

---

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI              |
| <b>COMMENT ID</b>          | 316.BGE.001              |
| <b>COMMENT AUTHOR</b>      | BALTIMORE GAS & ELECTRIC |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/23/1998 00:00:00.00   |

---

**COMMENT** 1. EPA should remove questions that ask individual companies and facilities to provide information on the following topics:

Studies regarding plans to adapt to deregulation

Amount and cost of long-term firm power purchases

Megawatt hours sold and revenues from long-term sales

Number of hours of operation over the last three years

Quantity of fuel burned and costs

Planned facility retirement dates.

Information of this type is very sensitive business information and its release beyond the company's control places the company at extreme risk from its competitors. Companies will be placed in a difficult position if EPA demands that they supply this information in the final questionnaire.

**RESPONSE** In response to this and other comments, EPA removed from the 316(b) questionnaire the following information requests: 1) studies regarding plans to adapt to deregulation; 2) amount and cost of long-term firm power purchases; and 3) megawatt hours sold and revenues from long-term sales. However, EPA retained questions regarding the number of hours of operation, the quantity of fuel burned and its costs, and planned unit retirement dates. As explained in more detail in the justifications of the 316(b) questionnaires, these questions will provide important information for the economic analysis of potential impacts of 316(b) regulation on utilities and their plants and generating units.

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA         |
| <b>COMMENT ID</b>          | 316.BGE.002              |
| <b>COMMENT AUTHOR</b>      | BALTIMORE GAS & ELECTRIC |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/23/1998 00:00:00.00   |

---

**COMMENT** 2. Commenter urges EPA to rely on public sources to obtain the financial data they need for this rule making. Companies already provide a great deal of financial information to FERC, DOE and other agencies and confidentiality issues have already been addressed in the submittals to these agencies.

**RESPONSE** EPA has further shortened and simplified the economic and financial portion of the questionnaire in response to this and other comments. EPA believes that the remaining questions asked in this part of the 316(b) questionnaire will not pose a significant burden on respondents.

Public sources of information have been used wherever possible to reduce respondent burden. However, limited additional information is required to conduct economic analyses that assess the potential impact of 316(b) regulation on affected entities. Each question asked in the economic and financial portion of the 316(b) questionnaire fulfills a specific practical function in EPA's economic analyses. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

---

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONIMPAC        |
| <b>COMMENT ID</b>          | 316.BGE.003              |
| <b>COMMENT AUTHOR</b>      | BALTIMORE GAS & ELECTRIC |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/23/1998 00:00:00.00   |

---

**COMMENT** 3. Economic impacts of the rule should be assessed at the facility level if possible. EPA should consider the ability of the individual facility to pay for the required changes or whether the changes would make continued operation of the facility uneconomical. This is the critical issue. Considering whether the overall corporation can afford the impact is much less relevant and could mask important adverse effects of the rule that occur at the plant level.

**RESPONSE** EPA agrees that the most relevant level of analysis is the plant. EPA will therefore focus much of its analysis of economic impact of the rule on that level. However, analysis of other organizational levels that may be affected by 316(b) regulation, such as the generating unit, the utility, and the domestic parent firm, are also important. For example, EPA needs utility-level data to conduct firm-level analyses required by statutes such as the Small Business Regulatory Enforcement Act (SBREFA). Therefore, EPA requests information on these levels in addition to plant-specific information.

---

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q15        |
| <b>COMMENT ID</b>          | 316.BGE.004              |
| <b>COMMENT AUTHOR</b>      | BALTIMORE GAS & ELECTRIC |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/23/1998 00:00:00.00   |

---

**COMMENT** 4. EPA's Question 15, Page 18 of the Technical section asks companies to identify the number of intake structures at a particular facility without explaining how this is to be done. EPA provides a definition of an intake structure but they do not explain how one structure is to be differentiated from another. Unless there is consistent guidance on responding to this question the data EPA obtains for subsequent questions will be very difficult if not impossible to interpret. For example, question 33 on Page 45 asks about approach velocity. If several units are served by what is considered to be a single intake structure, the velocities for each individual unit may differ widely and for one unit might seem high enough to cause concern, but if the velocities are averaged across the whole structure the velocity would be acceptably low. The same concern applies to question 34 on page 48 regarding flow. Given a similar physical structure serving a number of units, if one company considers it a single intake and another company considers it multiple intakes the responses will be widely different for essentially the same physical structure.

**RESPONSE** As requested by the commenter, EPA has clarified the definition of cooling water intake structure (CWIS). A single CWIS might have multiple intake bays and could serve more than one generating unit. If a plant has intake structures that withdraw water for other purposes along with cooling, the entire intake structure should be considered a cooling water intake structure under the questionnaire. The CWIS is the total structure used to withdraw water from a water source.

Regarding the Commenter's concern on reporting data (e.g., velocity, flow) for several units serviced by one structure, EPA requests the average and maximum be reported. This would provide EPA with appropriate data needed for its analyses.

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26        |
| <b>COMMENT ID</b>          | 316.BGE.005              |
| <b>COMMENT AUTHOR</b>      | BALTIMORE GAS & ELECTRIC |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/23/1998 00:00:00.00   |

---

**COMMENT** 5. The definitions for question 26 on page 29 in the glossary are still too vague.

Many of these terms relate to general concepts and are necessarily imprecise and this makes it hard to answer simple yes or no questions about them. Specifically, the concept of a migration route is so nebulous that it makes the question very speculative. How big must a tributary be before it is considered? How are we supposed to know if there are underwater vascular plants nearby? Commenter recommends that EPA revise or delete question 26.

**RESPONSE** EPA has revised the question to delete redundancy and clarify terminology.

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q38        |
| <b>COMMENT ID</b>          | 316.BGE.006              |
| <b>COMMENT AUTHOR</b>      | BALTIMORE GAS & ELECTRIC |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/23/1998 00:00:00.00   |

---

**COMMENT** 6. Question 38, Page 55 requests capital costs for technologies that have been installed over the last 10 years. Because of the way utilities account for costs, the "book value" of such assets may be zero but we believe the cost that EPA should be considering should be the replacement cost because this more accurately represents the value of this asset when modifications or alternatives have to actually be installed.

**RESPONSE** This question has been deleted.

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL          |
| <b>COMMENT ID</b>          | 316.BGE.007              |
| <b>COMMENT AUTHOR</b>      | BALTIMORE GAS & ELECTRIC |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/23/1998 00:00:00.00   |

---

**COMMENT** Commenter is a member of the Utility Water Act Group (UWAG). UWAG will be submitting comments on the questionnaire under a separate cover. Commenter endorses UWAG's comments and incorporates them here by reference.

**RESPONSE** No response necessary.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/REC/BURDEN                |
| <b>COMMENT ID</b>          | 316.NRECA.001                 |
| <b>COMMENT AUTHOR</b>      | NAT. RURAL ELEC. COOP. ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00        |

---

**COMMENT** As you know, two generation and transmission cooperatives volunteered to complete this questionnaire; Commenter and Commenter. I have discussed this with them in addition to several other member cooperatives and the comments reflect their concerns. Needless to say, the questionnaire is lengthy and requires numerous personnel to complete it, because of the different areas of required expertise.

The EPA has said that the questionnaire will be sent to every identified entity in its class.

This is unnecessary as many of the electric utilities have similar operations. Why make small entities with very limited staff complete the voluminous questionnaire. Because of the complexity of the questionnaire, some of the information may not exist. Rather than asking every utility to complete the questionnaire, a sampling should be done, exempting the small utilities.

**RESPONSE** EPA will send the questionnaire to a representative sample within the utility industry.

EPA is not able to exempt small facilities from answering the economic parts of the questionnaire because it needs information on small systems to conduct small entity analyses as required under the Small Business Regulatory Flexibility Act (SBREFA). In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. During the questionnaire pretest, rural electric cooperatives have required an average of 3 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/REC/ECONDATA              |
| <b>COMMENT ID</b>          | 316.NRECA.002                 |
| <b>COMMENT AUTHOR</b>      | NAT. RURAL ELEC. COOP. ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00        |

---

**COMMENT**      What is the relevance for requesting the sales, revenues, power exchanges and assets data for intake structures?

Requiring that each facility compile this data is an excessive burden. As noted previously, cooperatives have limited staff and this would cause an economic hardship on them.

**RESPONSE**      In response to this and other comments, questions requesting information about sales and power exchanges were removed from the 316(b) questionnaire. However, limited information about utility revenues and plant assets remain in the questionnaire. This information will be used in the economic impact analysis as described in more detail in the justifications of the 316(b) questionnaire which can be found in Attachment 8.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/REC/RESTIME               |
| <b>COMMENT ID</b>          | 316.NRECA.003                 |
| <b>COMMENT AUTHOR</b>      | NAT. RURAL ELEC. COOP. ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00        |

---

**COMMENT** Time needed to complete the questionnaire

The EPA has estimated that it will take 160 hours to complete each questionnaire. I have heard estimates from within the industry that it could take as many as 3,000 hours depending on the complexity of the operation. This requires a significant commitment of time and expense. The EPA should minimize the number of questions and data requested to keep to the essential questions for the issue.

**RESPONSE** All the facilities that pretested the questionnaire completed it within 120 days to include a facility that reported 430 burden hours (highest report). EPA has eliminated both Document I and II and has significantly shortened Document III. EPA estimates the burden is 156 hours. EPA believes 90 days is sufficient time to complete the revised questionnaire. See response to 316.AEP.003.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL               |
| <b>COMMENT ID</b>          | 316.CMA.001                   |
| <b>COMMENT AUTHOR</b>      | Chemical Manufacturers Assoc. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/24/1997 00:00:00.00        |

---

**COMMENT** Commenter provided comments on previous drafts of the questionnaire (as well as EPA's draft screener questionnaire). We note that the draft detailed questionnaire reflects some of the recommendations we made on EPA's draft screener questionnaire. We would particularly like to commend the Agency for separating out the manufacturing industry, reducing the requests for historical information, and adding a response option for data that are not available. Despite these changes, however, Commenter continues to have concerns regarding the nature of the information requested in the draft detailed questionnaire:

Commenter believes that the scope of the draft questionnaire is too broad and should be narrowed significantly. We are concerned that the questionnaire asks for information that is not relevant to the Agency's current efforts. Namely, the questionnaire seeks: 1) data on the entire facility rather than the cooling water intake structure; 2) historical data rather than current data; and 3) irrelevant and highly sensitive economic data. We urge the Agency to more clearly focus its information gathering efforts on the cooling water intake structures themselves.

**RESPONSE** 1) In general, EPA has a practical utility for data on the entire facility. The data is needed to fully understand how the cooling water intake structure operates within the whole operation. EPA can not provide a more detailed response, since the Commenter did not identify specific questions considered too broad.

2) EPA has a practical utility for both historical and current data. Historical data are needed to determine trends within an industry. EPA traditionally uses historical data to establish standards based on a long term average as oppose to a snap shot of data at a specific time and place. EPA asks very few questions that require historical data. The five years of flow data requested was identified as the most burdensome. Based on comments, EPA did decide that three years of flow data would be a reasonable period of time over which to evaluate cooling water use and the potential for use in the future. In other cases there may only exist historical data. For example, environmental data is often not current.

3) EPA requests economic and financial data from facilities and their parent firms necessary to conduct a series of economic analyses required by various statutes and mandates. These analyses are intended to determine the impact of 316(b) regulation on affected facilities, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. Examples of statutes and mandates that require the Agency to carry out these analyses are Executive Orders 12866 and 12898, the Unfunded Mandates Reform Act of 1995, the Regulatory Flexibility Act of 1980, and the Small Business Regulatory Enforcement Act of 1996. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.) Each question asked in the Financial and Economic Part

of the questionnaire fulfills a specific function in these economic analyses. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

EPA recognizes that certain financial and economic data are highly sensitive. The questionnaire allows respondents to identify sensitive information by checking a box on each page that contains confidential business information (CBI). In the course of past regulatory efforts, EPA has handled extensive amounts of confidential data and has developed procedures of ensuring the safety of these data. These procedures will be put into place both within the Agency and the Agency's contractors to protect sensitive data collected in the 316(b) regulatory effort.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL               |
| <b>COMMENT ID</b>          | 316.CMA.002                   |
| <b>COMMENT AUTHOR</b>      | Chemical Manufacturers Assoc. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** We also are concerned that the Agency has stated that its actions are pursuant to a consent decree which requires final rulemaking - when, instead, the decree requires "final agency action" which could include a determination that regulation is not necessary.

**RESPONSE** EPA inadvertently used the term "final rulemaking." The Consent Decree requires that the Agency "propose regulations" and then "take final action with respect to the regulations."

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL               |
| <b>COMMENT ID</b>          | 316.CMA.003                   |
| <b>COMMENT AUTHOR</b>      | Chemical Manufacturers Assoc. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** I. The Scope of the Draft Questionnaire Is Too Broad And Should Request Data That Will Provide Insight For Determining BTA For Cooling Water Intake Structures.

Commenter believes that the questionnaire is not appropriately focused. The scope of the questionnaire should be narrowed to focus on information that is relevant to the question at hand: What is the best technology available (BTA) for cooling water intake structures in order to minimize adverse environmental impact? Many of the questions in the draft seek information that will not be instructive on this issue. Particularly, we are concerned that the questionnaire seeks information on the entire facility, data on historical practices, and highly sensitive and irrelevant economic data.

**RESPONSE** The purpose of the detailed questionnaire is more than just to help EPA identify the Best Technology Available. In general, the technical portion of the questionnaire is intended to help EPA characterize the design, location, construction, and capacity of cooling water intake structures on a national basis. The baseline data is intended to help EPA frame regulatory options and define further research needs regarding the relationship of cooling water intake structures, intake technologies, and environmental impacts. EPA can not provide a more detailed response, since the Commenter did not identify specific questions considered "too broad."

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/JURISDIC              |
| <b>COMMENT ID</b>          | 316.CMA.004                   |
| <b>COMMENT AUTHOR</b>      | Chemical Manufacturers Assoc. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** A. EPA Should Not Seek Information Regarding The Entire Facility - But Should Focus On The Intake Structures.

Information requests should be limited to data regarding the structures themselves; however, many of EPA's requests regarding cooling water systems appear to go beyond the structures and inquire about the entire facility. For example, EPA requests a water balance diagram with information on the distribution of intake flow from each of the intake structures to process operations, contact and noncontact cooling operations, and other operations within the facility, including all recirculating and recycle loops and associated flow volumes (see p. 9).

Commenter fails to see the relevance of this information to determining BTA for cooling water intake structures. EPA also requests data regarding cooling tower technology and information on the number and location of cooling water outfalls (see pp. 55, 17). Cooling towers are relevant to thermal discharge issues, which are regulated by Section 316(a) of the Clean Water Act, but are not relevant nor linked to 316(b) determinations. We urge the Agency to delete these questions and narrow the focus to those questions related to the structure.

**RESPONSE** 1) The sole purpose of the detailed questionnaire is not to determine Best Technology Available. The detailed questionnaire serves multiple purposes. In particular, the water balance diagram provides EPA with a valuable visual picture of how the plant uses the intake water. EPA needs to understand the "big picture" in order to properly understand what factors impact the location, design, construction, and capacity of cooling water intake structures. See also response to comments 316.AFPA.009 and 316.CMA.003.

2) Cooling towers are not just related to Section 316(a) thermal discharges. Cooling Towers are also part of a recirculating cooling system which directly effect the required capacity of an intake structure. The capacity of a cooling water intake structure is directly related to adverse environmental impacts. Also see response to 316.DOW.001.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/HIST                  |
| <b>COMMENT ID</b>          | 316.CMA.005                   |
| <b>COMMENT AUTHOR</b>      | Chemical Manufacturers Assoc. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** B. Historical Data Are Not Relevant For Purposes Of Determining BTA For Cooling Water Intake Structures.

In addition, the questionnaire seeks historical data that are not relevant or will provide outdated information. For example, the questionnaire seeks data regarding historical flow data from 1993-1997 (see pp. 45-48). Commenter believes that the Agency should request limited historical data only. Requesting 5 years of historical information would require the facility to search daily records for 5 years to record the daily minimum and daily maximum flow. This information is not relevant for the purposes of the questionnaire. Thus, Commenter urges the Agency to revise the questionnaire to narrow its request to current data related to cooling water intake structures. Similarly, EPA seeks total capital cost data on cooling water intake structure technologies and cooling tower technologies from the past ten years (see pp. 51-54, 56) and O&M costs from the past five years (see pp. 51-53, 56). This request is overreaching and may well be impossible to determine. Commenter recommends that EPA should limit these requests to more recent data.

**RESPONSE** 1) The Agency does request only limited historical data. EPA, in particular, recognized that flow data reporting is very burdensome, and therefore reduced the historical data collection to a three year period. Flow data is relevant to the "capacity" of the cooling water intake structure. Also, see response to 316.CMA.001.

2) EPA eliminated all questions requesting capital cost data on cooling water intake structure technologies.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/ECONDATA              |
| <b>COMMENT ID</b>          | 316.CMA.006                   |
| <b>COMMENT AUTHOR</b>      | Chemical Manufacturers Assoc. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** C. The Economic Section Requests Irrelevant and Highly Sensitive Information.

We previously commented to the Agency that its earlier draft economic section was overreaching and, after reviewing the latest draft, we continue to have similar concerns. Commenter highlights the requests for sensitive data, such as the production cost, valuation of intangibles, current and non-current liabilities, and shareholder equity at the plant level which could compromise a company's competitive position (see pp. 9, 12). We also fail to see the relevance of some of the information requested, such as the number of full time employees, production cost data, and export revenues (see pp. 7, 9, 11). Similarly, we question the relevance and utility of the information sought regarding waste combustion and electricity generation (see pp. 14-19). In addition, responses to questions regarding liquidation values will be highly speculative and, therefore, of little value (see p. 13).

We reiterate our concerns about the sensitive nature of much of the material requested. Commenter again reminds the Agency that the information is costly and burdensome for companies to produce. We recommend that the Agency could take a more simplified approach to stratifying industries by using data other than economic factors, such as the approximate value of shipments. We understand that EPA needs some economic data to determine BTA for the structures; however, we believe that this questionnaire goes beyond the necessary information to make such a determination.

**RESPONSE** Four issues concerning the information collected in the Economic Sections of the questionnaire are raised in this comment:

1. Highly sensitive economic information is collected.
2. Some of the information requested is irrelevant.
3. Responses to questions regarding liquidation values will be highly speculative and, therefore, of little value.
4. The economic data collected go beyond the information necessary to make BTA determinations.

EPA's response:

1. EPA recognizes that certain financial and economic data are highly sensitive. The questionnaire allows respondents to identify sensitive information by checking a box on each

page that contains confidential business information (CBI). In the course of past regulatory efforts, EPA has handled extensive amounts of confidential data using detailed procedures that ensure the safety of these data. These procedures will be put into place both within the Agency and the Agency's contractors to protect sensitive data collected in the 316(b) regulatory effort.

2. EPA requests economic and financial data from facilities and their parent firms necessary to conduct a series of economic analyses that are required by various statutes and mandates. These analyses are intended to determine the impact of 316(b) regulation on affected facilities, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. Examples of statutes and mandates that require the Agency to carry out these analyses are Executive Orders 12866 and 12898, the Unfunded Mandates Reform Act of 1995, the Regulatory Flexibility Act of 1980, and the Small Business Regulatory Enforcement Act of 1996. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.) Each question asked in the Financial and Economic Part of the questionnaire fulfills a specific function in these economic analyses. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

In response to comments, questions regarding waste combustion activities were deleted from the questionnaire. Information requested about electricity generation was shortened and simplified. However, since electricity generation is an important secondary activity for many manufacturers surveyed by this questionnaire basic data requests on this activity are retained in the final version of the questionnaire.

3. EPA has requested information on facility liquidation values in past regulatory efforts and found that the responses received were generally of good quality. Economic analyses using this information have showed a high degree of correlation with other economic measures, confirming that responses provided were not merely speculative. While there may be some uncertainty in the numbers provided in this question, the same uncertainties would occur if a facility were to make a decision on liquidating its assets in real life. Therefore, information provided in this question should be similar to information on which a facility would make a shut-down decision and should provide useful insights into a facility's potential operational decisions in the light of 316(b) regulation.

4. While a facility's economic performance will play a role in determining BTA requirements, the economic and financial data collected in the questionnaire fulfill other important analytic functions. Please refer to the response to issue number 2 of this comment and Attachment 2 of this document for more information on the Agency's requirements for economic analysis in the rulemaking process.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL               |
| <b>COMMENT ID</b>          | 316.CMA.007                   |
| <b>COMMENT AUTHOR</b>      | Chemical Manufacturers Assoc. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** Final Agency Action - Not A Final Rule.

Commenter is concerned that the preamble description of the Agency's current actions regarding cooling water intake structures may mislead the public and the regulated community about its current efforts. Specifically, EPA states that it is "developing regulations under section 316(b) of the Clean Water Act" (63 Fed. Reg. 3739). In addition, EPA notes that "[t]o ensure that the regulations are based upon accurate information, EPA is conducting a variety of data-gathering activities. The proposed survey instrument will provide EPA with preliminary technical and cost data needed to ... determine the economic reasonableness of the final rule." (id. emphasis added).

We remind the Agency that the consent decree entered in *Cronin v. Reilly*, 93 Civ. 0314 (AGS), does not require that a regulation be established and that the decree has been so interpreted in court (see *Cronin v. Browner*, 898 F. Supp. 1052, 1061 (S.D. N.Y. 1995)). Rather, EPA must take "final action" by August 13, 2001. This final agency action may include a variety of actions, including promulgating a final rule, issuing guidance, or a final determination by EPA that no regulation is necessary, i.e., BTA for cooling water intake structures will be determined on a case-by-case basis. Commenter reminds the Agency that a judge refused to allow over 50 parties to intervene in the lawsuit that prompted EPA's current efforts (id.). The parties claimed that they should be allowed to intervene because the proposed consent decree (which was ultimately entered in the case) would require EPA to issue a final rule that was generally applicable to all point source categories and, therefore, would prejudice their rights as members of the regulated community. The judge rejected these arguments and denied the request for intervention precisely because the decree requires only final agency action and not promulgation of a final rule. We caution the Agency to avoid using language that shows any predisposition to a final rule - rather than a final action.

We recommend that EPA clarify this matter in all future public notices. The purpose of the Federal Register notice is to provide the regulated entities - as well as the public with information about the Agency's actions. This notice serves as the backdrop by which industry and the public provide comments on EPA's efforts. To ensure the most responsive comments and also to foster a full-understanding of the process, EPA must explain that a final rule is not required; rather that final agency action is required.

Conclusions

In closing, we urge the Agency to revise its detailed questionnaire.

**RESPONSE**

EPA inadvertently used the term "final rulemaking." The Consent Decree requires that the Agency "propose regulations" and then "take final action with respect to the regulations." EPA will clarify in future public notices that the Agency is currently developing "proposed" regulations.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL               |
| <b>COMMENT ID</b>          | 316.CMA.008                   |
| <b>COMMENT AUTHOR</b>      | Chemical Manufacturers Assoc. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT**      Conclusions

In closing, we urge the Agency to revise its detailed questionnaire so that it more clearly focuses on information that is relevant to the cooling water intake structure itself. Commenter believes that EPA should issue a more limited, streamlined version of this questionnaire, thereby significantly reducing the amount of data to be collected and the burden placed upon those responding. In addition, we urge the Agency to clarify the description of its efforts regarding cooling water intake structures to more adequately disclose the nature of its actions and to ensure that the public knows that the consent decree requires "final agency action" - not a final rule.

**RESPONSE**      EPA has significantly modified the detailed questionnaire based on comments received. The ICR submitted to OMB for approval provides a justification for the data collected in the final draft detailed questionnaire. See also responses to 316.CMA.003 and 316.CMA.007.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL        |
| <b>COMMENT ID</b>          | 316.DOW.001            |
| <b>COMMENT AUTHOR</b>      | DOW                    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1997 00:00:00.00 |

---

**COMMENT** The current questionnaire is more extensive than what it should be in regard to securing overall cooling water systems process information and establishing the best technology available. EPA should perform a more basic assessment of CWIS. Such assessments would only consist of the type of CWIS, type of water body supplying the cooling water and the amount of cooling water being drawn into the CWIS.

Most of the comments being submitted in this letter pertain to either the elimination of data requested by EPA or the rearrangement of certain questions which will ultimately reduce the administrative burden of completing portions of the questionnaire which appear to be impractical or irrelevant to the overall evaluation of cooling water intake structures.

**RESPONSE** Collecting data on only the type of CWIS, type of water body supplying the cooling water and the amount of cooling water being drawn into the CWIS is not enough data to adequately characterize the design, construction, location, and capacity of CWIS on a national basis. Nor is the data sufficient to properly analyze factors that influence adverse environmental impacts. EPA is collecting data on "cooling systems" because, for one, a facility's "cooling water system" is related, in general, to the total amount of cooling water that a facility withdraws through an intake structure. Because the "cooling water intake structure" is an integral component of the "cooling system", EPA believes it has the authority to collect data on the cooling water system as a whole. Two, there is a scientific link between the amount of water withdrawn and the significance of the environmental impacts that occur.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL        |
| <b>COMMENT ID</b>          | 316.DOW.002            |
| <b>COMMENT AUTHOR</b>      | DOW                    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00 |

---

**COMMENT** 1) Document I; Facility Level Information Part 1 - Question 8 Page 14

It is recommended that EPA consider reorganizing the format of the questionnaire so that the facility profile data requested in Question No. 8, be addressed as one of the first questions in the questionnaire. The repositioning of Question No. 8 would preclude numerous questionnaire respondents that use cooling water and that are point sources as defined under Section 502 of the Clean Water Act, but do not use Phase II Cooling Water Intake Structures, from the burden of comprehending the applicability of the questionnaire to their site(s) and from completing up to fourteen pages of documentation (including the water balance diagram) before it is determined that the questionnaire does not apply to that facility.

**RESPONSE** The screener questionnaire that preceded the detailed questionnaire identified facilities as in and out of scope. Only facilities that were identified as in-scope will receive the detailed questionnaire. Therefore, EPA does not consider it necessary to reorganize the detailed questionnaire as suggested.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q27      |
| <b>COMMENT ID</b>          | 316.DOW.003            |
| <b>COMMENT AUTHOR</b>      | DOW                    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/27/1997 00:00:00.00 |

---

**COMMENT** 2) Document I, Part I Section D - Question 27 Page 45-48

The five year time period for which actual intake flow rate data of Cooling Water Intake Structures (CWIS) is being requested seems to be unreasonable. A time period of three years would be more appropriate. A longer time period would be justified if the CWIS facility experienced some abnormal operations event during the past three years.

**RESPONSE** EPA has modified the question to ask for 3 years.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q5       |
| <b>COMMENT ID</b>          | 316.DOW.004            |
| <b>COMMENT AUTHOR</b>      | DOW                    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00 |

---

**COMMENT** 3) Document I, Part I Section A. - Question 5 and Section B. - Question 10

These two questions should be eliminated from the questionnaire since they do not directly pertain to CWIS.

**RESPONSE** EPA requires the information to assess the total environmental impact to a particular location on the source water and used for GIS mapping.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/ECONDATA       |
| <b>COMMENT ID</b>          | 316.DOW.005            |
| <b>COMMENT AUTHOR</b>      | DOW                    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00 |

---

**COMMENT** 4) Document I, Part II - Financial and Economic Data

It is felt that the entire Part II portion of the draft questionnaire is very burdensome to complete and too intrusive into the financial matters of the CWIS facility.

**RESPONSE** Data collected in the Financial and Economic Part of the questionnaire is limited to the information necessary for conducting economic analyses as required in the 316(b) regulatory process. Each question asked in the Financial and Economic Part of the questionnaire fulfills a specific function in these economic analyses. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document. Where possible, EPA has requested information in a form that closely resembles information routinely collected by facilities, e.g. data from income statements and balance sheets, minimizing respondent burden.

EPA recognizes that certain financial and economic data are highly sensitive. Respondents have the option of identifying sensitive information, which will then be protected using procedures developed by the Agency. (Please also refer to the response to comment 316.CMA.006 for a more detailed discussion on the protection of confidential business information.)

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/VOL            |
| <b>COMMENT ID</b>          | 316.DOW.006            |
| <b>COMMENT AUTHOR</b>      | DOW                    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/24/1998 00:00:00.00 |

---

**COMMENT** 5) Document II - Voluntary Supplemental Data

It is felt that this entire Voluntary Supplemental Data portion of the draft questionnaire is too intrusive into the manufacturing processes upstream of the CWIS system.

**RESPONSE** Respondents are given the option to provide additional information for other facilities that are owned by the same firm as the responding facility and that are not included in the 316(b) survey effort. This information is collected to allow EPA to take into account the overall impact of 316(b) regulation on a facility's domestic parent firm. However, the information collected in the voluntary supplemental data section of the questionnaire is voluntary. Consequently, a respondent who feels that the information request is too burdensome or intrusive may elect not to provide any information.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA       |
| <b>COMMENT ID</b>          | 316.DUKE.001           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00 |

---

**COMMENT** 1. We question the relevance of the majority of the financial/economic questions asked in the questionnaire. Although questions about the cost of performing studies, the cost of different technologies, and the O&M costs for the different technologies may be relevant, the plant-level financial data is not necessary for EPA to develop sound methodologies for assessing adverse impact and Best Technology Available. It is not relevant to the rulemaking.

**RESPONSE** The primary purpose of the economic and financial questions asked in the questionnaire is not to determine the costs of the various intake technologies or to assess adverse impact. Rather, the primary purpose of these questions is to assess potential economic impacts of the regulation on affected plants, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. As such, EPA needs to collect information necessary to assess the ability of plants and firms to absorb the costs associated with compliance with 316(b) regulations.

Each question asked in the economic and financial portion of the 316(b) questionnaire fulfills a specific practical function in EPA's economic analyses of effects of 316(b) regulations. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI            |
| <b>COMMENT ID</b>          | 316.DUKE.002           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** 2. We are not convinced that the Confidential Business Information (CBI) clause will actually protect sensitive/competitive information. We think that if the EPA is insistent on collecting this type of information that it should look to publicly available information (such as FERC Form 1 and EIA Forms 412 and 767) and not request additional information directly from the utilities.

**RESPONSE** EPA recognizes the highly sensitive nature of many questions in the economic and financial parts of the questionnaire. In the course of past regulatory efforts, EPA has handled extensive amounts of confidential data and has developed procedures of ensuring the safety of data identified as confidential business information. These procedures will be put into place both within the Agency and the Agency's contractors to protect sensitive data collected in the 316(b) regulatory effort. EPA believes that the CBI procedures used are sufficient to fully protect data claimed as CBI.

In compliance with nonduplication requirements, EPA will collect and use publicly available information from forms such as FERC Form 1, EIA Forms 412 and 767, and RUS Form 12 where possible. Use of publicly available information has substantially reduced the number of questions requested in the questionnaire from privately-owned utilities and their plants. However, to conduct its economic analyses, EPA requires limited other information that is not publicly available.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN         |
| <b>COMMENT ID</b>          | 316.DUKE.003           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1997 00:00:00.00 |

---

**COMMENT** 3. We estimate that the burden to fill out an individual questionnaire is about 300 hours. A variety of people at the company would be responsible for filling out the various sections of the questionnaire, including accountants, lawyers, scientists, engineers, as well as technical support personnel. Based on an average hourly labor rate of \$70, the cost of filling out each questionnaire is estimated to be \$21,000. For our eleven steam electric facilities, the total bill would be \$231,000. This is approximately twice the burden estimate that EPA is using. Several recommendations that could significantly decrease the burden on utilities are included in our section-by-section comments presented below.

**RESPONSE** Based on these and other comments EPA did significantly revise the questionnaire reducing or eliminating the questions identified as the most burdensome. EPA estimates the burden of the revised questionnaire to be 156 hours. See response to 316.AEP.007. Also, only a sample, not all, of the utility plants will receive the detailed questionnaire, which significantly reduces the overall burden to a given utility.

In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. During the questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly-owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CERT           |
| <b>COMMENT ID</b>          | 316.DUKE.004           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT**      Comments on Certification Statement

1. The certification statement, which appears twice, is written as follows:

I certify under [a] penalty of law that the attached questionnaire was prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

But this language deviates slightly from the language required under 40 CFR 122.22(d):

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please note that the regulatory language is present tense and includes the "for knowing violations" wording. The 316(b) Questionnaire is past tense and omits the knowing violations statement. Given that the reference is to 40 CFR 122.22, and because 122.22(d) is stated as a regulatory requirement, the wording in the questionnaire should reflect the regulatory language.

**RESPONSE**      EPA modified the certification statement for the revised detailed questionnaire. However, EPA did not change the certification statement to reflect word for word the language under 40 CFR 122.22(d). The certification statement for questionnaires has historically deviated slightly from the language required under 40 CFR 122.22(d). The certification language EPA uses for questionnaires reflects the unique features associated with these data collection instruments.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/RESTIME        |
| <b>COMMENT ID</b>          | 316.DUKE.005           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** Document I: Inventory of Plants and Generating Units

1. The EPA requests that this part of the survey be completed and returned within 30 days of receipt. At this time, we are not sure how the questionnaires will be addressed (e.g. corporate headquarters, individual power plants, compliance offices, etc.). By the time the questionnaires get into the right hands, a significant portion of the 30-day period may have already passed. We recommend that the 30-day clock not start until the questionnaires are actually received by those that will be filling them out. Alternatively, a list of mailing addresses could be forwarded to utilities in advance so we will know who will receive the questionnaires before they arrive.

**RESPONSE** EPA eliminated Document I.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA       |
| <b>COMMENT ID</b>          | 316.DUKE.006           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** Document II: Utility-Level Information

1 . The information requested in this section is available through other public means (i.e., FERC Form 1 and EIA Form 412). Therefore, this entire section should be omitted from the questionnaire. If the EPA requires this information in their data gathering efforts, they should rely solely on documents that are publicly available and not request additional information directly from individual utilities. The Federal Government has already required the utilities to compile this information once and has made it public. The Government should not once again request of the utilities the same information, when it is already publicly available.

**RESPONSE** Public sources of information (including FERC Form 1, Form EIA-412, and Form RUS 12) will be used wherever possible to reduce respondent burden. The questionnaires for privately-owned and publicly-owned utilities noticed in the Federal Register erroneously requested plant-level balance sheet information. Since this information is available from FERC Form 1 and Form EIA-412, EPA removed the questions from the 316(b) questionnaire. However, limited additional information is required to conduct economic analyses that assess the potential impact of 316(b) regulation on affected entities. Each question asked in the economic and financial portion of the 316(b) questionnaire fulfills a specific practical function in EPA's economic analyses. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

In addition, EPA has further shortened and simplified the economic and financial portion of the questionnaire in response to comments. EPA believes that the remaining questions asked in this part of the 316(b) questionnaire will not pose a significant burden on respondents.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/RESTIME        |
| <b>COMMENT ID</b>          | 316.DUKE.007           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** Document III: Plant-Level Information (Part 1: Technical Data)

1 . The EPA requests that this part of the survey be completed and returned within 90 days of receipt. At this time, we are not sure how the questionnaires will be addressed (e.g. corporate headquarters, individual power plants, compliance offices, etc.). By the time the questionnaires get into the right hands, a significant portion of the 90-day period may have already passed. We recommend that the 90-day clock not start until the questionnaires are actually received by those that will be filling them out. Alternatively, a list of mailing addresses could be forwarded to utilities in advance so we will know who will receive the questionnaires before they arrive.

**RESPONSE** Based on many discussions with utilities, EPA will send a package of questionnaires to the utility with instructions on which plants get the questionnaires and on when to return the questionnaire. Most utilities wanted to receive the package for all their plants since most often the environmental office for all the plants is located at the utility-level. EPA believes 90 days is sufficient time to complete the revised questionnaire. See response to 316.AEP.003.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q19      |
| <b>COMMENT ID</b>          | 316.DUKE.008           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** 2. Question #19(b)(2) asks for the harmonic mean of the water body. This is not a common way of expressing flow data. Using a geometric mean, or median flow value is more preferable. Commenter understands that EPA may request existing data via this questionnaire, but that EPA has no authority via the questionnaire to require the creation of new data that do not currently exist.

**RESPONSE** The question has been modified to request the mean low water level related to the NGVD (National Geodetic Datum) (in Feet). EPA believes that the lower the water level, decreasing the surface area of the screen intake, the greater the velocity through the screen, therefore, increasing the likelihood of impingement.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q34      |
| <b>COMMENT ID</b>          | 316.DUKE.009           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** 3. Question #34 asks for monthly flow data and number of operating days for 1993-97. This data is not readily available and could take up to 80 hours per facility to generate. Once again, Commenter understands that EPA may request existing data via this questionnaire, but that EPA has no authority via the questionnaire to require the generation of new data that do not currently exist. In addition, the questionnaire defines "operating days" as the total number of days (1 day = 24 hours) the cooling water intake structure operated during each month (partial days are not included). This is not a standard way in which utilities record this information, thus, we recommend that a box be placed next to this question such that we can indicate that this data is estimated.

**RESPONSE** EPA has modified the question and has reduced the amount of data requested from 5 to 3 years. EPA will also include requested instructions for converting partial days into whole days. EPA has provided responses for estimates and data not available.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q36      |
| <b>COMMENT ID</b>          | 316.DUKE.010           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** 4. Question #36 asks whether or not the plant uses dilution pumps. The term "dilution pump" needs to be clearly defined as it could be interpreted differently by different respondents.

**RESPONSE** EPA has modified the question to request information on the occurrence of the reduction of discharge temperature via dilution and the source of the dilution water.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q38      |
| <b>COMMENT ID</b>          | 316.DUKE.011           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** 5. Questions #38 and #40 ask for yearly O&M expenditures on cooling water intake structures and cooling towers, respectively, from 1993-97. Utilities typically do not break costs down to this level of detail so this data would be estimated at best. The costs can be marked actual, empirical, or no data. While Commenter contends that EPA has no authority via the questionnaire to require the creation of new data that do not currently exist, we would suggest that the word "empirical" be replaced with "estimated" to clarify the answer given and also be consistent with wording in the rest of the questionnaire.

**RESPONSE** Q. 38, Q. 40(b)(7) and 40 (b)(9) have been deleted.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA       |
| <b>COMMENT ID</b>          | 316.DUKE.012           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** Document III: Plant-Level Information (Part 2: Financial and Economic Data)

1 . The information requested in this section is available through other public means (i.e., FERC Form 1 and EIA Forms 412 and 767). Therefore, this entire section should be omitted from the questionnaire. If the EPA requires this information in their data gathering efforts, they should rely solely on documents that are publicly available and not request additional information directly from individual utilities.

**RESPONSE** Public sources of information (including FERC Form 1, Form EIA-412, and Form RUS 12) will be used wherever possible to reduce respondent burden. The questionnaires for privately-owned and publicly-owned utilities noticed in the Federal Register erroneously requested plant-level balance sheet information. Since this information is available from FERC Form 1 and Form EIA-412, EPA removed the questions from the 316(b) questionnaire. However, limited additional information is required to conduct economic analyses that assess the potential impact of 316(b) regulation on affected entities. Each question asked in the economic and financial portion of the 316(b) questionnaire fulfills a specific practical function in EPA's economic analyses. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

In addition, EPA has further shortened and simplified the economic and financial portion of the questionnaire in response to comments. EPA believes that the remaining questions asked in this part of the 316(b) questionnaire will not pose a significant burden on respondents.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/DEF            |
| <b>COMMENT ID</b>          | 316.DUKE.013           |
| <b>COMMENT AUTHOR</b>      | DUKE POWER             |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00 |

---

**COMMENT** Document III: Plant-Level Information (Part 3: Glossary to Technical and Economic Questionnaires)

1. Figure 3 shows a diagram of a submerged intake structure flush with the shoreline. The drawing shows a fixed curtain wall in front of the intake structure. If a facility has a floating curtain that is three feet deep and rises and falls with the water surface elevation, would the intake structure be classified as submerged or surface withdrawal?

**RESPONSE** EPA can not possibly cover every variation or contingency. EPA has set up a hot line to answer these very type of questions.

---

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL          |
| <b>COMMENT ID</b>          | 316.NSP.001              |
| <b>COMMENT AUTHOR</b>      | NORTHERN STATES POWER CO |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00   |

---

**COMMENT** First, in general, Commenter feels that the burden of the questionnaire could be minimized further through EPA's use of information already public. Information on the design and operation of the intake and on the hydrology and ecology of the associated surface water is found in the Section 316(b) demonstration/study for the generating plant. These studies were required by the EPA, or the state with an authorized NPDES program, and the results are on file with the EPA or state. Plant cooling water intake and discharge locations and associated flows and water balance diagrams are found in NPDES permit applications, NPDES discharge monitoring reports (DMRs), and water appropriations reports on file with the EPA or state. Surface water hydrologic information is readily available from the United States Geologic Survey (USGS). Utility financial and economic information is available from sources such as the Federal Energy Regulatory Commission (FERC) and the Securities and Exchange Commission (SEC).

**RESPONSE** Many of the Section 316(b) demonstration/study over twenty years old. Plus EPA needs comparable data. Early in the data collection phase or the rulemaking effort, EPA attempted to use existing 316(b) studies as the basis for developing the regulation. Unfortunately, EPA could not draw any valid conclusions. Past section 316(b) determinations and biological studies do not share common objectives, methodologies, data-gathering techniques, durations, or time frames.

Of course the water balance diagram used for the NPDES application may be used for this data collection effort (the instructions state that a current diagram may be modified). However, EPA asks that you modify this diagram to add information tailored to the cooling water intake structure data needs if the information does not already exist on the diagram. For example, intake location may or may not be indicated on an existing flow diagram. PCS data is not available for all facilities. Plus PCS data is very limited with respect to intake data.

EPA significantly reduced the hydrological data requested on intake water bodies.

EPA is using FERC and EIA publicly available data to the greatest extent possible. As a result of EPA relying heavily on publicly available data, EPA only asks utilities nine economic related questions. The data for these questions are not publicly available.

EPA uses publicly available data from agencies such as the Federal Energy Regulatory Commission (FERC), the Energy Information Administration (EIA), and the Rural Utilities Service (RUS) wherever possible to reduce respondent burden. However, it is essential that EPA collect data that is consistent across respondents to be able to conduct a valid economic analysis. While a few of the requested data items may be reported to entities such as the

Securities and Exchange Commission (SEC), these data are not always reported consistently across respondents. EPA is therefore not able to utilize these data for regulatory purposes.

---

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA         |
| <b>COMMENT ID</b>          | 316.NSP.002              |
| <b>COMMENT AUTHOR</b>      | NORTHERN STATES POWER CO |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00   |

---

**COMMENT** Second, regarding the financial and economic information requested in Document II and in Document III Part 2, Commenter questions the relevance of the information requested in respect to development of standards and the associated economic analyses. More pertinent data would seem to be derived from the capital costs and operation and maintenance costs associated with installation and operation of a particular intake technology, as partially addressed for recent years only in question 38 of Document III, Part 1. Determination of such costs may be difficult to address through existing plant accounting and may involve research with the original contracted architectural and engineering firm. Question 38 may need further distinction on the costs requested and provided by respective companies/plants since capital costs may encompass different activities at each company/plant.

**RESPONSE** The primary purpose of the economic and financial questions asked in the questionnaire is not to determine the costs of the various intake technologies or to assess adverse impact. Rather, the primary purpose of these questions is to assess potential economic impacts of the regulation on affected plants, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. As such, EPA needs to collect information necessary to assess the ability of plants and firms to absorb the costs associated with compliance with 316(b) regulations.

Each question asked in the economic and financial portion of the 316(b) questionnaire fulfills a specific practical function in EPA's economic analyses of effects of 316(b) regulations. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

---

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/AEI              |
| <b>COMMENT ID</b>          | 316.NSP.003              |
| <b>COMMENT AUTHOR</b>      | NORTHERN STATES POWER CO |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00   |

---

**COMMENT** Third, Commenter has a concern that the EPA's use of the questionnaire for development of standards is incomplete in terms of addressing "minimizing adverse environmental impact." As discussed under Section 316 (b) of the Clean Water Act, any standard for "location, design, construction, and capacity of cooling water intake structures reflect best technology available for minimizing adverse environmental impact." Assessment of "adverse environmental impact" in terms of entrainment and impingement of aquatic organisms was and is the basis of the Section 316 (b) demonstrations/studies, which are on file with the EPA or state. The absolute entrainment and impingement results need to be related to the levels, natural variability, and harvest of indigenous populations in the associated surface water, and sometimes the Section 316 (b) demonstrations/studies encompassed this relationship. Section E of Document III, Part 1, has some questions on Section 316 (b) and other impingement and entrainment studies but typically in terms of if and what data was collected, not in terms of results. The results are important to determine if existing intake technologies on specific surface waters have had a long term impact on aquatic life or if the aquatic life has remained healthy with sustainable populations. Subsequent to the questionnaire, will the EPA be evaluating such study results?

Additionally, in any evaluation for examining "minimizing adverse environmental impact", further information on the ecosystem of the surface water in question needs to be included, particularly in terms of the aquatic community and population dynamics, such as compensatory mechanisms, of representative indigenous species. Such an evaluation is more consistent with the EPA's recent watershed/basin management approach to ecosystem and water quality protection. However, such an evaluation will be very time consuming and should be the burden of federal and state resource agencies with pertinent data and/or monitoring systems for the ecosystem and ambient conditions.

**RESPONSE** The purpose of the questionnaire is not to define adverse environmental impact. EPA is primarily gathering data through other research efforts to help define adverse environmental impacts. See response to 316.CMA.003.

EPA is primarily gathering general yes no information in the Environmental Section (Section D) of the questionnaire as opposed to specific impingement or entrainment data because EPA believed such data would not have a practical utility. From past 316(b) determinations and case studies, EPA has found that impingement and entrainment data are highly site specific and not comparable. The studies measured different species, used different methodologies, had different objectives, evaluated different tax levels, used different data-gathering techniques, and lasted different durations, or time frames. The environmental data collected through section D is designed to support and supplement data that EPA is obtaining through the secondary sources.

EPA agrees that the information on the water body health and productivity are important factors in determining adverse environmental impacts. EPA intends to conduct several watershed case studies consistent with its watershed management approach to ecosystem and water quality protection.

---

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN           |
| <b>COMMENT ID</b>          | 316.NSP.004              |
| <b>COMMENT AUTHOR</b>      | NORTHERN STATES POWER CO |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00   |

---

**COMMENT** Fourth, input from personnel at several of Commenter's generating plants find that the estimate of 160 hours, on average, for each facility to complete the questionnaire may be an underestimate. The plants anticipate that the compiling of financial and economic information as presently requested and the tracking down of original design and engineering information will greatly exceed the estimated hours.

**RESPONSE** See response to 316.AEP.007.

In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. During the questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly-owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

---

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q13        |
| <b>COMMENT ID</b>          | 316.NSP.005              |
| <b>COMMENT AUTHOR</b>      | NORTHERN STATES POWER CO |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00   |

---

**COMMENT** Fifth, Commenter has the following questions on the specific item indicated:

For question 13 of Document III, Part 1, is a single intake structure with multiple bays considered one "Cooling Water System"?

**RESPONSE** As requested by the commenter, EPA has clarified the definition of cooling water intake structure (CWIS). A single CWIS might have multiple intake bays and could serve more than one generating unit. If a plant has intake structures that withdraw water for other purposes along with cooling, the entire intake structure should be considered a cooling water intake structure under the questionnaire. The CWIS is the total structure used to withdraw water from a water source.

|                            |                          |
|----------------------------|--------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/A          |
| <b>COMMENT ID</b>          | 316.NSP.006              |
| <b>COMMENT AUTHOR</b>      | NORTHERN STATES POWER CO |
| <b>DOCUMENT TYPE</b>       | Industry (specific)      |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00   |

---

**COMMENT** Fifth, Commenter has the following questions on the specific item indicated:

Do the water supply and discharge questions in Section A of Document III Part 1 encompass domestic water supply and sewage?

**RESPONSE** EPA is trying to identify all sources of cooling water, therefore the water supply and discharge questions encompass domestic water supply and sewage. The purpose of the water balance diagram is to get a more complete picture of the water flow within the facility.

---

|                            |                             |
|----------------------------|-----------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/GENERAL             |
| <b>COMMENT ID</b>          | 316.OPPD.001                |
| <b>COMMENT AUTHOR</b>      | OMAHA PUBLIC POWER DISTRICT |
| <b>DOCUMENT TYPE</b>       | Local Government            |
| <b>DOCUMENT DATE</b>       | 03/24/1998 00:00:00.00      |

---

**COMMENT** 1) The questionnaire is ambiguous and does not take into account the level of detail necessary to answer some questions. One example is a request for individual flows per intake, as opposed to total flow for discharge. Our facilities' existing NPDES permit currently requires total flow for discharge to be reported. The questionnaire requests individual flows per intake. This would require a considerable amount of time reorganizing data to answer. As it is not stated in the instructions or body of the questions, Commenter recommends EPA clarify the level of detail requested, and/or provide a 180 day time frame for completing the questionnaire, if necessary.

**RESPONSE** EPA reduced the flow data from a five year period to a three year period. Based on pretest data the significant reduction or elimination of the most burdensome questions, EPA believes that 90 days is a sufficient amount of time to compete the questionnaire. See response to 316.AEP.003.

---

|                            |                             |
|----------------------------|-----------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/GENERAL             |
| <b>COMMENT ID</b>          | 316.OPPD.002                |
| <b>COMMENT AUTHOR</b>      | OMAHA PUBLIC POWER DISTRICT |
| <b>DOCUMENT TYPE</b>       | State Government            |
| <b>DOCUMENT DATE</b>       | 03/24/1998 00:00:00.00      |

---

**COMMENT** 2) The questionnaire states "EPA does not intend to make judgement via answers to this questionnaire about best technology available (BTA) of the various intake structures". However, upon receipt of the questionnaire, EPA will use the information to frame regulatory options. The criteria used to determine those options are not stated and will, ultimately, determine BTA. Commenter recommends incorporating the criteria that will be used to judge BTA, what qualifications will be used to determine the Missouri River expert, or at a minimum, establishing guidelines that will be used.

**RESPONSE** EPA intends to discuss the criteria used to determine Best Technology options in the preamble to the proposed regulation.

---

|                            |                             |
|----------------------------|-----------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/CBI                 |
| <b>COMMENT ID</b>          | 316.OPPD.003                |
| <b>COMMENT AUTHOR</b>      | OMAHA PUBLIC POWER DISTRICT |
| <b>DOCUMENT TYPE</b>       | State Government            |
| <b>DOCUMENT DATE</b>       | 03/24/1998 00:00:00.00      |

---

**COMMENT** 3) Much of the information sought in the sections regarding "Financial and Economic Information" is considered proprietary. Specifically those questions about power purchases and sales would provide other energy companies with competitive advantages if disclosed. Commenter supports the removal of sections related to sales and purchases.

**RESPONSE** In response to this and other comments, questions requesting information about power purchases and sales were removed from the 316(b) questionnaire.

---

|                            |                             |
|----------------------------|-----------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/ECONIMP             |
| <b>COMMENT ID</b>          | 316.OPPD.004                |
| <b>COMMENT AUTHOR</b>      | OMAHA PUBLIC POWER DISTRICT |
| <b>DOCUMENT TYPE</b>       | State Government            |
| <b>DOCUMENT DATE</b>       | 03/24/1998 00:00:00.00      |

---

**COMMENT** 4) As stated in the federal register, "Impacts on these state government entities could include either increased costs as a result of additional efforts needed to implement a final section 316(b) rule?". The state government entities, which were previously stated in the federal register, are those responsible for issuing National Pollutant Discharge Elimination System permits. Commenter questions how this "impact" would be passed on to industry.

It is Commenter's interest to help the agency in the collection of information and development of regulations under Section 316(b) of the Clean Water Act, 33 U.S.C 1326(b).

**RESPONSE** EPA is aware of the potential burden that 316(b) regulations may pose on state government entities. EPA will conduct analyses, as required under the Unfunded Mandates Reform Act of 1995 (UMRA), to ensure that state government entities are not unduly burdened by new 316(b) regulations.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/GENERAL               |
| <b>COMMENT ID</b>          | 316.EPSA.001                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** The draft questionnaire is proposing to collect tremendous amounts of very detailed information that is not directly relevant to the section 316(b) rulemaking.

**RESPONSE** EPA is unable to respond to this comment since the commenter does not specify any specific questions that are not directly relevant the section 316(b) rulemaking effort. In general, however, EPA has a practical utility for all the data requested in the detailed questionnaire (see attachment to the information collection request for justifications on each part of the detailed questionnaire). Furthermore, EPA revised the detailed questionnaire based on comments. These revisions reduced the size of the questionnaire by at least 60 pages.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/CBI                   |
| <b>COMMENT ID</b>          | 316.EPSA.002                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** Commenter is especially concerned about the financial and economic data that EPA is proposing to collect on fixed capital generation costs, fuel costs productivity, and revenues for specific facilities. This data is highly confidential and would be extremely burdensome for Commenter's members to provide as requested in EPA's questionnaire. Moreover, EPA has failed to provide any compelling justification for the collection of such highly confidential and competitively sensitive information.

**RESPONSE** In response to this and other comments, the question requesting fixed capital generation costs was replaced by a more standard question about general facility-level electric expenses. However, EPA retained the questions about fuel costs productivity and revenues as these will be important in the economic analysis of potential effects of 316(b) regulation on regulated entities. Among other purposes, EPA will use this information to determine the competitive position of nonutility power plants relative to other providers of electricity and their ability to compete in an increasingly deregulated electricity market. Attachment 8 provides detailed explanations of the practical utility of each question requested in the questionnaire.

EPA attempted to reduce respondent burden posed by the 316(b) questionnaire by obtaining data items already reported by nonutilities to the EIA on Form EIA-867. As outlined in the response to comment 316.EPSA.009 above, EIA was not willing to share these data with EPA. Obtaining these data from EIA would have reduced the number of economic questions by almost 20 percent. Since these data could not be obtained from EIA, EPA included references to the appropriate sections in Form EIA-867 in its final version of the questionnaire, thereby reducing respondent burden.

EPA recognizes the highly sensitive nature of some questions in the economic and financial part of the questionnaire. In the course of past regulatory efforts, EPA has handled extensive amounts of confidential data and has developed procedures of ensuring the safety of data identified as confidential business information. These procedures have been put into place both within the Agency and the Agency's contractors to protect sensitive data collected in the 316(b) regulatory effort.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/ECONDATA              |
| <b>COMMENT ID</b>          | 316.EPSA.003                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** As discussed below in greater detail, the questionnaire data will lack practical utility and could even create a distorted impression of the economic impacts of the rulemaking on the power generation sector. This is particularly the case given the site-specific nature of the section 316(b) regulatory process and many uncertainties resulting from restructuring of the power generation industry. In light of these facts, Commenter urges EPA to evaluate economic impacts based on generic analyses that fulfill EPA's legal rulemaking obligations without requiring a detailed breakout of highly sensitive economic data.

1. The proposed questionnaire will gather very detailed economic data that is unnecessary for implementing CWA section 316(b).

EPA indicates two general uses for data gathered by the questionnaire. One is for regulatory development. The questionnaire data is intended to assist EPA in developing section 316(b) regulations, including whether existing cooling water intake structures are having adverse environmental impacts and, if so, what technology reflects the "best technology available" (BTA) for minimizing those impacts. The other purpose of the questionnaire data is to assess the range of economic impacts resulting from the proposed regulation. Specifically, the data is intended to assist EPA in performing the economic impact analyses required by the Small Business Regulatory Enforcement Fairness Act (SBREFA) and other applicable federal laws.

Much of the information to be gathered (particularly the very detailed financial and economic data) is neither necessary nor required for performing any of these regulatory functions. CWA section 316(b), for example, authorizes EPA to assess the costs and environmental benefits of imposing BTA requirements on cooling water intake structures for affected facilities. These analyses, however, do not necessitate performing the plant-specific economic modeling (such as discounted cash-flow and plant closures analyses) that EPA typically performs for traditional effluent guidelines. Similarly, SBREFA and other applicable federal laws provide EPA with considerable discretion in selecting the type of analyses most appropriate for assessing the economic impacts and cost-benefits of this particular rulemaking. As discussed below, several factors strongly weigh in favor of not performing the elaborate economic analyses usually performed for effluent models. These factors include --

-the uselessness of the proposed questionnaire data in performing an accurate assessment of the rule's financial and economic impacts;

-extreme and unnecessary burdens imposed on the respondents to the questionnaire; and

-fundamental differences regarding the manner in which EPA must develop the BTA requirements under section 316(b) and performance standards under typical effluent guidelines.

**RESPONSE**

Two issues are raised in this comment:

1. EPA should evaluate economic impacts based on generic analyses that fulfill EPA's legal rulemaking obligations without requiring a detailed breakout of highly sensitive economic data.
2. EPA should not perform the elaborate economic analyses usually performed for effluent models because of the following reasons:
  - a) lack of utility of the questionnaire data in performing an accurate economic assessment;
  - b) extreme and unnecessary burden; and
  - c) fundamental differences between standard effluent guidelines and the BTA requirements imposed by 316(b).

EPA's response:

1. Given the highly site-specific nature of 316(b) regulations, a fact which has been stressed time and again by industry representatives in these comments and on other occasion, EPA believes that generic economic analyses that ignore site-specific factors are not consistent with the intent of the law. EPA therefore needs to gather the data proposed in these questionnaires in order to evaluate potential impacts of 316(b) regulation with as much site-specific information as possible. While EPA recognizes the highly sensitive nature of some of the items requested in the questionnaire, it uses standard CBI procedures that will insure the protection of confidential business information. These procedures have been put into place both at EPA and at EPA's contractors.
2. EPA disagrees with the Commenter's assertions of why it should not perform detailed economic analyses:
  - a) Each question asked in the 316(b) questionnaire fulfills a specific practical purpose in the economic analyses of 316(b) regulations. These purposes are explained in detail in the justifications of the questionnaire which can be found in Attachment 8;
  - b) EPA recognizes the burden posed on respondents by the 316(b) questionnaire. However, EPA has taken measures to reduce respondent burden wherever possible. For example, EPA deleted Questions 27 and 28, requesting detailed information on uses of cooling water and revenues realized by economic activities from the questionnaire. These questions were cited by industry in public outreach meetings as the most difficult and burdensome requests in the economic and financial part of the questionnaire. In addition, EPA attempted to obtain data that nonutilities provide on Form EIA-867 from EIA. As outlined in the response to comment 316.EPSA.009 above, EIA was not willing to share these data with EPA. Obtaining these data from EIA would have reduced the number of economic questions by almost 20 percent. Since these data could not be obtained from EIA, EPA included references to the appropriate sections in Form EIA-867 in its final version of the questionnaire, thereby reducing respondent burden.

c) EPA recognizes the differences between standard effluent guidelines and the BTA requirements imposed by 316(b). EPA does not intend to follow the standard effluent guideline approach in its economic analysis of 316(b) regulations but seeks to implement an approach that takes account of the highly site-specific nature of 316(b) regulations. The commenter is reminded that many of the economic analyses EPA needs to perform in the context of 316(b) regulations are not driven by the guideline process itself but by other executive orders and mandates that apply to the regulatory process, irrespective of the particular regulation. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.)

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/ECONDATA              |
| <b>COMMENT ID</b>          | 316.EPSA.004                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** Minimal Utility of Questionnaire Data. Commenter does not oppose the collection of data necessary for assessing the costs and benefits of the economic and regulatory impacts of the BTA requirements imposed under CWA section 316(b). In fact, one key element of the regulatory development process will involve assessing whether the costs of a possible regulatory scenario are wholly disproportionate to the anticipated benefits resulting from that scenario. Commenter supports EPA's efforts to gather data that can be meaningfully used for completing these types of economic analyses.

Our fundamental concern is that EPA is proposing to collect enormous amounts of very detailed data that would apparently be used for projecting the economic impacts on specific facilities covered under the rule. The modeling of facility-specific regulatory impacts is very questionable for several reasons. First, performing such modeling would be a very complex, if not impossible, task for the power generation sector. This is especially the case given the rapid and major changes currently occurring within our industry as a result of electric utility restructuring. Among other things, EPA's proposed approach would require the modeling of electric grid dispatch, transmission practices, pricing and constraints, electric demand (load) projections, and supply alternatives. EPA would have to model these and other variables at a time when the widespread uncertainties associated with restructuring mean that historical information on facilities, costs, and sale price of power will be of little value as a predictor of future industry responses to additional regulatory burdens.

Second, EPA need not attempt to undertake these types of overly complex analyses in order to assess financial and economic impacts of the section 316(b) rulemaking on the power generation sector. Generic models are currently available to EPA for providing a reasonably accurate and reliable economic assessment of various rulemaking scenarios. EPA itself has recently adapted these generic modeling tools for assessing the impacts of possible Clean Air Act regulatory control scenarios on the power generation sector. Two notable examples include EPA's modeling efforts used for the Clean Air Power Initiative and the "SIP-Call" rulemaking for addressing interstate ozone transport. Commenter urges EPA to consider adapting these or other currently available generic models for performing the necessary economic analyses for the section 316(b) rulemaking. The thoughtful application of these analytic tools should be more than adequate for achieving EPA's stated purpose for collecting the detailed economic data in the proposed questionnaire. Specifically, these tools should enable EPA to achieve its objective of assessing the number of facilities "likely to incur adverse economic and financial impacts as a result of compliance with the regulation" and the magnitude of these impacts on affected facilities. To the extent that additional data would still be needed to assess small business impacts, EPA could collect that supplementary data only from affected small business entities and perform the necessary analysis for assessing these impacts.

**RESPONSE** The commenter suggests that EPA should not attempt to model potential impacts of 316(b) regulations itself but should instead use existing energy market models in its economic analyses. The commenter cites the need to incorporate factors such as electric grid dispatch, transmission practices, pricing and constraints, electric demand (load) projections, and supply alternatives into the analysis. EPA agrees that modeling of the future electricity market is a difficult task and that the use of existing energy market models is desirable. EPA intends to make use of these existing models so that the important factors mentioned by the commenter can be taken into account. However, while these models are designed to provide important information on issues such as system reliability, capacity shifts, and pricing changes, they are less well suited for the facility- and firm-specific analyses that EPA is required to conduct. In addition, since these models are not run by EPA and since access to them is therefore outside of EPA's direct control, EPA cannot solely rely on these models. Therefore, EPA needs to collect the information requested in the economic and financial parts of the questionnaire despite its intended use of existing models.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/BURDEN                |
| <b>COMMENT ID</b>          | 316.EPSA.005                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** Burdensomeness of the Questionnaire. EPA has indicated that the questionnaire would require an average of 160 hours to complete. The agency has not provided any detailed calculation or other technical support for justify its estimation. Commenter believes that a number of indicators suggest that EPA's estimate is overly optimistic by a factor of three or more. Key indicators include:

The questionnaire will require a detailed breakout of costs incurred, revenues generated, and other economic data related to power production, generation efficiency, and profitability.

Respondents must provide financial data that apportions the uses of cooling water for electricity generation and other economic activities (such as waste heat used at cogeneration facilities).

Many facilities have multiple cooling water intake structures for which multiple responses will be necessary for the same question.

The complexity of aquatic characteristics for many water bodies will dramatically increase the amount of information collected for a significant number of facilities.

The questionnaire burdens will dramatically increase for many facilities that have performed multiple studies evaluating a wide range of biological and aquatic data.

Even using EPA's overly optimistic estimate, the financial burden of completing the draft questionnaire would be approximately \$19 million. As the above indicators suggest, this financial burden would very likely increase to over \$50 million. Imposing such a financial burden requires a compelling justification which has not been clearly articulated by EPA. Commenter believes such a justification is simply not possible in the instant case given that the vast major of the questionnaire data will lack any practical utility in assessing the economic reasonableness of the various regulatory alternatives for implementing the requirements of CWA section 316(b).

This estimate is based on EPA's suggested labor estimate of 160 hours and assumption that questionnaires would be completed for 1,705 affected facilities. Commenter has assumed an average hourly rate of \$70 as the cost for an engineer who would be responsible for completing the questionnaire.

**RESPONSE** The results from pretest surveys reflected that it took an average of 211 hours to complete the survey. However, based on comments (particularly on the amount of flow data requested), EPA has reduced the amount of data originally requested therefore lowering the burden estimate to 156 hours. The Questionnaire was reduce by about 60 pages. EPA has provide

complete details on how the burden was calculated in the information collection request provide to OMB. EPA considers the burden estimate to be reasonable and accurate.

In particular, EPA recognizes the burden with respect to the economic and financial part of the questionnaire and has taken measures to reduce respondent burden where ever possible. For example, EPA deleted questions 27 and 28 which were highlighted as the most difficult and burdensome of the economic questions.

With respect to the burden associated with facilities having multiple intake structures, based on EPA's research and discussion with the power production industry, most facilities have only one intake structure, while few have more than two cooling water intake structures

The burden associated with the aquatic characteristics, facility's should not be very burdensome. Most facilities will only have one source water type. The data collection for each source water body type consists of three to five questions. EPA significantly revised the matrix for providing data on the proximity of intake structures to sensitive aquatic ecological areas within the source water's watershed. The burden associated with completion of this matrix is cut in half.

With respect to the burden associated with multiple studies evaluating a wide range of biological and aquatic data, EPA expects many facilities have not conducted studies and will be skipping this section entirely. For those facilities that have completed one or more studies, the questions are designed as closed ended questions making it easier for the facility to provide the data. Plus, EPA has a "don't know" option which provides facilities with an easy out if they truly do not have the information, instead of having to spend a lot of time and resources trying to figure out a response to the question.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/BTA                   |
| <b>COMMENT ID</b>          | 316.EPSA.006                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** Key Differences Between BTA and Effluent Guidelines.

As already noted, EPA has apparently modeled the draft questionnaire after the information requests typically prepared for effluent guideline rulemakings. There are, however, a number of key differences between the BTA requirement established under section 316(b) and the technology-based performance standards established under typical effluent guidelines. Commenter believes that these differences further demonstrate the inappropriateness of collecting extremely detailed data for performing plant-specific modeling currently being contemplated by EPA.

First, effluent guidelines have traditionally entailed EPA developing generic performance standards that uniformly would apply to all affected sources. Affected facilities must install the requisite technology and reduce their pollutant discharge levels without regard to whether or not these pollutant reductions are necessary to address an adverse environmental impact. In these cases, collecting detailed data from every affected entity can be justified. EPA would logically need this information to assess broad economic impacts of the generic standards that would be applied uniformly across the entire industry. EPA does not need this type of detailed industry-wide data in order to implement the BTA requirements of CWA section 316(b). The regulatory structure of section 316(b) is fundamentally different from the effluent guideline approach. Specifically, BTA is required only in cases where EPA has determined that the existing cooling water intake structure is having an adverse environmental impact on the local waterbody. This decision making process of section 316(b) is inherently site-specific and does not lend itself to EPA modeling industry-wide economic impacts models based on detailed economic data from the entire industry. Moreover, performing such analyses at this time would be fundamentally inconsistent with the regulatory structure and intent established under section 316(b).

**RESPONSE** EPA recognizes that Section 316(b) is fundamentally different than effluent guidelines. However, the data collection process is very similar. EPA used the effluent guideline process to develop the questionnaire, but tailored the questions to reflect Section 316(b) regulatory issues. The questionnaire seeks detailed technical, economic, and environmental information that is extremely important to the development of a scientifically and legally defensible § 316(b) rule addressing existing facilities. EPA has a practical utility for each question (see attachment to the information collection request which provides a justification for the data). EPA has revised the detailed questionnaire to reflect data needed to further develop a draft framework that EPA has developed for the § 316(b) regulation. The framework contemplates a three-tiered analysis designed to evaluate a facility's cooling water intake structure and to determine the best technology available to minimize adverse environmental impacts. The intent of Tier 1 is to establish an operational standard commensurate with the performance of the

cooling water intake technologies that are most effective in minimizing impingement and entrainment. If a facility cannot demonstrate compliance with that standard, a site specific evaluation in Tier 2 would be necessary. Tier 2 considers the characteristics of source waters. Facilities whose intakes are located in an area of low biological productivity would be deemed to meet the requirements of § 316(b). All other facilities would proceed to Tier 3, which prescribes detailed studies to determine what is the best technology available for minimizing adverse environmental impacts in a given location. The baseline data collected through the detailed questionnaire will help EPA frame regulatory options within these tiers and to define further research needs regarding the relationship of cooling water intake structures, intake technologies, and environmental impacts. (Note, EPA's § 316(b) regulatory approach is the very subject of this rulemaking proceeding, the framework is still under development and will remain so until EPA takes final action). Although the 316(b) regulation will likely look very different than an effluent guideline, EPA is still required to prepare a detailed assessment of the impacts of the regulation to satisfy Executive Order 12866; prepare an assessment of the impacts of the proposal on small businesses under SBREFA, and prepare an assessment of the impacts of the proposal on state, local, and tribal governments and the private sector under UMRA.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/ECONDATA              |
| <b>COMMENT ID</b>          | 316.EPSA.007                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** A second important difference relates to fundamental differences that exists between the power generation industry covered in this rulemaking and other manufacturing sectors subject to effluent guidelines. Power plants rendered "uneconomic" by this section 316(b) regulation will only result in shifting of power generation from one generating facility to another with the power grid. This load shifting would occur in most cases within the same geographic region due to existing transmission constraints. Moreover, the replacement power could be supplied by the same power supplier that owned and operated the shutdown facility. In contrast, manufacturers in other industry sectors may be profoundly affected by even minor increases in the cost of production since the same product may be imported into the United States and sold at a lower cost to the consumer. Such economic displacement is simply not possible for the power supply. Commenter believes that this difference is another important reason why the effluent guideline model is inappropriate for assessing impacts of the section 316(b) rulemaking on the power generation sector.

The relative overall economic impacts of the section 316(b) rule should be minor for the power generation industry. For example, given total annual revenues of \$220 billion for the industry, annual compliance costs of \$2 billion would amount to an economic impact of less than one percent for the entire justified. In the context of the rulemaking, these costs -- whatever they are -- may or may not be justified by the estimated benefits to the environment. It is unlikely, however, that these increased costs will be substantial as to result in dramatic change in the national demand for electricity. Commenter acknowledges that the rule could have different impacts, depending on such factors as fuel source, age, size and location of the power plant. We urge that EPA attempt to focus its efforts on modeling these types of impacts.

**RESPONSE** The commenter suggests that the effluent guideline model is inappropriate for assessing impacts of the 316(b) rulemaking because the concept of economic replacement of power does not apply to the power generation sector. EPA again stresses that it does not intend to use the standard effluent guideline approach in estimating potential impact of 316(b) regulation but requires the information to perform the myriad of economic analyses required by executive orders and mandates. EPA intends to use existing energy market models and collect additional data on the majority of the electric power industry so that it has enough information to conduct a grid analysis that does not rely on the concepts routinely used in the development of effluent guidelines. In addition, even if there is no true economic replacement in a commodity industry such as the electric power industry, EPA is nevertheless required by the Small Business Regulatory Enforcement Act (SBREFA) to analyze potential impacts of 316(b) regulation on small entities. Therefore, even if power lost at one plant is replaced by power from another plant within the same geographical region, EPA needs to determine if the economic impacts on facilities and other relevant entities are disproportionately larger for small than non-small firms.



---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/CBI                   |
| <b>COMMENT ID</b>          | 316.EPSA.008                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** 2. The confidentiality concerns weigh in favor of EPA not collecting detailed economic data from competitive power suppliers.

Although the electric power industry is in the process of radical transformation, that process is still far from complete. The industry still includes both traditional regulated utility generators and competitive power suppliers. This means that EPA must be especially sensitive in collecting information from particular segments within power generation industry.

To the extent that some generation facilities remain part of regulated utility companies, the collection of this information will pose no confidentiality problems. Those generators are still subject to rate regulation and costs are recovered through cost-of-service rates approved by state public utility commissions. This will remain true as long as those facilities are owned by public utilities and operated outside the realm of a competitive market. Confidentiality concerns become paramount, however, when a generation facility is operated in a competitive market. In such instances, generation is priced at market-based, not cost-based, rates. Public release of information from individual generating facilities concerning their generating and fuel costs is not appropriate. These costs are not passed through to utility ratepayers because competitive generators, unlike utilities, bear the risk of these costs. This is true for all competitive suppliers, whether the facility is a PURPA qualifying facility (QF), a utility plant which has been sold, or a merchant plant.

Commenter believes that these confidentiality concerns strongly weigh in favor of not collecting data on generating costs, fuel costs, and other competitively sensitive economic data from our sector of the power generation industry. Before requiring the collection of confidential data of this type, EPA must first justify the reasons for gathering such data and limit the collection to only data that is absolutely necessary for performing the economic analyses. Furthermore, EPA should evaluate all alternate approaches and methodologies for performing the same analyses without collection of confidential data. As already discussed, EPA cannot justify collecting such data -- particularly since the Agency can achieve the same ends by performing more generic analyses. EPA should work with DOE and FERC to access their extensive expertise in modeling possible effects of deregulation.

**RESPONSE** Two issues are raised in this comment:

1. Current differences between utilities and nonutilities in their competitive position in the electricity market should weigh against submission of financial data by nonutilities.

2. EPA should evaluate all alternate approaches and methodologies for performing the same analyses without collection of confidential data.

EPA's response:

1. The commenter claims that the differences in the competitive position between utilities and nonutilities should be reason for EPA not to collect financial data from nonutilities. However, EPA maintains that because these differences are rapidly disappearing as deregulation of the industry proceeds, it is necessary to conduct similar economic analyses of 316(b) regulation for utilities and nonutilities. To this end, EPA needs to collect similar data for both groups. EPA feels supported in this opinion by EIA's recent proposal about the future confidentiality of collected data. EIA's press release announcing its proposal about electric power data and confidentiality explicitly states that "[t]he new procedures are designed to provide equal treatment for data from utilities and nonutilities..." (See EIA press release on Electric Power Data and Confidentiality, July 17, 1998.) EIA further proposes to exempt a very limited amount of data from disclosure. As a result of the direction the EIA is taking in terms of the collection and dissemination of nonutility data, EPA feels that its approach of collecting similar data from utilities and nonutilities for 316(b) economic analyses is justified.

However, EPA does recognize the highly sensitive nature of some questions in the economic and financial part of the questionnaire. In the course of past regulatory efforts, EPA has handled extensive amounts of confidential data and has developed procedures of ensuring the safety of data identified as confidential business information. These procedures have been put into place both within the Agency and the Agency's contractors to protect sensitive data collected in the 316(b) regulatory effort.

2. EPA agrees that alternative approaches and methodologies that do not require the collection of data should be explored and used wherever possible. In order to take into consideration important factors such as electric grid dispatch, transmission practices, pricing and constraints, electric demand (load) projections, and supply alternatives, EPA intends to make use of existing electricity market models. However, while these models are designed to provide important information on issues such as system reliability, capacity shifts, and pricing changes, they are less well suited for the facility- and firm-specific analyses that EPA is required to conduct. In addition, since these models are not run by EPA and since access to them is therefore outside of EPA's direct control, EPA cannot solely rely on these models. Therefore, EPA needs to collect the information requested in the economic and financial parts of the questionnaire despite its intended use of existing models.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/NU/BURDEN                |
| <b>COMMENT ID</b>          | 316.EPSA.009                 |
| <b>COMMENT AUTHOR</b>      | ELECTRIC POWER SUPPLY ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/01/1998 00:00:00.00       |

---

**COMMENT** 3. EPA has failed to develop a questionnaire that meets the requirements established under the Paperwork Reduction Act.

The Paperwork Reduction Act (PRA) required EPA to prepare a questionnaire that minimizes federal paperwork burden and maximizes the usefulness of the information collected, The following are key PRA requirements with which EPA has failed to adhere.

EPA has failed to demonstrate that it has taken every reasonable step to ensure that the proposed collection of information is the least burdensome necessary for performing the requisite economic analyses and achieve program objectives established under CWA Section 316(b). See 5 C.F.R. §1320.5(d)(1)(I).

EPA has failed to demonstrate that the collected information will have practical utility. See 5 C.F.R. §1320.5(d)(1)(iii). Among other things, EPA should show the "actual, not merely theoretical or potential, usefulness of the information" to carry out its legal and programmatic functions. See 5 C.F.R. §1320.3(1) & 1320.5(d)(1)(I).

EPA has failed to meet its obligation of developing and presenting a plan for the efficient and effective management and use of the information to be collected. See 5 C.F.R. § 1320.58 (a)(7). EPA's plan should provide a blueprint explaining how the economic data and other information is relevant and useful in developing the upcoming intake structure regulations.

Each of these deficiencies further demonstrate burdensomeness of the questionnaire as currently drafted.

**RESPONSE** The commenter asserts that EPA has failed to develop a questionnaire that meets the requirements of the Paperwork Reduction Act. Specifically, the commenter claims that EPA has failed to:

1. demonstrate that it has taken every reasonable step to ensure that the proposed questionnaire is the least burdensome necessary for performing the requisite economic analyses;
2. demonstrate that the collected information will have practical utility; and
3. develop and present a plan for the efficient and effective management and use of the information to be collected

EPA's response:

1. EPA recognizes the burden posed on respondents by the 316(b) questionnaire. However, EPA has taken measures to reduce respondent burden wherever possible. For example, EPA deleted Questions 27 and 28, requesting detailed information on uses of cooling water and revenues realized by economic activities from the questionnaire. These questions were cited by industry in public outreach meetings as the most difficult and burdensome requests in the economic and financial part of the questionnaire. In addition, EPA attempted to reduce respondent burden posed by the 316(b) questionnaire by obtaining data items already reported by nonutilities to the EIA on Form EIA-867. Unfortunately, EIA was not willing to share information declared confidential by Form EIA-867 respondents with EPA for regulatory purposes. Since these data could not be obtained from EIA, EPA included references to the appropriate sections in Form EIA-867 in its final version of the questionnaire, allowing respondents to retrieve these data from their Forms EIA-867 instead of having to newly research the data and thereby reducing respondent burden. As explained in detail in the justifications, each remaining question questionnaire fulfills a specific purpose in the economic analysis of §316(b) regulations.
2. Each question asked in the 316(b) questionnaire fulfills a specific practical purpose in the economic analyses of 316(b) regulations. These purposes are explained in detail in the justifications of the questionnaire which can be found in Attachment 8.
3. The plan on how information requested in this questionnaire will be managed and used is presented in the justifications which can be found in Attachment 8.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/BURDEN                |
| <b>COMMENT ID</b>          | 316.AMP.001                   |
| <b>COMMENT AUTHOR</b>      | AMERICAN MUNICIPAL POWER-OHIO |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** You have estimated that it will take approximately 160 man hours to complete the survey. Others, put the time of completion at 1,000 - 2,000 hours. Even at 160 hours, this places an excessive burden on municipalities that operate small steam plants. Many of these plants do not have full-time environmental staff to complete the paperwork, forcing them to hire an outside consultant to complete the questionnaire. At a minimum, this would result in an unplanned and unnecessary expense of \$25,000 for each facility. Multiplied over many communities, this results in a significant impact on local government.

**RESPONSE** EPA significantly revised the questionnaire, reducing or eliminating the questions identified as the most burdensome. EPA estimates the revised average burden is 156 hours. For small plants, the burden estimate would be actually lower. Based on the pretest of a small plant, the reported burden was 55 hours and zero dollars.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/GENERAL               |
| <b>COMMENT ID</b>          | 316.AMP.002                   |
| <b>COMMENT AUTHOR</b>      | AMERICAN MUNICIPAL POWER-OHIO |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** At least two of our members who operate steam generating plants do not use surface water for cooling purposes. Unfortunately, the survey does not attempt to ascertain whether the facility has a cooling water intake until page 39. This should be one of the first questions posed and should terminate the questionnaire if a negative response is entered.

**RESPONSE** EPA revised the questionnaire, placing all in-scope screening questions near the front. This way facilities that are not in scope will exit the questionnaire before having to answer unnecessary questions. The question determining whether a facility uses cooling water is now question number 5. If the respondent checks "NO" then the respondent stops and returns the questionnaire. If the respondent answers "YES" then Question 6 ascertains whether the facility withdraws any portion of the cooling water from surface water. Again, if the respondent checks "NO" then the respondent stops and returns the questionnaire.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/BURDEN                |
| <b>COMMENT ID</b>          | 316.AMP.003                   |
| <b>COMMENT AUTHOR</b>      | AMERICAN MUNICIPAL POWER-OHIO |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT**      Sending the questionnaire to every power plant is unnecessary to gain insight into how the industry makes use of cooling water structures. A statistical approach that would make use of a representative sample would provide the data necessary to support an informed rule development process.

**RESPONSE**     EPA will send the questionnaire to a representative sample of the utility industry.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/BURDEN                |
| <b>COMMENT ID</b>          | 316.AMP.004                   |
| <b>COMMENT AUTHOR</b>      | AMERICAN MUNICIPAL POWER-OHIO |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00        |

---

**COMMENT** As I understand it, the ultimate purpose of Section 316(b) is to minimize the negative impacts of cooling water structures on the riverine ecosystem. It would seem appropriate to evaluate the health of the water body before requiring significant investment of resources in completing a survey. For example, if water quality and ecosystem reports (particularly those making use of the Index of Biotic Integrity) demonstrate that the a particular stream segment is healthy or improving, why is there a need to survey the utilities in those areas at all? It seems implausible to think that cooling water intakes are having a significant negative impact in water bodies that are healthy or improving. This information should be readily available to you in state biannual 305(b) reports. Concentrating your survey on problem areas would go a long way toward easing the unnecessary burden on municipalities with small power plants.

**RESPONSE** EPA has a practical utility for data on the water body. The source water body data will help EPA determine which sites to select for a case study. EPA did revise the section on source water body information, reducing the burden slightly. It is impractical for EPA to go through multiple state biannual 305(b) reports to decipher information on a particular water body, when the facility has that information, making it easier to link the data to facility when EPA enters the data into an electronic data base.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL              |
| <b>COMMENT ID</b>          | 316.API.001                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Commenter member companies operate over 150 petroleum refineries in the United States, its territories, and Puerto Rico and these refineries are among the proposed recipients of the questionnaire. Furthermore, some of these petroleum refineries are likely to be impacted by any regulations that are promulgated under the authority of Section 316(b). Therefore, it is vital to Commenter's members that the questionnaire collects adequate and clear information, but not be overly burdensome on respondents by requesting data that are unnecessary to fulfill the objectives of the survey.

**RESPONSE** EPA has significantly lowered the burden, by reducing the questionnaire by approximately 60 pages. EPA also modified the questions identified as the most burdensome based on public comments and pre-test results. In general, EPA has a practical utility for all the data requested in the detailed questionnaire (see attachment to the information collection request for justifications on each part of the detailed questionnaire).

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL              |
| <b>COMMENT ID</b>          | 316.API.002                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00       |

---

**COMMENT** Commenter's comments are intended to improve the clarity of questions and definitions in the questionnaire. An overall concern that the Commenter has with the questionnaire is that in a number of instances, respondents may misunderstand the requested information and data and thus may provide incorrect or misleading answers. Our comments identify definitions and questions which should be clarified by EPA in the final questionnaire. These comments also assume that only those manufacturing facilities that have been identified by EPA (via the screener questionnaire) as having cooling water intake structures will receive the detailed questionnaire. All of the questions in this questionnaire clearly assume that one or more cooling water intake structures which are the operated by the recipient. If it is possible that recipients without cooling water intake structures may receive this questionnaire, then one of the first question in Part 1 should be whether or not a recipient owns/operates a cooling water intake structure, and if the answer is no, the recipient's obligation to complete the questionnaire is satisfied and they should be instructed to send the questionnaire back to EPA.

**RESPONSE** EPA is reasonably 100 percent positive that only manufactures with cooling water intake structures will receive the detailed questionnaire. The screeners that EPA sent to manufacturers identified whether a facility was in or out of scope. The facilities randomly selected to receive the detailed questionnaire will be taken from a revised sample frame of only in-scope facilities.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q4             |
| <b>COMMENT ID</b>          | 316.API.004                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 7, Question 4(a)

This question requests the expiration date for a respondent's NPDES permit. It is common for NPDES permits to be administratively extended by the permitting authorities (states and EPA regions) beyond their expiration dates. This is done because the permitting authorities are unable to renew the permits within the 180-day period between submittal of a renewal application by the permittee and the expiration date of the permit. Therefore, simply requesting the permit expiration date in the questionnaire will lead to misleading responses. EPA should add a response box to this question requesting a facility to indicate if an expired permit has been administratively extended by the permitting authority. Question 4c Same comment as Question 4a.

**RESPONSE** EPA has modified the question to allow for those permits that have been administratively extended.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/DEF                  |
| <b>COMMENT ID</b>          | 316.API.005                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 9, Definitions Box

The definition of groundwater is limited to "fresh" water withdrawn from an aquifer. Some facilities may use brackish, or even saline, groundwater as a water supply. The definition should therefore be expanded.

In addition, the groundwater definition includes the phrase "usually held in aquifers." Commenter is unaware of any groundwater that is not held in aquifers, given that the hydrologic definition of an aquifer is a geological formation that produces groundwater. Therefore, the last sentence in the groundwater definition, which includes the above phrase, is unnecessary and should be deleted. The definition in the glossary (Document I, Part 3) should also be changed.

**RESPONSE** Based upon these and other comments, EPA modified the definition for "Groundwater."

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/DEF                  |
| <b>COMMENT ID</b>          | 316.API.006                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 10, Definitions Box

The definitions of "cooling lake" and "cooling pond" are not mutually exclusive and will be confusing to respondents. Commenter suggests the following definitions for these two terms, based on our interpretation of EPA's intended distinction between the two types of water bodies:

cooling lake - a body of water that is formed by the construction of a dam, berm, or levee in a natural watershed and which relies on the banks of the natural watershed to provide the majority of the containment of the impounded water.

cooling pond - a body of water that is formed by construction of a dam, berm, or levee on land that has no significant watershed and which requires that the manmade containment surround most or all of the impounded water.

The definition of a cooling tower is a poor description and should also be changed to more accurately reflect the design, purpose, and operation of a cooling tower. The following definition is suggested:

cooling tower - a structure that is designed to provide cooling by the forced evaporation of water into an air stream and which uses either mechanical energy (forced draft) or ambient buoyancy (natural draft) to provide the movement of the air stream through the tower.

The definitions of these terms that are provided in the glossary (Document I, Part 3) should also be changed as described in these comments.

**RESPONSE** Based upon these and other comments, EPA modified the definition for a "Cooling Pond," "Cooling Lake," and "Cooling Tower."

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q9             |
| <b>COMMENT ID</b>          | 316.API.007                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 14, Question 9

This question refers to the number of "intake bays" in a cooling water intake structure. The term "intake bays" is poorly defined in the glossary (Document I, Part 3, page 9). EPA's definition is "temporary holding areas designed to direct water toward the pump well of a specific intake structure." However, this definition can be easily confused with the definition of an "intake canal/channel" which EPA also includes in the questionnaire. Furthermore, the graphics in Part 2 are of little value for interpreting what an intake bay is. Commenter assumes that the intent of the intake bay definition is to identify structures attached to the intake structure itself which separate pump intakes from one another. These "bays" typically also have separate bar racks, screens and impingement prevention devices installed. However, some multiple-pump intake structures do not have identifiable bays, as EPA seems to be using the term.

EPA should clarify exactly what it means by an "intake bay" and should include graphics in Part 3 (glossary) that show typical examples of what types of structures it intends to have identified as intake bays. It also must make a clearer distinction between the definitions of intake bays and intake channels.

**RESPONSE** EPA has reviewed all the definition modification suggestions made by the respondents and has modified the definitions accordingly.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q12            |
| <b>COMMENT ID</b>          | 316.API.008                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 18, question 12(b)(2) and (3)

In these two questions EPA requests the harmonic mean flow (note: the Agency has left out the word flow following the word "mean" and should insert it in the final questionnaire) and 7Q10 flow, respectively. However, EPA has structured this response to be answered for nontidal rivers and streams and tidal rivers (emphasis added). The harmonic mean flow and 7Q10 flow for a tidally-influenced river often has little bearing on the mixing and dispersion of an effluent, because tidally-induced flow is often the dominant source of mixing and dispersion in tidal waters. Therefore, EPA should either delete tidal rivers from this question or should add an additional question for tidal rivers requesting either the average tidal range or the tidal flow, or both; if such information is available.

**RESPONSE** EPA has modified the question to ask for Mean Annual Flow and 7Q10 for nontidal rivers or mean tidal flow for tidal rivers.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q13            |
| <b>COMMENT ID</b>          | 316.API.009                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 19, Question 13(a)

This question is very likely to be misunderstood by respondents because the distinctions between EPA's definitions of "lake," "reservoir," and "cooling lake" are very poor. Commenter presumes that EPA intends for the definitions of lake and reservoir to be applied only to bodies of water that were not constructed for the primary purpose of providing cooling for manufacturing processes or steam-electric generation. There are many reservoirs and lakes that were constructed primarily for water supply, for example, that serve dual purpose as cooling water supplies for industry and power generation. If it is EPA's intent to make this distinction between lakes and reservoirs and cooling lakes, then the definitions should make these distinctions very clear, which the current definitions do not.

The inclusion of the term "natural" in front of pond, to distinguish it from a cooling pond (constructed specifically to provide cooling for a manufacturing plant and/or power station) implies that EPA's intent is as stated above.

**RESPONSE** EPA has modified the definitions to add clarity.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q15            |
| <b>COMMENT ID</b>          | 316.API.010                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 21, Question 15 (b) (4)

This question asks for the average distance of an intake structure below the water surface. Given EPA's definition of an intake structure (Part 3, pages 2 and 9), this question makes no sense. EPA defines a cooling water intake structure as the "total structure and associated technologies used to direct water from a water body into a plant up to the point of the first intake pump or series of pumps." At many locations, this would include structural equipment that is above the normal water surface. The figures in EPA's glossary show examples of such structures (Part 3, pages 15 and 16). Therefore, this question as asked does not make sense.

Commenter assumes that the intent of this question is to request the average depth of the openings in the intake structure below the water surface. However, this question is also somewhat problematic, because in many cases the intake structure will be open from the water surface to the bottom of the channel in front of the structure. EPA should reconsider how it wishes to ask this question and should provide better instructions to the respondents on how to answer. For example, if the intake structure is completely open from the water surface to the channel bottom, EPA should instruct the respondent to report the average depth (although EPA could not distinguish between a fully open intake structure and one with openings at a set elevation). If the Agency deems it important to identify structures that withdraw water at specific depths from an intake channel as opposed to structures that withdraw from the total water depth, then the question should be revised.

**RESPONSE** EPA has deleted Question 22 requesting the distance of the top of the cooling water intake structure opening below the water surface for intake canals/channels and modified to include the distance to bottom of structure for Q.13, 14, and 15.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q16            |
| <b>COMMENT ID</b>          | 316.API.011                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 22, Question 16(B)(4 )

This question regarding data on intake structure depth has the same problem identified with Question 15(b)(4) and should be corrected as described in the comments on page 21.

**RESPONSE** EPA has deleted the question and only asks for depth in the submerged intake section.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q17            |
| <b>COMMENT ID</b>          | 316.API.012                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 23, Question 17(b)(4)

This question regarding data on intake structure depth has the same problem identified with Question 15(b)(4) and should be corrected as described previously.

**RESPONSE** EPA has deleted the question here and only asks for depth in the submerged intake question.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q21            |
| <b>COMMENT ID</b>          | 316.API.013                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 27, Question 21 and 22 and Definitions Boxes

EPA's definitions do not clearly differentiate bar racks/trash racks from screens. Respondents will have difficulty making this distinction in some cases and the answers provided to EPA may be inconsistent and misleading.

Commenter suggests that the most appropriate distinction between bar racks/trash racks and screens is the size of the openings in the units. In fact, in Question 21(c) EPA identifies a maximum screen opening of 3/4" inch. Commenter recommends that the Agency incorporate this size opening, or a slightly larger opening, in its definitions of bar screens/trash racks and screens to better differentiate between the different types of equipment. Even a relatively arbitrary selection of opening size to differentiate between the two types of equipment will prevent inconsistent responses and make EPA's data tabulation more meaningful.

**RESPONSE** EPA has considered all the suggestions to the modification of the definitions and has made modifications as appropriate.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q26            |
| <b>COMMENT ID</b>          | 316.API.014                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 41, Question 26(c)

The first bullet in the list of operating conditions is "generating load at the facility (or percent maximum water demand)." It appears that this bullet was taken from EPA's questionnaire for power generation facilities. Commenter suggests eliminating the "generating load" terminology and using the percent of maximum cooling water demand as the basis for the responses in the matrix.

**RESPONSE** EPA has deleted the question.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q32            |
| <b>COMMENT ID</b>          | 316.API.016                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 54, Question 32(b)(3)

This question assumes that an ineffective impingement/entrainment control technology will either be: (1) replaced by an alternate technology; or (2) not changed. A third alternative is that a facility will remove the ineffective technology and not replace it with any alternate impingement/entrainment control technology. The question should be changed to allow this option to be included as a response.

**RESPONSE** Respondents may include this information in their "why changes were made" response.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q29            |
| <b>COMMENT ID</b>          | 316.API.015                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 50, Question 29

The question asks if "dilution pump(s)" are used to reduce the temperature of a cooling water discharge. This should be changed to "dilution water" because pumps cannot reduce temperature and in some cases the dilution water may not have to be pumped to be combined with the cooling water discharged.

**RESPONSE** EPA has modified the question to "Does the plant reduce temperature of its heated discharge by pumped dilution with surface water?"

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/DEF                  |
| <b>COMMENT ID</b>          | 316.API.017                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Page 55, Definition Box

As stated in the comments on the definition box found on the page 10 of the questionnaire, the proposed definition of a cooling tower is an unclear description of the design and function of these units. EPA should replace the definition of cooling tower on page 55 with a better definition, such as that given in Commenter's comments on the page 10 definitions.

**RESPONSE** See Response for 316.API.006.

**SUBJECT MATTER CODE**     DET/MAN/D1/P1/Q33  
**COMMENT ID**             316.API.018  
**COMMENT AUTHOR**        American Petroleum Institute  
**DOCUMENT TYPE**         Industry Association  
**DOCUMENT DATE**         03/25/1998 00:00:00.00

---

**COMMENT**           Pages 56 and 57, Question 33(b)(6)

Commenter suggests replacing the term "helper" with "supplemental," which will be clearer to most industrial respondents.

**RESPONSE**         The question has been modified to "recirculating" systems.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q15            |
| <b>COMMENT ID</b>          | 316.API.019                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Financial and Economic Data Page 14, Question 15

The question asks for information on waste combustion. Question 15(a) should be reworded to ask if a facility conducted waste combustion and if cooling water is used in the waste combustion process. If cooling water is not used in the waste combustion process, then respondents should not be required to supply the data requested in 15(b) and 15(c).

In 15(c), the questionnaire asks respondents to estimate the annual costs of waste "disposal" if the waste combustion unit was not available. Waste combustion units are usually treatment units, not disposal units, because a solid residue requiring disposal is typically generated. The reported annual cost of a substitute treatment process for waste combustion should be adjusted to account for any disposal costs that the facility incurs for combustor residue.

It is important that EPA stick to asking questions totally relevant to the task at hand and not stray into questions not germane to this questionnaire. For example, it is not relevant to this questionnaire to inquire about waste combustion. Irrelevant questions and issues should be eliminated from the questionnaire. This suggestion would contribute to eliminating unnecessary time of both regulators and the regulated facilities. This constructive suggestion is offered under the Government Performance and Results Act (GPRA) to streamline this questionnaire.

**RESPONSE** In response to comments, the questions requesting information on waste combustion were deleted from the questionnaire, reducing respondent burden.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q26            |
| <b>COMMENT ID</b>          | 316.API.020                  |
| <b>COMMENT AUTHOR</b>      | American Petroleum Institute |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 03/25/1998 00:00:00.00       |

---

**COMMENT** Pages 21 and 22, Question 26

This question includes waste combustion as a potential source of 1997 revenues for an industrial facility. Few industrial facilities operate waste combustion units as revenue sources; they are much more commonly cost centers. In Question 15(c) EPA asked facilities that operate on-site waste combustors to estimate annual costs if waste combustion were not used for treatment. Commenter assumes that this estimated cost for an alternative waste treatment is not what EPA wants to have recorded in the table for Question 26, because it defines revenues as the total amount of money received for goods and services provided by the facility. To avoid confusion, a footnote to the Question 26 table should emphasize that revenues for waste combustion should only be reported if that combustion was performed as a service for which money is actually received from users of the service.

**RESPONSE** In response to comments, the questions requesting information on waste combustion were deleted from the questionnaire, reducing respondent burden.

---

|                            |                                |
|----------------------------|--------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/REC/BURDEN                 |
| <b>COMMENT ID</b>          | 316.TRI.001                    |
| <b>COMMENT AUTHOR</b>      | Tri-State Generation and Trans |
| <b>DOCUMENT TYPE</b>       | Industry Association           |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00         |

---

**COMMENT** Commenter believes that it is unreasonable to expect utilities to potentially spend 160 hours responding to a questionnaire concerning intake structures for generating facilities. EPA's stated intention to ultimately send this questionnaire to all utilities seems to be an unnecessary burden on the industry. It would seem that EPA should be able to devise some kind of sampling scheme to obtain the necessary information from a smaller number of respondents. We also believe that more of the desired information should be pursued from existing available published sources.

**RESPONSE** EPA will send the questionnaire to a representative sample within the utility industry.

EPA is using secondary sources where appropriate to obtain needed information. For example, EPA eliminated all the questions requesting historical technology cost data. Instead, EPA will contact vendors to obtain this information. This is just one example of how EPA has significantly reduced the burden of the questionnaire. EPA has a practical utility for all the questions in the questionnaire.

Public sources of information (including FERC Form 1, Form EIA-412, Form RUS 12, and Form EIA-861) will be used wherever possible to reduce respondent burden. However, limited additional information is required to conduct economic analyses that assess the potential impact of 316(b) regulation on affected entities. Each question asked in the economic and financial portion of the 316(b) questionnaire fulfills a specific practical function in EPA's economic analyses. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

In addition, in response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. During the questionnaire pretest, rural electric cooperatives have required an average of 3 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire.

---

|                            |                                |
|----------------------------|--------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/REC/ECONDATA               |
| <b>COMMENT ID</b>          | 316.TRI.002                    |
| <b>COMMENT AUTHOR</b>      | Tri-State Generation and Trans |
| <b>DOCUMENT TYPE</b>       | Industry Association           |
| <b>DOCUMENT DATE</b>       | 03/26/1998 00:00:00.00         |

---

**COMMENT** Commenter also questions why some of the information and data requested is needed, such as those found in Document II, Section D concerning power purchases and sales for resale. The request in Document II, Section E for a copy of any studies analyzing potential effects of deregulation on a utility's operations, economic performance, and/or recovery of stranded assets is totally inappropriate given the nature of the proposed regulations. The request in Document III, Part 2, Section B for the average cost of fuel burned is also objectionable.

In summary, Commenter believes this information request should be revised and restructured to collect only information that is applicable to water intake structures and that a electric utility sampling scheme be devised to reduce the reporting burden on an industry that already has major existing compliance reporting requirements for numerous environmental media.

**RESPONSE** In response to this and other comments, questions requesting information about power purchases, sales for resale, and studies of potential effects of 316(b) regulation on the respondent were removed from the questionnaire. In addition, other questions were eliminated or simplified to further reduce respondent burden. However, the question requesting information about the average cost of fuel burned was retained as it provides very important information on the economic performance of a plant's generating units relative to other plants. As explained in further detail in the justifications of the 316(b) questionnaire provided in Attachment 8, this information will be used in the unit- and plant-level economic analyses of 316(b) regulations.

---

|                            |                            |
|----------------------------|----------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/RESTIME            |
| <b>COMMENT ID</b>          | 316.PRE.001                |
| <b>COMMENT AUTHOR</b>      | PUERTO RICO ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry Association       |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00     |

---

**COMMENT** Our first comment concerns the term required to complete the documents that form the 1998 Detailed Industry Questionnaire: Phase II Cooling Water Intake Structures. In particular, Document II (Utility-Level Information) and Document III (Plant-Level Information, Parts 1 & 2) will require an extensive and detailed research on behalf of the party that will respond to the questionnaires. Therefore, the term to respond to the questionnaire should be at the least within a range of 140 to 160 days. The term afforded to complete the questionnaire should take into consideration the number of plants, historical backgrounds, and the corresponding complexity of each plant.

**RESPONSE** EPA eliminated Document II. Plus, EPA significant revised Document III, reducing or eliminating of the most burdensome questions. Based on these revisions and pretest reports on burden, EPA believes that 90 days is a sufficient amount of time to compete the questionnaire. See response to 316.AEP.003.

---

|                            |                            |
|----------------------------|----------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/BURDEN             |
| <b>COMMENT ID</b>          | 316.PRE.002                |
| <b>COMMENT AUTHOR</b>      | PUERTO RICO ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry Association       |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00     |

---

**COMMENT** With regard to the Environmental and Technological Studies Document III (Plant-Level Information), Part I (Technical Data) Section E, it requires responses in the provided matrix for each study conducted at one or more of the plants' cooling water intake structures. For parties that have been in business for more than 20 years or for parties that have performed several 316(b) and impingement studies, this section impose a heavier burden if compared to other parties that have not been in business for an extended period of time or have not performed as many studies.

**RESPONSE** EPA is asking for data on the most representative study, not every study conducted over the lifetime of the plant. EPA recognizes that those plants who have conducted studies will have a higher burden than those facilities that have not conducted any studies.

---

|                            |                            |
|----------------------------|----------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/DEF                |
| <b>COMMENT ID</b>          | 316.PRE.003                |
| <b>COMMENT AUTHOR</b>      | PUERTO RICO ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry Association       |
| <b>DOCUMENT DATE</b>       | 03/27/1998 00:00:00.00     |

---

**COMMENT** Our next comment regards the term "Cooling Water Intake Structure" definition as provided in the "Glossary to Technical and Economic Questionnaires". We would be interested in confirming if a cooling water intake structure within a single site, that directs the water to intake bays that do not connect to each other and that proceed to separate pumps that send the water to separate cooling units within the plant, are considered a single cooling water intake structure that only requires a single questionnaire response.

We appreciate your assistance in this matter and any information regarding future developments of the questionnaires and the corresponding competitive overtones. Furthermore, any new information regarding the development of the definition of the "adverse environmental impact" term using the "one fish or organism standard" would be of great assistance.

**RESPONSE** Yes, a cooling water intake structure within a single site that directs water into intake bays that do not connect to each other and that proceed to separate pumps that send the water to separate cooling units within the plant are considered a single cooling water intake structure.

---

|                            |                           |
|----------------------------|---------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL           |
| <b>COMMENT ID</b>          | 316.EEI.001               |
| <b>COMMENT AUTHOR</b>      | EDISON ELECTRIC INSTITUTE |
| <b>DOCUMENT TYPE</b>       | Industry Association      |
| <b>DOCUMENT DATE</b>       | 04/13/1998 00:00:00.00    |

---

**COMMENT** EPA Needs to Streamline and Better Focus the Questionnaire

The commenter maintains that the proposed questionnaire, especially given its length and complexity, is an unsuitable mechanism for the task at hand. Despite the agency's best intentions, the commenter does not believe that the questionnaire will produce accurate, relevant and useful data that will be necessary or sufficient for §316(b) regulatory decision making. We believe that the questionnaire is asking for more information than necessary for EPA to evaluate possible improvements in the current §316(b) program. At the same time, we are concerned that EPA will not be sufficiently accounting for site-specific factors that are at the heart of evaluating cooling water intake structures.

**RESPONSE** Based on these and other comments, EPA significantly revised the detailed questionnaire. EPA has a practical utility for each question. See response to 316.AEP.007.

The questionnaire is not EPA's only data collection effort. EPA is using secondary sources of information to supplement the questionnaire data. It is through these other sources that EPA is collecting more site-specific data. See response to 316.EPSA.006 and 316.UWAG.007.

---

|                            |                           |
|----------------------------|---------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN            |
| <b>COMMENT ID</b>          | 316.EEI.002               |
| <b>COMMENT AUTHOR</b>      | EDISON ELECTRIC INSTITUTE |
| <b>DOCUMENT TYPE</b>       | Industry Association      |
| <b>DOCUMENT DATE</b>       | 04/13/1998 00:00:00.00    |

---

**COMMENT** EPA should reexamine the proposed § 316(b) questionnaire in the context of its own stated objectives and more critically examine whether it can address the issues that need to be studied with some more streamlined list of questions and process. The Paperwork Reduction Act (PRA) requires federal agencies, among other responsibilities, to minimize "information collection burdens on the public. See, e.g., 44 U.S.C. §3506(b)(1). Agencies are required to evaluate the need to collect information, eliciting comments on the relevance of the information to the agency's functions and the burden on the regulated community. 44 U.S.C. § 3506. Furthermore, the PRA requires the Office of Management and Budget (OMB) to review proposed new information requests such as the § 316(b) questionnaire to see if this obligation has been met. 44 U.S.C. §3504 (c)(3).

The Commenter's members already are subject to a host of federal and state requirements that are aimed at evaluating and addressing environmental and resource concerns, including the potential effects of their activities on aquatic organisms. These requirements include reviews under the federal Clean Water Act, Fish and Wildlife Coordination Act, Endangered Species Act, National Environmental Policy Act, and Federal Power Act, to name a few. Whether the issue is siting or operating a steam-electric plant, these water-dependent activities already are subject to a huge amount of scrutiny to ensure that they are built and operated in an environmentally-responsible way. We question the need for such an involved, wide-ranging and closed-ended information collection initiative.

**RESPONSE** EPA has significantly revised the questionnaire, reducing the number of pages by over 60 pages. EPA has a practical utility for each question. EPA's justification for the data is part of the information collection request supporting statement which will be sent to OMB for review and approval.

---

|                            |                           |
|----------------------------|---------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL           |
| <b>COMMENT ID</b>          | 316.EEI.003               |
| <b>COMMENT AUTHOR</b>      | EDISON ELECTRIC INSTITUTE |
| <b>DOCUMENT TYPE</b>       | Industry Association      |
| <b>DOCUMENT DATE</b>       | 04/13/1998 00:00:00.00    |

---

**COMMENT** In addition, EPA needs to account better for site-specific factors that play such an important role in the 316(b) context. The critical public policy issues of whether an existing cooling water intake structure creates an adverse environmental impact and, if so, what technology consultates the best technology available to minimize the impact are inherently site-specific concerns. The current questionnaire (for reasons specified in the UWAG's comments) is not structured in a way to allow respondents to adequately account for that site-specificity.

Commenter understands that EPA needs appropriate data to assess the issue and determine a reasonable and responsible course of action. Commenter and it members are committed to assisting the agency in doing just that. We believe there is a way the agency can collect information that is less burdensome than the one currently proposed and that has more practical application. This alternative approach would serve to provide necessary data in a timely manner and do so in a manner that is more consistent with the Clinton Administration's regulatory reinvention initiatives, current statutory requirements and sound public policy development.

For reasons to be detailed in UWAG's comments, Commenter does not believe the current version of the questionnaire most appropriately addresses the stated agency objective to "better understand the design and operation of cooling water intake structures ... to support the development of a regulation pursuant to § 316(b) of the Clean Water Act." Questionnaire, Document III, p.1.

We suggest that EPA approach the regulation of activities under §316(b) through an alternative technique based on analysis of the existing body of §316(b) case studies and available literature in conjunction with technical workshops and public meetings on the critical public policy issues. There may be a need for a simplified, shortened version of the questionnaire to gather some key data. EPA can then, based on information collected and solicited, develop a regulatory approach that accounts for all appropriate site-specific factors. Commenter would energetically work with the agency to support such an approach.

**RESPONSE** The questionnaire is not EPA's only data collection effort. EPA is using secondary sources of information to supplement the questionnaire data. It is through these other sources that EPA is collecting more site-specific data. See response to 316.EPSA.006.

Early in the data collection phase or the rulemaking effort, EPA attempted to use existing 316(b) studies as the basis for developing the regulation. Unfortunately, EPA could not draw any valid conclusions. Past section 316(b) determinations and biological studies do not share

common objectives, methodologies, data-gathering techniques, durations, or time frames. See response to 316.CMA.003.

---

|                            |                           |
|----------------------------|---------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI               |
| <b>COMMENT ID</b>          | 316.EEI.004               |
| <b>COMMENT AUTHOR</b>      | EDISON ELECTRIC INSTITUTE |
| <b>DOCUMENT TYPE</b>       | Industry Association      |
| <b>DOCUMENT DATE</b>       | 04/13/1998 00:00:00.00    |

---

**COMMENT** EPA Needs to Fully Protect Confidential Business Information

Much of the information EPA is planning to collect is confidential business information (CBI). EPA should not collect such information unless absolutely necessary, and EPA needs to handle any such information the agency does collect with care. Therefore, we support EPA's intention to allow reporting companies to identify portions of their responses that are CBI, and we encourage EPA fully to protect such information from public disclosure. In fact, EPA should consider consolidating the information so that it does not disclose individual company CBI, and eliminating the original company specific information as soon as it is no longer needed.

Because of changes occurring in the electric utility industry, as discussed in the next section of these comments, Commenter and its members are very concerned that agencies need to avoid collecting CBI unless necessary and to take steps necessary not to disclose such information to the public, in particular a company's competitors, suppliers, and customers. Information such as a company's capital and operating costs, generation assets, performance characteristics, customers, sales, revenues, and marketing and development plans (including merger plans) is highly sensitive. The public release of such information can cause significant and irreparable competitive harm to Commenter's member companies.

To give a few key examples, if a fuel supplier knows cost, quantity and quality of fuels purchased by a utility, it can use that information during future energy procurements to gain an unfair advantage during competitive bidding and subsequent contract negotiations. Similarly, public release of company-specific wholesale electricity information, when combined with other data, can reveal bidding and marketing strategies, probable electricity production costs, and likely contract negotiation strategies -- public disclosure of this information puts electric utilities at a competitive disadvantage because independent power producers and power marketers can use this information to "target" utility customers and even engage in predatory pricing. Short and long-term projections of utility sales to energy end-users permits competitors to anticipate the marketing efforts that will be necessary to achieve utility sales goals. Also, when projections are combined with actual sales information, competitors for retail customers can determine the success of specific utility marketing and advertising programs and unfairly compete for customers where consumer choice is implemented by the states. Information about plans for future activities, such as the addition of new generation plants and proposed merger activities, reveal a utility's assessment of the adequacy and competitiveness of regional electricity markets and disclose highly sensitive strategic plans. Such intelligence can be used by competitors to thwart competition and to gain an unfair advantage in the electric marketplace.

As EPA appears to recognize, it has both the authority and the responsibility to manage CBI as confidential under the Freedom of Information Act, 5 U.S.C. § 552 (FOIA), the Trade Secrets Act, 18 U.S.C. § 1905, the PRA, and EPA's related confidentiality regulations at 40 C.F.R. Part 2, Subpart B.

Though FOIA generally requires federal agencies generally to disclose their records to the public, the statute contains a number of important exemptions. 5 U.S.C. § 551(b). Of particular relevance is exemption b(4) for trade secrets and privileged or confidential commercial and financial information. Trade secrets can consist of any formula, pattern, device, or compilation of information used in a business that gives the business opportunity to obtain an advantage over competitors who do not know or use it. Restatement of Torts § 757, comment b (1938). Privileged commercial or financial information, such as information covered by the attorney-client privilege, attorney work product privilege, or a self-evaluative privilege, also is exempt. Federal Information Disclosure, Second Edition, James T. O'Reilly, Lawyers Cooperative Publishing Co. (June 1996), chapter 14, pp. 12-13, 23-25. In addition, data qualifies for exemption if it is confidential commercial or financial information. Relevant criteria are the prospect of substantial harm to the competitive position of the data submitter, or the likelihood that disclosure would impair future data gathering by the government. *National Parks & Conservation Assoc. v. Morton*, 498 F.2d 765 (D.C. Cir. 1974). To quote O'Reilly, a "likelihood of harm, not a certainty, is required. The existence of competition must be actual, though the particular competitor who would benefit need not be established. In economic terms, the harm is a misalignment of economic position which results from redistribution of the asset of information. The relationships among parties would change as the information changed hands." *Ibid.*, chapter 14, p. 39.

Courts have held that various types of commercial or financial information can be covered by exemption b(4): short term marketing strategies, market positions, trade sources, customer names, individual customer transactions, high profit activities, profit margins, pricing information, plant employment statistics that effectively disclose plant staffing and equipment use, inventory, and individual employee salaries. See, e.g., *Board of Trade v. FTC*, 627 F.2d 392 (D.C. Cir. 1980), and *Braintree Electric Light Dept. v. Department of Energy*, 494 F. Supp. 287 (D.D.C. 1980). Disclosure of such information will create an inappropriate asymmetry in the electricity marketplace by giving commercially valuable information to companies that compete with or are suppliers or customers of the reporting utilities, creating an imbalance in the market.

The Trade Secrets Act specifies that officers and employees of the United States are subject to fines or imprisonment for divulging information that "concerns or relates to the trade secrets, processes, operations, style of work, or apparatus, or to the identify, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, ... [or] corporation" except as authorized by law. 18 U.S.C. § 1905. The Act thus imposes a direct obligation on agencies and their staff to protect CBI.

The PRA also directs federal agencies to ensure that the collection and dissemination of information is "consistent with applicable laws," including FOIA and the Trade Secrets Act. 44 U.S.C. § 3501. OMB is responsible for reviewing and approving the agency information collection activities, and also is charged with developing policies, standards, and guidelines on "privacy, confidentiality, security, disclosure and sharing of information collected or maintained by or for agencies." 44 U.S.C. § 3504(g). In addition, the PRA imposes the same responsibility for careful management of data on other agencies as the agency that collects the

data. "All provisions of law (including penalties) that relate to the unlawful disclosure of information apply to the officers and employees of the agency to which the information is released to the same extent and in the same manner as the provisions apply to the officers and employees of the agency which originally obtained the information." 44 U.S.C. § 3510(b)(2).

The U.S. Supreme Court has held that the owners of commercially sensitive information are entitled to certain protections including judicial review under the Trade Secrets Act and the Administrative Procedure Act. *Chrysler Corp. v. Brown*, 441 U.S. 281 (1979). These protections have been reinforced by Executive Order No. 12,600, 52 Fed. Reg. 23781 (1987), which requires all Executive Branch agencies to provide parties submitting confidential commercial information with notice and due process in managing the information. If an agency should determine that the confidential protection of information a company has identified as CBI is not warranted, then the agency must notify the person or company who submitted the information before disclosing it, allowing that person or company to seek review of that decision under the Administrative Procedure Act and other applicable law. EPA regulations recognize this responsibility to elicit the submitting company's views before releasing information the company has identified as CBI in response to a request for the information. 40 C.F.R. §2.204(e) and 2.205(b).

Applying these provisions to the § 316(b) questionnaire, Commenter encourages EPA to treat the types of information we have discussed above, and any other information reporting companies may identify as CBI, as confidential. We request that these comments be accepted as an expression of the views of our members that: these data are proprietary commercial and financial information; but for the collection of such data by EPA or other agencies, the data would be held by our members in confidence; and if EPA releases the information, such action will cause our members substantial harm. We hope that this provides EPA with sufficient basis under its regulations to rely on these comments as substantiating the need to treat certain types of utility data as confidential. Of course the best way to protect confidential information is not to require companies to disclose it in the first place. EPA should require companies to provide only the kinds of financial and business information that is absolutely essential for the purposes of this rulemaking, and again we urge EPA to consider the alternative, targeted information collection technique discussed above.

We encourage EPA to consider treating the 316(b) questionnaire in its entirety as confidential - other federal agencies, especially statistical agencies, manage reporting requirements in this way. In any case, EPA needs to protect information that companies identify as CBI from public disclosure. Commenter understands that sometimes EPA chooses to protect confidentiality by "coding" the information it is provided so as to remove identifiers that could be used to identify particular facilities. Anything that would shield the identity of individual plants could be helpful, and we urge EPA to use such techniques. However, we urge EPA not to rely exclusively on such techniques to preserve confidentiality because in the case of the electric utility industry anyone with some time and some reference materials may be able to rather easily identify individual plants based on some key operational or engineering specifications.

**RESPONSE**

In response to this and other comments, EPA deleted from the 316(b) questionnaire some of the data highlighted by the commenter as particularly sensitive. For example, EPA no longer requests the following information: 1) studies regarding plans to adapt to regulation; 2) amount and cost of long-term firm power purchases; and 3) megawatt hours sold and revenues from

long-term sales. However, EPA retained those questions that it needs to conduct required economic analysis, including information regarding the cost, quantity, and quality of fuel burned. As explained in more detail in the justifications of the 316(b) questionnaires, these questions will provide important information for the economic analysis of potential impacts of 316(b) regulation on utilities and their plants and generating units.

The commenter further states that public disclosure of this information would put electric utilities at a competitive disadvantage compared to independent power producers and power marketers. EPA recognizes the highly sensitive nature of many questions in the economic and financial parts of the questionnaire. EPA will use all available techniques to ensure that individual plants are not identifiable from financial information provided in the economic assessment. In addition, EPA has handled extensive amounts of confidential data in the course of past regulatory efforts and has developed procedures of ensuring the safety of data identified as confidential business information. These procedures will be put into place both within the Agency and the Agency's contractors to protect sensitive data collected in the 316(b) regulatory effort. EPA believes that the CBI procedures used are sufficient to fully protect data claimed as CBI.

Finally, it should be noted that nonutility power producers are also subject to the 316(b) questionnaire. Recognizing the evolving competitiveness of the electricity market, EPA is collecting similar information from both utility and nonutility power producers. As a result, EPA does not believe that the 316(b) questionnaire will provide a competitive advantage to any one group of power producers.

---

|                            |                           |
|----------------------------|---------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN            |
| <b>COMMENT ID</b>          | 316.EEI.005               |
| <b>COMMENT AUTHOR</b>      | EDISON ELECTRIC INSTITUTE |
| <b>DOCUMENT TYPE</b>       | Industry Association      |
| <b>DOCUMENT DATE</b>       | 04/13/1998 00:00:00.00    |

---

**COMMENT** These Issues are Especially Important as the Electricity Market is Becoming Competitive

To put our comments about reducing the proposed reporting burden and confidentiality in context, EPA should be aware of the major changes occurring in the electric utility industry. Electric utilities are in the throes of change from a heavily regulated industry with exclusive, defined service territories to an industry where the generation and sale of electricity are increasingly competitive. In the past several years, federal and state legislators and regulators have taken significant steps to encourage competition in the generation and sale of electricity, moving from heavy regulation of these activities to a competitive market.

At the federal level, the Energy Policy Act of 1992 made it easier for new entrants to participate in the power-generation business, creating a new class of market participants called Exempt Wholesale Generators (EWGs). In addition, the Act opened up transmission lines for the EWGs to obtain wholesale customers. Carrying this a step further, in 1996, the Federal Energy Regulatory Commission issued a pair of orders requiring investor-owned electric utilities to provide access to their transmission systems for transmission of power at wholesale. The Commission's objective was to promote robust wholesale competition by providing relatively open access to the transmission systems while also establishing standards for the recovery of costs that would be stranded as a result.

At the state level, all states and the District of Columbia either have had or are in the midst of proceedings to address similar electric industry restructuring issues, in particular at the retail level. Many of them are moving ahead with retail customer choice programs and other initiatives that also introduce competition in the generation and sale of electricity. Already sixteen states have set time frames within which they expect to have retail competition, with California and a number of northeast states in the lead.

As a result, new electric generating and marketing companies are entering the marketplace, and they and existing companies are looking for ways to provide new services and to serve new markets. As of December 31, 1996, there were more than 4,000 non-utility generation projects in the United States. Of these, over 2,200 sold power to utilities. For calendar year 1996, 26 percent of new capacity came from non-utility generation and non-utility generation accounted for 11 percent of the nation's power. Similarly, power marketers and brokers, almost non-existent six years ago, have experienced explosive growth since then. There are now more than 400 power marketers participating in the nation's wholesale markets alone. In the fourth quarter of 1997, power marketers sold enough electricity to power the equivalent of 151 million homes. Among suppliers who sell power to ultimate consumers, there are almost 2,000 municipal electric utilities and more than 900 electric cooperatives in addition to 200 investor-owned utilities. Thus, Commenter's members already face real competition in the generation of

electricity and in sales at wholesale, and increasingly they will face competition in sales at retail.

In such an environment, any new reporting burden such as the § 316(b) questionnaire needs to be kept streamlined, to avoid increasing the costs borne by reporting utilities vis-a-vis other power generators and marketers. Furthermore, any CBI that an agency collects needs to be handled with great care to avoid upsetting operation of the marketplace by providing a reporting company's competitors, suppliers, and customers with commercially and financially sensitive information. Commenter encourages EPA to recognize and properly address these issues in drafting its §316(b) questionnaire and managing the data EPA collects.

**RESPONSE**

Two issues are raised in this comment:

1. The 316(b) questionnaire needs to be kept streamlined to avoid increasing the costs borne by reporting utilities vis-a-vis other power generators and marketers.
2. Any CBI that an agency collects needs to be handled with great care to avoid upsetting operation of the marketplace by providing a reporting company's competitors, suppliers, and customers with commercially and financially sensitive information.

EPA's response:

1. In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. It should be noted that nonutility power producers are also subject to this questionnaire. Therefore, costs associated with responding to the 316(b) questionnaire will affect all segments of the electricity generation market and will not shift the competitive balance between the different market segments.
2. EPA recognizes the highly sensitive nature of many questions in the economic and financial parts of the questionnaire. In the course of past regulatory efforts, EPA has handled extensive amounts of confidential data and has developed procedures of ensuring the safety of data identified as confidential business information. These procedures will be put into place both within the Agency and the Agency's contractors to protect sensitive data collected in the 316(b) regulatory effort. EPA believes that the CBI procedures used are sufficient to fully protect data claimed as CBI.

---

|                            |                           |
|----------------------------|---------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN            |
| <b>COMMENT ID</b>          | 316.EEI.006               |
| <b>COMMENT AUTHOR</b>      | EDISON ELECTRIC INSTITUTE |
| <b>DOCUMENT TYPE</b>       | Industry Association      |
| <b>DOCUMENT DATE</b>       | 04/13/1998 00:00:00.00    |

---

**COMMENT** Conclusion

In summary, Commenter encourages EPA to look for less burdensome, more effective ways to obtain information necessary to further its development of possible § 316(b) regulations. Commenter would be happy to assist in this effort. The goal should be one of streamlining the administrative burden on the regulated community while providing necessary and practical information to the agency for decision making. We are confident that there are positive steps that can be taken in that direction. But the proposed questionnaire does not meet this goal.

**RESPONSE** EPA believes that the revised questionnaire is reasonable. Each question has a practical utility. EPA only asks for data that it will use in the cooling water intake structure rulemaking effort. The questionnaire is only one of many EPA data collection efforts. Where it is impractical to use to use the questionnaire to collect data, EPA is using secondary sources of information.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.AEP.001             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** Company supports the intent of the EPA 316(b) questionnaire; however, EPA must carefully balance the need for the information with its intended use. If a good 316(b) regulation is to be written, then adequate information will have to be collected to ensure that it is a reasonable and technically sound regulation. However, if the agency collects more information than it intends to review, or is even capable of reviewing, then an unjust burden has been placed on the respondents. In our opinion, EPA is obligated to have a clear reason for requesting the information from the electric utility industry and once that information is received, EPA is obligated to use it for its intended purpose. With this in mind, the Companies feel that the Agency has been unclear in describing how the requested information will be used.

**RESPONSE** Each question in the detailed questionnaire has a practical utility. EPA included a justification for the data as part of the supporting documentation for the information collection request.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI             |
| <b>COMMENT ID</b>          | 316.AEP.002             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** Further, requested economic and financial information will not enable the Agency to make appropriate technology determinations and the Companies are very concerned about the confidentiality of this information.

**RESPONSE** Based on comments, EPA reduced the economic and financial section to nine questions for the utilities. EPA is using publicly available data to collect all the other economic and financial information that EPA needs to have on each individual facility.

The purpose of the economic and financial information is not to enable EPA to make technology determinations. EPA will use this information in its assessment of facility- and firm-level impacts of complying with cooling water intake structure guidelines (under the authority of section 316(b) of the Clean Water Act). Specifically, EPA needs to determine how many utilities are likely to incur adverse economic and financial impacts as a result of compliance with regulation, how large the impacts will be, and if impacts will be more severe for small firms than non-small firms. In order to evaluate full costs of the regulation, EPA will consider the costs associated with performing 316(b) demonstrations, additions to cooling water intake equipment, and operating and monitoring costs associated with the regulation. EPA will estimate impacts on firm cash flow and assess the likelihood of full or partial plant closures as a result of the regulation. EPA needs the information requested in this part of the survey in order to conduct these analyses.

EPA recognizes the highly sensitive nature of many questions in the economic and financial parts of the questionnaire. EPA has handled extensive amounts of confidential data and has developed procedures for ensuring the safety of data identified as confidential business information.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/RESTIME         |
| <b>COMMENT ID</b>          | 316.AEP.003             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/13/1998 00:00:00.00  |

---

**COMMENT**      The Agency has also been unrealistic in its estimation of the burden of completing the questionnaire and the time allowed to complete the survey.

**RESPONSE**      The average burden reported from the pretest was 211 hours. The highest burden reported was 430 hours. The facility that reported 430 hours took 120 days to complete the survey. Based on significant revisions, which include the elimination of the most burdensome questions (e.g., historical cost data), EPA estimates that the average burden is now 156 hours. Based on the pretest burden reports combined with the revisions to the questionnaire, EPA believes that it is very reasonable to require that the revised questionnaire be completed in 90 days.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.AEP.004             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** In addition, the questionnaire has not been designed to allow the Agency to appropriately define adverse impact. The Companies will expand on these points in the following text.

**RESPONSE** The purpose the questionnaire is not to define "adverse environmental impacts." See response to 316.CMA.003.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.AEP.005             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** EPA's use of the information is unclear. Unless the use of this information can be further clarified, the effort required to complete the survey for the Companies' facilities will far exceed the value of the information. The intent of the questionnaire needs to be more clearly stated in order to justify the necessary work. The Agency should demonstrate the actual usefulness of the information and ensure that the collected information will have practical utility. The Companies do not oppose the use of the survey for the collection of relevant information; however, the Companies do oppose the collection of this information where there is no obvious use for it.

**RESPONSE** EPA has a practical utility for the data requested in the detailed questionnaire. To clearly demonstrate the practical utility, EPA has included a justification for the data as part of the supporting documentation for the information collection request.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI             |
| <b>COMMENT ID</b>          | 316.AEP.006             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** Confidentiality concerns

The Companies are extremely concerned about the confidentiality and the business sensitivity of much of the information that we will be asked to submit to EPA in response to the questionnaire. The utility industry is in the midst of adapting to market competition and deregulation after many years of operation as tightly regulated monopolies. The financial information sought by EPA in the questionnaire may be subject to release in response to Freedom of Information Act requests because it may not qualify as "trade secrets" or as "confidential" in light of its potential availability to public utility commissions. Therefore, the Companies are competitively vulnerable because EPA's routine confidential business information procedures are unlikely to provide adequate protection for our financial information.

The Companies are particularly concerned about EPA's plans to require the submission of studies regarding the possible effects of deregulation. Some of these studies constitute strategic management plans for competing in the deregulated environment. Even with EPA assurance of confidentiality, the risk associated with disclosure of these studies outweigh any possible regulatory insights that EPA can derive from review of these studies. It is as unreasonable to expect utilities to divulge this type of information as it would be to ask chemical or automobile manufacturers to turn over their business or marketing strategy documents.

In addition to strategic planning documents, EPA's broad inquiry will elicit many studies assessing the viability of mergers and acquisitions, many of which have already been considered and rejected for one reason or another. These studies would be irrelevant to EPA's regulatory process because they are highly speculative, examining hypothetical situations and assuming sets of facts that may never come to pass. Furthermore, since AEP is currently involved in a potential merger, the burden associated with producing all of the relevant studies would be extreme.

The risks and burdens associated with the request for information concerning the effects of deregulation cannot be justified, especially since the Agency can perform its own analysis of the effects of deregulation by accessing the expertise of the Department of Energy and the Federal Energy Regulatory Commission (FERC). In fact, the majority of the information that EPA needs to do an economic analysis of the proposed 316(b) regulation can be obtained from the FERC.

For the reasons stated above, the Companies vehemently object to the inclusion of requests for economic or other information that is directly related to corporate business plans or strategy, or

which is available from other federal agencies.

**RESPONSE**

EPA recognizes the highly sensitive nature of many questions in the economic and financial parts of the questionnaire. In the course of past regulatory efforts, EPA has handled extensive amounts of confidential data and has developed procedures of ensuring the safety of data identified as confidential business information. These procedures will be put into place both within the Agency and the Agency's contractors to protect sensitive data collected in the 316(b) regulatory effort. EPA disagrees with the Commenter that EPA's standard CBI procedure will not be sufficient to protect sensitive data submitted by respondents. Confidential data that are not currently publicly available will not be subject to release under the Freedom of Information Act.

The commenter highlights EPA's request for studies regarding the possible effects of deregulation as particularly sensitive. In response to this and other comments, EPA removed this information request from the 316(b) questionnaire. In addition, the commenter states that CBI may be released because it may not qualify as "trade secrets" or as "confidential" in light of its potential availability to public utility commissions. It should be noted that, in general, information available to the public is not eligible for CBI status. However, EPA is not requesting these publicly available data in the questionnaire but will obtain them directly from the public sources. As a result, information collected in the questionnaire will not be publicly available and therefore will qualify as "confidential" and be protected under CBI procedures.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.AEP.007             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** The survey is more burdensome than estimated by EPA. EPA estimates that each facility will require on the average, 160 hours to complete the detailed questionnaire. This includes the time required to review instructions; develop, acquire, install, and utilize technology and systems for the purpose of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information and transmit or otherwise disclose the information. For the Companies, this effort would, by EPA estimates, require 3520 hours, or the equivalent of 1.7 man-years. This does not appear to be a realistic estimate. Other estimates by electric utility staff range from 250 to 900 hours per plant, with 400 hours being the more likely estimate. However, even this estimate of time is extremely burdensome, adding up to over 8800 hours, or more than 4 man-years. The Companies believe that it is appropriate to assume a fully loaded, hourly rate of \$65.00 for an engineer to complete the data request. Multiplying this rate by the total number of hours expected to complete the survey produces a financial burden of \$572,000 for the Companies alone. The Agency has not adequately justified this expense relative to its need for all of the requested information. As § 308 of the CWA states, "the Administrator shall require the owners or operator of any point source to ... provide such other information as he may reasonably require". (Emphasis added.) For the reasons given herein, we believe that the extensiveness of the technical and economic/financial data requested goes well beyond any measure of reasonableness. We urge EPA to reconsider the burden being placed on the survey respondents.

**RESPONSE** Based on the pretest of the detailed questionnaire, the average burden to utilities was 211 hours. A utility that is representative of the largest and most complex utilities reported a burden of 430 hours. However, based on comments, EPA has significantly revised the questionnaire effectively reducing the estimated burden to 156 hours.

The technical portion of the question was cut by more than 35 pages. The most burdensome questions were identified as the five year water intake flow data and the historical technology cost data. In response these comments, EPA reduced the intake flow data to a three year period and eliminated all the questions requesting technology cost data (capital cost and operation and maintenance cost). EPA will obtain this information from the vendors.

In response to this and other comments, EPA has further simplified the economic and financial portion of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These question are expected to pose minimal burden on respondents. During the questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level

questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly-owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.AEP.008             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** A significant portion of the firm level economic and financial data requested by EPA is publicly available. Though EPA has revised the questionnaire to delete requests for some of the information that is publicly available, the survey still includes requests for a significant amount of publicly available information. For example, Section E: Miscellaneous Utility Information, requests miscellaneous information about the utility's bond rating and allowed rate of return. This type of information is available in various documents filed with the Securities and Exchange Commission (e.g., Form 10-K), the Federal Energy Regulatory Commission (e.g., Form 1), as well as the various state public utility commissions. Information is also contained in various shareholder annual reports for publicly-traded companies, as well as numerous financial reports from independent organizations. Due to the significant burden that completion of the questionnaire will put on respondents, EPA needs to completely eliminate any requests for publicly available information.

**RESPONSE** The commenter argues that a significant portion of the firm level economic and financial data requested by EPA is publicly available. EPA disagrees with this assertion. Public sources of information have been used wherever possible to reduce respondent burden. While it is true that information on bond ratings and the allowed rate of return is available from public sources, EPA's research into these sources has found that the publicly reported information is not uniformly available in the form that is needed for EPA's economic analyses and not always comparable across respondents. In order to perform valid economic analyses, data that are complete and comparable across respondents are essential.

In addition, EPA has further shortened and simplified the economic and financial portion of the questionnaire in response to comments. EPA believes that the remaining questions asked in this part of the 316(b) questionnaire will not pose a significant burden on respondents.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/RESTIME         |
| <b>COMMENT ID</b>          | 316.AEP.009             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** The time allowed to compete the questionnaire is not sufficient. The Agency estimates that, upon receipt of the questionnaire, it will take 30 days to complete Document I and 90 days to complete Documents II and III. These time frames are very unrealistic. Locating, assembling, analyzing, and checking the requested data will consume much more time than EPA has estimated. For this reason, the Companies strongly urge EPA to increase the response time to at least 180 days.

**RESPONSE** All the facilities that pretested the questionnaire completed it within 120 days to include a facility that reported 430 burden hours (highest report). EPA has eliminated both Document I and II and has significantly shortened Document III. EPA estimates the burden is 156 hours. EPA believes 90 days is sufficient time to complete the revised questionnaire. See response to 316.AEP.003.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.AEP.010             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** Requests for plant-level financial and economic information should be made at the firm or regional level.

Certain questions in Document III, Part 2: Financial and Economic Data, are directed at plant-level information. Plant and unit specific information as it relates to cost per kW of installed capacity; revenues and costs from other economic activities is very sensitive and not easily separated because the Companies remain integrated, operating in seven (7) contiguous states. It would be more appropriate for EPA to obtain this information from a market perspective. Peak demand and the real economic value of power sales should be obtained at the regional level (e.g., East Central Area Reliability Council (ECAR)). EPA should contact the various U.S. reliability councils to determine the extent of information that they may have available to assist in its efforts before burdening individual power plants.

**RESPONSE** EPA agrees with the commenter about the importance of conducting economic analyses of effects of 316(b) regulation on a regional (NERC region) as well as an industry-wide level. These analyses will be an important part of the economic assessment of 316(b) regulations. However, the site-specific character of this regulation as well as numerous statutes and mandates (please also refer to the response to comment 316.CMA.006 as well as Attachment 2) necessitate additional analyses of effects of 316(b) regulation on the plant-level. Since plant-level information is not available from the regional reliability councils such as ECAR, EPA needs to collect the plant-level information necessary to conduct required economic analyses in the 316(b) questionnaire.

For a discussion about how EPA intends to protect sensitive business information, please refer to the response to comment 316.CMA.006.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.AEP.011             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** Requested firm level economic and financial information will not enable EPA to make appropriate Best Technology Available (BTA) determinations.

As previously stated, we are concerned with the request for economic and financial information. In addition to our concerns of confidentiality, we believe EPA is on the wrong track with the requested economic information. As stated in the January 26, 1998 Federal Register notice (Vol., 63, No. 16), "the proposed survey instrument [is to] provide EPA with preliminary technical and economic data needed to help quantify the adverse environmental impacts from cooling water structures." Specifically, "EPA is requesting facility and firm level economic data.... These economic data will ... enable EPA to carry out required economic analyses, including a Regulatory Impact Analysis...." While we understand the need for EPA to do an economic analysis of the impact of this rulemaking, it is not clear how EPA will use the requested information in order to do this analysis.

The economic analysis should focus on the methodological issues involved in ensuring that the overall benefits of 316(b) regulations will exceed the costs. If EPA is to assess the costs of intake technologies versus adverse environmental impacts, then the economic questions should be limited to the cost of the various intake technologies. Further, these estimates should also include all relative cost elements. These would include, in addition to the obvious capital, operating and maintenance costs, the possibility of replacement power costs during any plant shutdown due to the retrofit or reductions in station output associated with operating the technology, as well as any costs associated with unintended environmental effects such as increased pollution or waste creation and disposal. These data can then be used in a complete assessment of the economic impact of the regulation.

Firm level data should not be used to assess the economic impact of retrofitting intake technologies at individual plants. It is not reasonable to extrapolate firm-level data to an individual plant basis. Doing so would not produce an accurate assessment of the individual plant economics. Consequently, the use of these data for such purposes would not be appropriate.

**RESPONSE** Four issues are raised in this comment:

1. It is not clear how EPA will use the requested information to do an economic analysis of the impact of this rulemaking.
2. If EPA is to assess the costs of intake technologies versus adverse environmental impacts, then the economic questions should be limited to the cost of the various intake technologies. All relative cost elements should be included.

3. Firm level data should not be used to assess the economic impact of retrofitting intake technologies at individual plants.

4. The economic analysis should focus on the methodological issues involved in ensuring that the overall benefits of 316(b) regulations will exceed the costs.

EPA's response:

1. EPA will use the requested economic and financial information to determine facility and firm-level economic impacts from 316(b) regulation, including facility closures and non-closure impacts. Each question asked in the economic and financial portion of the 316(b) questionnaire fulfills a specific practical function in EPA's economic analyses of effects of 316(b) regulations. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

2. The primary purpose of the economic and financial questions asked in the questionnaire is not to determine the costs of the various intake technologies but to assess potential economic impacts of the regulation on affected plants, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. As such, EPA needs to collect information necessary to assess the ability of plants and firms to absorb the costs associated with compliance with 316(b) regulations.

3. EPA agrees with the commenter that firm-level data should not be used to assess economic impacts of 316(b) regulation on individual plants. EPA collects plant-specific data necessary to make this assessment on the plant rather than using firm level data for this purpose. However, EPA also requires limited firm-level information for the plant-level analysis because certain financial data (e.g., revenues) are only accounted for at the level of the firm and need to be apportioned to specific plants. In addition, EPA needs additional data to conduct firm-level analyses required by statutes such as the Small Business Regulatory Enforcement Act (SBREFA). As explained above, each question asked in the economic and financial portion of the 316(b) questionnaire fulfills a specific practical function in EPA's economic analyses of effects of 316(b) regulations. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

4. The economic analysis will assess the likely impacts of 316(b) regulation on facilities, firms, and communities affected by the regulation. In addition, the benefit-cost analysis will analyze if the costs of the regulation are disproportionately high compared to the benefits. However, neither in this nor in the implementation of other regulations, is EPA required to demonstrate that benefits will exceed costs.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/AEI             |
| <b>COMMENT ID</b>          | 316.AEP.012             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** The questionnaire does not allow EPA to appropriately define adverse impact.

The questionnaire is not designed to support development of a regulation that properly defines adverse impact and site-specific determinations. On the contrary, it appears designed for the development of categorical, technology-based performance standards. However, before EPA can make recommendations for the best technology available for cooling water intake structures, it must first assess whether or not adverse impacts are present. Once adverse impact has been established, EPA can go about defining the technology to minimize that impact.

The agency has stated that it does not intend to rely completely on the environmental data collected by the questionnaire to assess adverse environmental impacts or BTA efficacy. Instead, it appears that the Agency will use the environmental assessment and BTA data from the questionnaire to identify potential facilities for on-site sampling and analysis in order to collect more in-depth data. EPA then appears to presume any impact is adverse and will use the intake data and the impingement and entrainment data from earlier studies to identify as BTA an intake technology or several intake technologies that have the least impact. It is unfortunate that the Agency is taking this approach. The survey asks for information on the performance of 316(b) studies and on the presence of sensitive ecological areas near intake structures. However, information on whether or not a determination of adverse impact was made during the studies is not requested.

EPA must define adverse impact and the concept of adverse impact should be based on the ability of aquatic populations to propagate and survive. It should not be based on the loss of individual fish. Population effects do not correlate with intake effects because the cropping losses caused by intake structures can have markedly different effects on aquatic populations in different ecosystems. For this reason, the concept of adverse impact must be applied on a case-by-case basis. The biological significance of intake losses depends on the interaction of multiple variables that will be unique in each environmental setting. Questions on the survey must take into account the complex biological considerations describing the fish population response to natural and man-induced stresses.

The survey has virtually ignored the need to collect meaningful information on adverse impacts. If the Agency were to gather data concerning adverse impacts from previous 316(b) studies, it would be able to compare those data with plant-level technical data. Such a comparison would allow the agency to make a better assessment of which facilities have the potential to cause adverse environmental impact.

## RESPONSE

EPA agrees with the commenter that one of the major issues that EPA must address in the rulemaking is what is an "adverse environmental impact." The questionnaire, however, is not the most effective data source for the information necessary to help EPA define "adverse environmental impact." EPA intends to use case studies, both individual and watershed, and other secondary sources for this purpose. The questionnaire is designed to provide indicator environmental data to help EPA chose case study sites. See also response to 316.CMA.003.

Reference the Commenter's concern that EPA appears to presume any impact is adverse and that EPA intends to use impingement and entrainment data from earlier studies to identify as BTA an intake technology or several intake technologies that have the least impact. This is a presumptive opinion. First, EPA does not state that any impact is adverse. Second, EPA does not intend to use the impingement and entrainment data from earlier studies to determine that a specific facility is causing an adverse environmental impact. EPA does not have a practical utility to collect data on weather or not a determination of adverse impact was made during the studies. This information is purely subjective and is not based on a common definition of "adverse environmental impact," therefore the information is useless. Lastly, survey data will not be used to make a final BTA determination on a facility basis, but rather to provide EPA with an estimate of potential national level costs and benefits of the regulation.

Survey data will not be used to make final BTA determination on a facility by facility basis, but rather to provide EPA with an estimate of potential national level costs and benefits of the regulation.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.AEP.013             |
| <b>COMMENT AUTHOR</b>      | AMERICAN ELECTRIC POWER |
| <b>DOCUMENT TYPE</b>       | Industry (specific)     |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00  |

---

**COMMENT** In summary, the Companies believe that EPA needs to collect information for this important rulemaking. Any 316(b) regulation developed without this information, would not be a reasonable or effective regulation. However, while the Companies believe that the Agency needs to collect adequate information to develop the 316(b) regulations, the Companies also believe that this information must be collected in a reasonable and responsible manner. The current questionnaire does not do this and needs to be significantly revised.

**RESPONSE** EPA has a practical utility for each question in the questionnaire. See response to 316.AEP.007.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/BURDEN               |
| <b>COMMENT ID</b>          | 316.AFPA.001                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00       |

---

**COMMENT** Commenter has several primary concerns with the Questionnaire, a few of which we previously discussed in our comments on the draft Screener. (for your convenience, our comments on the Screener are attached as Attachment III. Our primary concerns with the Questionnaire are discussed below.

The Need for Two Separate Questionnaires for Manufacturers and Nonutility Power Producers

It is clear why EPA is proposing separate Questionnaires for manufacturers and for Nonutility Power Producers. The Questionnaires are very similar, but it will be confusing for respondents trying to figure out which Questionnaire they have to fill out. According to the Glossary, a facility that generates any electricity is considered a "nonutility power producer." Yet the Manufacturers Questionnaire contains many questions (Section H) about electricity generation, which a facility filling out the Manufacturers Questionnaire, as opposed to the Nonutility Power Producers Questionnaire, should not need to answer.

**RESPONSE** EPA will determine which facilities will receive the manufacturers questionnaire and which ones will receive the nonutility power producers questionnaire. Contrary to the original glossary definition, not every facility that generates electricity is considered a nonutility power producer. Rather, for the purposes of this questionnaire, a nonutility power producer is defined as a facility that is not a utility and that generates electricity as its main economic activity. The glossary definition of the term "nonutility power producer" has been modified accordingly. In addition to these facilities, other facilities, classified as manufacturers for the purposes of this questionnaire, may be engaged in the generation of electricity. (In general, the main economic activity of these facilities is not electricity generation.) As a consequence, facilities classified as manufacturers will be asked to provide some information about electricity generation. However, this information will be less detailed than that asked of nonutility power producers. The glossary definition of "nonutility power producer" has been changed in response to this comment.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL        |
| <b>COMMENT ID</b>          | 316.TU.002             |
| <b>COMMENT AUTHOR</b>      | TU SERVICES            |
| <b>DOCUMENT TYPE</b>       | Industry Association   |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** The two key determinations under Section 316(b) are whether the existing cooling water intake structure creates an adverse environmental impact and, if so, what technology constitutes the best technology available to minimize the impact. These determinations are inherently site-specific, as EPA has recognized in more than 20 years of past rulemaking and regulatory guidance. Specific comments are addressed on the following page.

**RESPONSE** EPA is unable to respond to this comment because it is too general.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN         |
| <b>COMMENT ID</b>          | 316.TU.003             |
| <b>COMMENT AUTHOR</b>      | TU SERVICES            |
| <b>DOCUMENT TYPE</b>       | Industry Association   |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** EPA has not met its obligations under the Paperwork Reduction Act (PRA). Under the PRA, EPA must demonstrate that it has taken reasonable steps to ensure that the proposed collection of information is the least burdensome necessary for the proper performance of the Agency's functions and inform respondents of how collected information will be used. In order to meet these responsibilities, EPA must first develop a regulatory strategy that is consistent with the proper performance of its functions in implementing Section 316(b). EPA should explain how the Questionnaire data will be used to carry out that strategy, and support its certification that the collected information is necessary for that purpose.

**RESPONSE** EPA has developed a draft regulatory framework. The questionnaire does support the continued development of this draft framework. Each question has a practical utility. EPA justifies the data in the information collection request supporting documentation. See response to 316.EPSA.006.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/HIST           |
| <b>COMMENT ID</b>          | 316.TU.004             |
| <b>COMMENT AUTHOR</b>      | TU SERVICES            |
| <b>DOCUMENT TYPE</b>       | Industry Association   |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Availability of data

EPA's directive to "Answer all questions unless otherwise instructed" places a burden on the responder to take extraordinary steps to complete the questionnaire. For older facilities, written documentation for events or changes made decades ago may no longer exist or be accessible, as well as data on various proposed or canceled systems and units. There is also a significant cost in time and personnel associated with recovery of much of the more extraneous data requested, and several items in the questionnaire appear to exceed the record retention requirements identified in NPDES permits or other regulatory programs. The Agency should include a clear definition of the phrase "data not available" including the concept of "a reasonable search". This response should be made available throughout the questionnaire, not just in certain portions.

**RESPONSE** In the revised instructions EPA does state to "answer all questions unless otherwise instructed." EPA instructs each respondent to "not leave response areas blank to any questions that you have been directed to answer." EPA asks for data on the most recent technology changes, not all changes which is not overly burdensome. Plus, EPA only asks for data on planned (not canceled units) cooling water intake structures and changes to capacity. EPA revised the questionnaire to reflect, where appropriate, data collection based on established NPDES record retention requirements. EPA believes that the term "data not available" is self explanatory, and does not need further clarification. In addition, the Commenter asks EPA to define "reasonable search," but EPA does not use this term. EPA allows the respondent the option to check "don't know" if the data is not available for questions EPA has reason to believe data may not be available. See response to 316.UWAG.039.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/RESTIME        |
| <b>COMMENT ID</b>          | 316.TU.005             |
| <b>COMMENT AUTHOR</b>      | TU SERVICES            |
| <b>DOCUMENT TYPE</b>       | Industry Association   |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Comment Period

A ninety-day comment period is insufficient for development and submittal of the information required. Much of the information requested is either typically not maintained, or is kept in a different format than the requested format/units of measurement. This will require the identification, collection, and generation of the databases necessary to respond. Further, the complexity and depth of the requested data, combined with the difficult format of the questionnaire, will make assemblage and recording difficult. Commenter suggests a more reasonable comment period of 180 days.

**RESPONSE** All the facilities that pretested the questionnaire completed it within 120 days to include a facility that reported 430 burden hours (highest report). EPA has eliminated both Document I and II and has significantly shortened Document III. EPA estimates the burden is 156 hours. EPA believes 90 days is sufficient time to complete the revised questionnaire. See response to 316.AEP.003.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN         |
| <b>COMMENT ID</b>          | 316.TU.006             |
| <b>COMMENT AUTHOR</b>      | TU SERVICES            |
| <b>DOCUMENT TYPE</b>       | Industry Association   |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT**      Size of Company

Large companies, such as Commenter, with multiple generating facilities, will probably have greater difficulty in responding to the questionnaire since this type of broad information request, requiring current, historical, corporate, and site specific data (especially where there is no one repository for the data), will require a multiplication of efforts to locate and assemble the data at both the facility and corporate levels.

**RESPONSE**      In general, EPA has reduced the burden of the questionnaire by deleting all the historical technology cost data questions and by reducing the number of years for the flow data. See response to 316.AEP.007.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN         |
| <b>COMMENT ID</b>          | 316.MP.001             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** General Comments: Burden Associated with Completing the Detailed Industry Questionnaire

The Environmental Protection Agency (EPA) has estimated that respondents will require approximately 160 hours to complete the questionnaire. Based on Commenter's involvement as a volunteer utility completing the draft questionnaire, we are estimating it will require approximately 400-500 hours per facility to complete the questionnaire. This estimate may be low for many utilities as MP has computerized our circulating and service water flow data which significantly reduces the amount of time required for completion. Without a computerized system, our time to complete would increase significantly. It should be pointed out that our volunteer facility has only one intake structure. Facilities with multiple intake structures would require more time for questionnaire completion.

**RESPONSE** Based on these and other comments, EPA significantly revise the questionnaire reducing or eliminating the questions identified as the most burdensome. EPA estimates the burden of the revised questionnaire to be 156 hours. See response to 316.AEP.007 (this commenter represents the facility that pretested the draft detailed questionnaire and recorded a burden of 430 hours).

In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These question are expected to pose minimal burden on respondents. During the questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly-owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI            |
| <b>COMMENT ID</b>          | 316.MP.002             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Confidentiality

Commenter is extremely concerned about the amount and type of confidential and sensitive information required by the questionnaire. As the electric utility industry is already in a competitive environment due to deregulation initiatives, Commenter is very concerned about providing some of the financial information (References to FERC Form 1 pages 300, 301, 321, 326, 327, and 401. Currently efforts are underway to make this information confidential), strategic planning documents and specific studies on deregulation. Summaries of activities which have been included in other public documents can be provided, however, specific information which outline strategic direction, unit specific pricing information and income generating efforts may not be submitted. Even with the EPA assurances of confidentiality, the risk associated with the disclosure of these specific studies and information outweigh any potential regulatory insights EPA can derive by reviewing their content. Commenter believes this type of information should be confidential and if released could be damaging to our competitiveness in a deregulated environment. Commenter also questions the applicability of this type of information to the overall rule making process.

**RESPONSE** In response to this and other comments, EPA removed the information request for any strategic planning documents and studies on deregulation from this questionnaire. In addition, EPA removed all questions related to FERC Form 1 pages 300, 301, 321, 326, 327, and 401.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CERT           |
| <b>COMMENT ID</b>          | 316.MP.003             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Certification

In completing the draft questionnaire its apparent that a fair amount of best professional judgment, estimated data and assumptions are necessary to complete the questionnaire. Several questions in the questionnaire require estimating quantities (Document III, Part 1, Questions 11 and 16; Document III, Part 2, Question 9). In these cases, certifying that the responses are "complete and accurate" upon penalty of civil or criminal charges seems inappropriate. Any form of certification statement should be geared towards a "good faith effort" and "best professional judgment" rather than "accurate and complete". This appears to be a better approach rather than attempting to qualify the answers in numerous situations.

**RESPONSE** EPA has modified the certification statement to address this concern. Specifically, EPA added the following language: "In those cases where we did not possess the requested information, we have provided best engineering estimates or judgments."

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/AEI            |
| <b>COMMENT ID</b>          | 316.MP.004             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Adverse Environmental Impact (AEI). It's unclear to Commenter how the questionnaire is going to assist the EPA in addressing an AEI rule-making. EPA should address how the information being requested will promote the development of a rule which defines AEI and facilitate site-specific determinations.

**RESPONSE** The purpose of the questionnaire is not to define adverse environmental impacts. EPA is primarily gathering data through other research efforts to help define adverse environmental impacts. The environmental data collected through section D is designed to support and supplement data that EPA is obtaining through the secondary sources. See also response to 316.CMA.003 and 316.CON.003.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL        |
| <b>COMMENT ID</b>          | 316.MP.005             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Consistency with Reference Documents Several questions reference EIA Reports, the requested questionnaire responses do not match the information listed in the EIA Reports. Consistent terminology should be used between the questionnaire and the noted reference documents (Some examples include- Document III, Part 1, Questions 3, 13,16 and 18: Document III, Part 2, Question 7).

**RESPONSE** EPA deleted all references to EIA Reports in Document III, Part 1 (Facility-Level, Technical Data).

In response to this and other comments, the language of Document III, Part 2, Question 7 was changed to be consistent with terminology used in the referenced EIA Reports.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL        |
| <b>COMMENT ID</b>          | 316.MP.006             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Clarification

EPA needs to furnish additional clarification to several areas within the questionnaire. This clarification is necessary to reduce the burden on those completing the questionnaire and the EPA. Areas requiring further clarification are identified below (See Specific Questions on the Questionnaire).

**RESPONSE** EPA addresses specific issues later in the document.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL        |
| <b>COMMENT ID</b>          | 316.MP.007             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Availability of Data

A "no data" or "data not available" entry should be available for each piece of data requested. In some cases monthly and daily data has never been collected for "daily min." and "daily max." cooling water flows. "No data" or "data not available" should be defined to cover at least two situations, one in which the data was never collected and, two, to cover the situations where the data is too difficult to obtain.

**RESPONSE** EPA decided that the term "no data" was appropriate to reflect data that was never collected and data that is too difficult to obtain. EPA did add an option to check "no data for the year." EPA also reduced the number of years of flow data to the three most recent years. More recent data should be easier to obtain than data four and five years back.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D2/Q4          |
| <b>COMMENT ID</b>          | 316.MP.008             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 5 Question 4b

The definition of electric department is needed (i.e., does it mean the entire electric portion of the company, the generation portion, of the entire corporation.) Some form of clarification is necessary.

**RESPONSE** This question was omitted from the questionnaire.

In response to this and other comments, the instructions to this question were modified to more clearly identify the information requested.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI            |
| <b>COMMENT ID</b>          | 316.MP.009             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page #7 Question 10 h-j

This information should be treated as confidential, including the alternative information. Utilities are attempting to remove this reporting requirement.

**RESPONSE** In response to this and other comments, EPA removed the questions requesting information on the amount and cost of long-term firm power purchases from the 316(b) questionnaire.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI            |
| <b>COMMENT ID</b>          | 316.MP.010             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page #8 Question 11 p-q

This information should be treated as confidential, including the alternative information. Utilities are attempting to remove this reporting requirement.

**RESPONSE** In response to this and other comments, EPA removed Question 11 of Document II (request for information on the disposition of energy) from this questionnaire.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI            |
| <b>COMMENT ID</b>          | 316.MP.011             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page #9 Question 15

This information is confidential. A summary which is provided in other regulatory reports might be an acceptable option.

**RESPONSE** In response to this and other comments, EPA removed Question 15 of Document II (request for studies on deregulation) from this questionnaire.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q1       |
| <b>COMMENT ID</b>          | 316.MP.012             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page #7 Question lb

In cases where the label is not correct, the block provided does not have a space for the facility phone number.

**RESPONSE** Space has been added to provide the facility telephone number.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q3       |
| <b>COMMENT ID</b>          | 316.MP.013             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 7 Question 3

The term "commercial service" needs to be clearly defined. The question does reference Page 1 Item 5 of EIA 767, but this report classifies plants as "existing", "planned", or "retired". If reference is made to EIA 767, the question should be consistent with this terminology. At a minimum "commercial service" should be defined in relation to EIA 767.

**RESPONSE** EPA has deleted this question.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q4       |
| <b>COMMENT ID</b>          | 316.MP.014             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 8 Question 4a.

Does this "main line of business" refer to the plant that is completing the questionnaire or the corporation as a whole? In many cases, electric utilities have diversified into many lines of business and electrical generation may not be the "main line of business."

Page 8 Question 4c Same comment as Question 4a.

**RESPONSE** EPA requires the Standard Industry Code (SIC) for the plant's main line of business (e.g., petroleum refining, electric utility). EPA has clarified in Question 4(a) that this question is for plants specifically. The SIC system classifies establishments by their primary type of activity. Therefore, the SIC code should match the plant's primary activity.

EPA deleted Question 4(b) requesting the North American Industry Classification (NAIC) code information.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q5       |
| <b>COMMENT ID</b>          | 316.MP.015             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry Association   |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 5c

A box should be provided to indicate if a station is operating under an expired NPDES permit. In some cases, a permittee will have made timely application, but the permitting authority may not have issued the new permit prior to the expiration date.

**RESPONSE** A box has been provided to indicate if a facility's NPDES permit has expired by has administratively been extended.

Would the definition of "discrete biological study of impingement" include monitoring of the number of organisms (rate or volume) impinged at a facility? It implies a study of population effects, not simply a count of organisms impinged. Has this been determined?

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q11      |
| <b>COMMENT ID</b>          | 316.MP.016             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 12 Question 11

The term "plants own surface water supply" needs to be defined. Does this mean the plant is taking water from its own cooling ponds or a public water (i.e., lake, river, stream, etc.) It is assumed that this term covers plants who are appropriating water from public lakes, rivers, streams but the term is confusing. It implies that the plant owns the actual water source

**RESPONSE** The "plants own surface water supply" has been defined for the purposes of this questionnaire as water from ponds or reservoirs contained within the facility's boundary.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q12      |
| <b>COMMENT ID</b>          | 316.MP.017             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page #13 Question 12a 2

The flow requested in MGD needs to be defined as either minimum, maximum or average. It is assumed because the data requested covers a one year period, the total volume appropriated for the year would be totaled and then divided by 365 days. This needs to be specified because water appropriation can vary greatly on a day to day basis.

**RESPONSE** EPA clarified that the requested information is an average annual flow. EPA provided calculation instruction for further clarification.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q13      |
| <b>COMMENT ID</b>          | 316.MP.018             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 16 Question 13a

Our system has one intake and one outfall point and would appear to be one CWS. The question implies that our response should be the same as that found in EIA 767, but for the facility we selected to our respond to the draft questionnaire that document lists four systems with only three names (CS- 1, CS- 1, CS- 3 & CS-4). Should we consider this as one CWS and do we care about direct correspondence with EIA 767?

## Page #16 Question 13b

The cooling systems listed above came on line at three different times. Should we list the earliest use of this intake point or all three? Again, EIA 767 lists all three.

**RESPONSE** EPA request that the respondents answer the questions according to the definitions of cooling water systems provided in the questionnaire. In an attempt to decrease confusion, EPA has deleted all reference to EIA-767 and instructs the respondent that similar data may be requested. Your comment suggests the need for further site-specific discussion to arrive at an appropriate answer. EPA cannot answer this question directly without more information. For cases such as these, EPA will be operating a help line to provide direction for site-specific questions.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q16      |
| <b>COMMENT ID</b>          | 316.MP.019             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 18 Question 16b

As in question 13b, should we provide the first date or all three?

Page #19 Questions 16c and 16d

The questionnaire requests locations in degrees, minutes and seconds, and refer to EIA 767. EIA 767 does not use seconds. Should the response here match EIA 767 or be something more accurate. Are seconds necessary?

Page # 19 Question 16f

The term "Total Design Intake Flow" implies an instantaneous maximum flow requirement but the units listed are in MGD. Do they want a daily average, maximum day or design flow?

Page #19 Question 16g

The meaning of the term "design" needs to be clarified.

**RESPONSE** Question 16(b) requests date when first used.

EPA agrees with the commenter that the references to EIA Form 767 can be confusing and direct the respondent to answer the questions incorrectly, therefore EPA will delete the EIA-767 references. However, EPA will note in the survey instructions that some questions request similar data to that reported in the EIA-767. The EIA-767 data do not contain the precision required by EPA to conduct the GIS mapping. Therefore, EPA has requesting the longitude/latitude data be reported in degrees/minutes/seconds.

For Question 16(f), EPA has revised the question to ask for "design intake capacity" instead of design intake flow. This should clarify that EPA is not asking for the measured flow but rather the design capacity. If the structure withdraws water for multiple purposes the respondent should provide the design intake flow for all uses.

EPA is not adding a definition for the term "design" since this is a commonly used term in engineering.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q18      |
| <b>COMMENT ID</b>          | 316.MP.020             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page #21 Questions 18b and 18c

The questionnaire requests locations in degrees, minutes and seconds, and refer to EIA 767. EIA 767 does not use seconds, are they necessary? Should the response here match EIA 767 or be something more accurate.

**RESPONSE** The latitude and longitude needs to be more specific than what is reported on the EIA-767 form. EPA will input these data into a GIS mapping system. This will provide EPA with a visual picture to evaluate cumulative impacts.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q19      |
| <b>COMMENT ID</b>          | 316.MP.021             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page #22-24 Questions 19 through 23

The intake in question draws surface water from a cove that is fed, minimally, from a small creek and substantially from an adjacent lake which is part of the Mississippi River. The river, at this point, has two different lake names but appears to be a river. Less than two miles downstream, there is a dam that controls the river at a slightly higher elevation than would occur naturally. Water flow from the river is facilitated by the fact that the natural channel to the bay, has been dredged to improve the flow of cooling water to the intake structure. Should we simply call this a river? If not, what questions need to be answered? Is it a lake? Is it a reservoir?

**RESPONSE** Facilities should consult their NPDES permitting authority or the Regional USGS office for source water classification.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q19      |
| <b>COMMENT ID</b>          | 316.MP.022             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 22 Question 19

Refers to withdrawal of plant's cooling water from a non-tidal river or stream. Commenter intake withdraws water from North Blackwater Lake which is connected to the Mississippi River via a man made canal

**RESPONSE** Without knowing the particulars of your situation, it appears your source water would be from a lake. However, facilities should consult their NPDES permitting authority or regional USGS office for site-specific source water classification.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q20      |
| <b>COMMENT ID</b>          | 316.MP.023             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 22. Question 20

Refers to withdrawal of plant's cooling water from a lake, pond or reservoir. Commenter intake withdraws water from North Blackwater Lake which is connected to the Mississippi River via a man made canal.

**RESPONSE** Without knowing the particulars of your situation, it appears your source water would be from a lake. However, facilities should consult their NPDES permitting authority or regional USGS office for site-specific source water classification.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q22      |
| <b>COMMENT ID</b>          | 316.MP.024             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/08/1998 00:00:00.00 |

---

**COMMENT** Page 25 Question 22a

Asks whether the plant has any intake canals/channels. Commenter intake withdraws water from North Blackwater Lake which is part of the Mississippi River via a man made canal. The intake structure, however, is not located at the terminal end of the canal.

**RESPONSE** Without knowing the particulars of your situation, it appears your source water would be from a lake. However, facilities should consult their NPDES permitting authority or regional USGS office for site-specific source water classification.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26      |
| <b>COMMENT ID</b>          | 316.MP.025             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 29 Question 26

Asks about the plant's cooling water intake structure proximity to other structures and sensitive ecological areas. Questions 26b and c asks about discharge outfalls of other plants. We should not be concerned about other intake structures and even if this question remains there should be a "none" option on the questionnaire.

**RESPONSE** EPA has deleted this question.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q33      |
| <b>COMMENT ID</b>          | 316.MP.026             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 47 Questions 33a and 33b

Refer to actual approach velocity measured just prior to the first cooling water intake structure technology. At the Commenter's facility, the approach velocity will vary with the number of circulating water pumps that are operating at the time. Two circulating water pumps are used on each Units 1 and 2 during the summer months while one pump is used on these same units for winter operation. The questionnaire needs to be modified to accommodate the different modes of and resulting approach velocities.

**RESPONSE** EPA has modified the question to ask for the "design pass-through velocity under low flow conditions."

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/HIST           |
| <b>COMMENT ID</b>          | 316.MP.027             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 49

We do not have Daily Max. and Daily Min. data prior to 1995.

**RESPONSE** EPA revised the question to ask for 1996, 1997, and 1998 flow data.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P2/Q6       |
| <b>COMMENT ID</b>          | 316.MP.028             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 5 Question 6

Asks what economic activity outside of generation of electricity is occurring at Boswell. These activities include selling coal, disposing of CCB, and leasing land to a tree nursery which uses a small amount of waste heat. The revenues and costs associated with these activities are difficult to obtain. These same questions are asked again in section B. This information is not usually separate for reporting purposes.

**RESPONSE** In response to this and other comments, EPA deleted the questions requesting information on other economic activities from the unit-level Section B. Instead, EPA now only requests this information on the plant-level and asks respondents to identify specific units, if applicable, with which the activities are associated.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P2/Q7       |
| <b>COMMENT ID</b>          | 316.MP.029             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 6 Question 7a

The EIA generator Identification Codes are shown in EIA Forms 767. Commenter's units are characterized as 1, 2, 3, 4. Codes do not match the reference document.

**RESPONSE** In response to comments, Question 7.a, requesting the plant-designated unit name was removed from the 316(b) questionnaire. EPA still requests information about the EIA designated generating unit codes to be able to link data provided in the survey to publicly available data sources.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P2/Q9       |
| <b>COMMENT ID</b>          | 316.MP.030             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 6 Question 9

This question should reside in a different section of this questionnaire.

**RESPONSE** In response to this and other comments, EPA removed the request for the percent of flow from each cooling water intake structure that was used in the generating unit. However, EPA still requires identification of each CWIS that is associated with the generating unit. While EPA agrees that more detailed information such as cooling water flows are more appropriately located in the technical part of the questionnaire, EPA believes that the identification information that remains in this question is appropriate in its current location.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P2/Q11      |
| <b>COMMENT ID</b>          | 316.MP.031             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 6 Question 11

This information is confidential and may not be given to any regulatory agency in this level of detail. It is available on the FERC Form 1 on a plant wide basis.

**RESPONSE** The purpose of this question is to determine the proportion of the facility's cooling water coming from surface water sources to facilitate regulatory decision making. EPA has the authority to collect this information under Section 308 of the Clean Water Act (33 U.S.C. Section 1318).

EPA has a comprehensive plan to handle confidential business information. A company may claim confidentiality of business information for a response by checking (?) the box to the left of certain questions. If no check mark appears and no other claim of confidentiality has been made with respect to any given response, EPA may make the data available to the public without further notice. If EPA must reveal information covered by a claim of confidentiality, the Agency will strictly follow the requirements and procedures set forth in 40 CFR Part 2, Subpart B.

EPA has extensive standard operating procedure in place to handle, store, and transmit CBI data and has a long history of successfully managing this type of information.

While EPA recognizes the sensitive nature of the information requested in Question 11, this information is essential in conducting the economic analyses of 316(b) regulation. As outlined elsewhere in this response to comments, EPA will employ procedures of handling and presenting CBI that will ensure that disclosure of sensitive information will be prevented.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q34      |
| <b>COMMENT ID</b>          | 316.MP.032             |
| <b>COMMENT AUTHOR</b>      | MINNESOTA POWER        |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Page 50

Flow data requested. In the November section a Daily Average is requested--this appears to be a typo and is inconsistent with the rest of the table--it should be changed to Daily Minimum.

**RESPONSE** The question has been revised to request daily minimum.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D3/P2                |
| <b>COMMENT ID</b>          | 316.AFPA.002                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Financial and Economic Data

Much of the information sought in Part II, Financial and Economic Data, has nothing to do with the statutory purpose of Clean Water Act (CWA) Section 316(b), that is, minimizing the adverse environmental impacts resulting from the operation and design of cooling water intake structures. Despite EPA's statement that the information in Part II is necessary to assess the costs of compliance, none of the information requested relates to the costs of compliance; rather, it relates, if at all, to the ability of facilities to absorb those costs. The costs of complying with new 316(b) regulations may be "disproportionate to the benefits resulting from the regulation" regardless of how many facilities might be closed by the cost of compliance. In fact, Part II might be simplified considerably, and its burden on respondents reduced commensurately, if EPA first assessed the costs of complying with the range of technologies being considered and then asked the facilities about their ability to incur costs within that range.

We support fully EPA undertaking a thorough analysis necessary to fulfill its obligation to calculate the costs and benefits of a proposed rule. However, in Part 2, many questions--especially all those questions in pages 18 through 22--seem to be designed to allow the agency to allocate production costs and revenue to use of cooling water and particular intake structures. While this may be a valid notion and even an implementable one in some limited circumstances, we believe that for the vast majority of industrial facilities, and certainly for forest products facilities, it is an inappropriate and in any event unworkable line of analysis. How can a facility (or EPA) allocate the benefits of boiler shell cooling or condenser water to a particular product line, when the boiler supplies steam to the entire plant? Are the costs of a particular cooling water intake structure design less unreasonable for a small facility that uses cooling water for a large part of its process than for a large facility that uses cooling water for a small part of its process? For Commenter members, the analysis necessary to answer many of the questions in part 2 will be next to impossible, but, in any event, certainly extremely burdensome. (Other than this general comment, we do not have any specific comments in Attachment I on pages 18-22. They all present significant difficulties for Commenter members trying to complete the Questionnaire.)

**RESPONSE** Three issues are raised in this comment:

1. Much of the information sought in the Financial and Economic Part of the questionnaire has nothing to do with minimizing adverse environmental impacts from cooling water intake structures and determining cost of compliance.

2. EPA should determine economic impacts of 316(b) regulation by first assessing the costs of complying with the range of technologies being considered and then asking the facilities about their ability to incur costs within that range.

3. The questions on pages 18 through 22 in the Financial and Economic Part, designed to allocate production costs and revenue to use of cooling water and particular intake structures, will be next to impossible and extremely burdensome to answer.

EPA's response:

1. Contrary to the statement in the General Information and Instructions Section of the questionnaire, the questions in the Financial and Economic Part of the questionnaire are not primarily intended to provide information for assessing best technology available (BTA) requirements and their compliance costs. Rather, this part of the questionnaire is designed to assess the facilities' and their firms' ability to absorb these compliance costs and the economic impacts resulting from 316(b) regulation. In response to this and other comments, the purpose statement of this Part of the questionnaire will be modified.

Apart from the determination of the regulations compliance costs and a comparison of compliance costs and benefits, EPA is under the obligation of carrying out a range of additional economic analyses. These analyses are intended to determine the impact of 316(b) regulation on affected facilities, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. Examples of statutes and mandates that require the Agency to carry out these analyses are Executive Orders 12866 and 12898, the Unfunded Mandates Reform Act of 1995, the Regulatory Flexibility Act of 1980, and the Small Business Regulatory Enforcement Act of 1996. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process. Please also refer to the response to comment 316.CMA.001 for a more detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.)

2. EPA cannot first assess costs associated with different technology options and then ask facilities about their ability to afford them because the regulatory options that will be considered by the Agency are not predetermined. Rather, regulatory options are developed taking into account the facilities' and firms' ability to afford them. As a consequence, the assessment of facility, firm, community, foreign trade, small business, and equity impacts and the development of technology options have to occur simultaneously. As outlined in detail in the justifications of the questionnaire, the information collected in the Financial and Economic Part is necessary to determine the economic performance of facilities and firms subject to 316(b) regulation.

3. In response to comments, the sections of the Financial and Economic Part have been modified to reduce the burden on respondents. In specific, Questions 24, 25, and 27 have been removed without replacement, and Question 26, requesting allocation of production costs and revenues to use of cooling water and particular intake structures, has been replaced by a significantly simplified question regarding the facility's dependence on cooling water.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/CWDEF                |
| <b>COMMENT ID</b>          | 316.AFPA.004                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** As we have stated in our previous correspondence (see, for example, our comments on the Screener, attached), the Screener and Questionnaire do not do an adequate job of distinguishing between cooling water, which may be subject to the regulation, and process water, which is not subject to the regulation. This problem is exacerbated by the example on page 20 which basically provides that if water is ever used as cooling water it forever retains its "cooling water" label, even if cooling is only a minor function performed by the water in the overall manufacturing process. Thus, the Questionnaire, in its present form, exceeds EPA's authority under the Clean Water Act because it may bring process water, which is not subject to regulation under CWA Section 316(b) within the scope of the regulation. We believe it is clear that Congress did not intend for Section 316(b) to apply to process water intakes where there might be some use of the water for cooling, and especially not where water that itself is used in the process may perform some secondary heating or cooling function before or after its use in the process. We offer again to discuss this more thoroughly with EPA before the Screener and Questionnaire are finalized.

**RESPONSE** Section 316(b) applies to cooling water intake structures, not to either cooling water or process water. The questionnaire does not exceed EPA's authority under the Clean Water Act because Section 308 of the Act authorizes EPA to gather information necessary for the development of a regulation under Section 316(b). EPA believes that it is best to start broad within the statutory authorization of the Act, and then if there is enough supporting documentation, narrow the scope of the regulation.

EPA recognizes that one intake structure might withdraw both cooling water and process water. However, the questionnaire does not request any specific data on process water. EPA merely requests the respondent to provide data on the entire flow (i.e. process water and cooling water combined) for a given intake structure. The Agency considers it less burdensome for the respondent to provide total intake flow since it is common practice for facilities to measure combined flow rates, rather than measuring cooling and process water intake separately. In document II, part 2, question 3(g), EPA asks for an estimate percentage of the intake design capacity that is apportioned to cooling water intake. This data provides EPA with the information necessary to understand the proportional relationship between the process water and cooling water intake flows. The plant "flow distribution/water balance diagram," also provides EPA with data to distinguish the magnitude of process water versus cooling water use.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/BURDEN               |
| <b>COMMENT ID</b>          | 316.AFPA.006                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Burden estimate

EPA discusses its efforts to reduce the burden of completing the Questionnaire and then estimates that

"each facility will require, on the average, 160 hours to complete the detailed questionnaire [including] the total time, effort or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal Agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirement; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information and transmit or otherwise disclose the information." 63 Fed Reg. 3740.

This clearly is an extremely low estimate when one considers that the entire Questionnaire itself is almost 160 pages (including the Glossary and Document II). Many of the questions ask for information that will have to be culled from historical records (such as specifications and costs for existing cooling water structures), that is in a form not usually used or referred to, or that will require facility personnel to obtain information from other parts of the corporation. The effort needed to try to allocate product revenues to cooling water flows is but one example of the questions that will require extensive new analysis to try to answer. EPA has made this Questionnaire so (unnecessarily) complicated that it will likely require at least 300 hours for many facilities to complete.

**Paperwork Reduction Act Concerns**

All of these points, and the other concerns raised in our attached comments, indicate that the Questionnaire raises serious problems under the Paperwork Reduction Act of 1995. Under section 3506 of the Act, it is unlawful for EPA to submit a request to OMB for approval of the Questionnaire unless and until EPA makes ten statutorily-mandated "certifications" on such issues as statutory authority, practical utility and reasonableness of burdens. Section 3506 further provides that EPA cannot make these certifications unless it can justify them based on the public comment record. In light of the serious issues raised in our comments, it would be unlawful for EPA to seek OMB approval of the Questionnaire in its present form.

**RESPONSE**      The results from pretest surveys reflected that it took an average of 211 hours to complete the survey. However, based on comments (particularly on the amount of flow data requested), EPA has reduced the amount of data originally requested therefore lowering the burden estimate to 156 hours. The Manufacturers Questionnaire is now under 100 pages (a reduction of over 60 pages).

In response to comments EPA significantly simplified the questions asking respondents to allocate product revenues to cooling water flows, reducing respondent burden.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/JURISDIC             |
| <b>COMMENT ID</b>          | 316.AFPA.008                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** PAGE 1 QUESTION Instructions

**PROBLEM**

The instructions discuss the need for information to help EPA understand "how cooling water use and discharge practices relate to the facility's general water use practices." (emphasis added.) Similarly, the instructions indicate that Section B seeks information about "discharge outfalls."

**PAPERWORK ACT VIOLATION**

Under the Paperwork Reduction Act (hereinafter referred to as the "PRA" or "Paperwork Act"), EPA must make ten certifications to OMB before OMB can begin to consider whether or not to grant a control number authorizing the Questionnaire. See 44 U.S.C. Section 3506(c)(3). In order to make these certifications, the statute requires that EPA "provide [OMB] a record supporting such certification, including public comments received by the agency". Without the certifications, including the supporting public comment record, it would be unlawful for EPA to seek, or for OMB to award, a control number for the Questionnaire.

The first statutory certification requires EPA to demonstrate that the proposed information collection is "necessary for the proper performance of the functions of the agency, including that the information has practical utility." 44 U.S.C. Section 3506(c)(3)(A). By seeking information on discharges, the first, statutory requirement (statutory authorization/practical utility) is violated, because the Agency is requesting information beyond the scope of Section 316(b), which deals with cooling water intake structures, not discharge practices.

The Questionnaire also violates the second statutory requirement, under which EPA must ensure that it does not collect data that is "unnecessarily duplicative of information otherwise reasonably accessible to the agency." 44 U.S.C. Section 3506(c)(3)(B). EPA already has significant information on facilities' discharge practices through the National Pollution Discharge Elimination System (NPDES) permit application and issuance process.

**REQUESTED CORRECTIVE ACTION**

Information sought regarding water discharges should be eliminated.

**RESPONSE** 1) EPA has the authority to collect data on water discharges. There is an inherent relationship between Section 316(a) which regulates thermal discharges and Section 316(b) which regulates

cooling water intake structures. The discharge is directly related to the water withdrawn. Therefore, EPA believes that it meets the "practical utility" requirement under the Paperwork Reduction Act.

2) EPA only asks seven questions on facility discharge outfalls. The data collected is not reasonably accessible to EPA. In particular, the Permit Compliance System (PCS) database contains data gaps. In addition, PCS only plots latitude and longitude to the nearest minute, for this data collection effort EPA needs latitude and longitude to nearest second. Therefore, EPA believes that it satisfies the "unnecessary duplication of information" requirement under the Paperwork Reduction Act.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/BURDEN               |
| <b>COMMENT ID</b>          | 316.AFPA.009                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** PAGE 8 QUESTION 5

**PROBLEM**

EPA directs respondents to attach an existing water balance diagram and modify it to create the requested information. Or, if no diagram is available, EPA directs respondents to create a diagram.

**PAPERWORK ACT VIOLATION**

This violates the fifth statutory certification requirement, which requires that the Questionnaire "be implemented in ways consistent and compatible, to the maximum extent practicable, with the existing reporting and record keeping practices of those who are to respond." 44 U.S.C. 3506(c)(3)(E). Because Question 5, without adequate justification, could require individual facilities to create information not readily available, it violates the Paperwork Act.

**REQUESTED CORRECTIVE ACTION**

EPA should provide respondents with the option of providing water balance information in the form most practical and illustrative form for the specific facility. Certain facilities may choose to modify existing diagrams or create new ones, but the facility also should have the choice of providing water balance information in whatever form is most effective.

**RESPONSE** EPA's instructions allows facilities to modify existing diagrams or to create a new diagram. The information is requested to get a visual understanding of how the plant operates. The diagram allows EPA to cross check cooling water intake and discharge data from the questionnaire.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/DEF                  |
| <b>COMMENT ID</b>          | 316.AFPA.010                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** PAGE 9 QUESTION Definition of "own groundwater supply"

**PROBLEM**

The last sentence in the definition states that "[t]he facility, however, would not provide potable water to residential populations like a local water supplier." The implication of this sentence is that if the facility does provide any amount of potable water to any residential populations, then the facility no longer fits within the definition of a "facility with its own groundwater supply." There is no apparent reason, under the Clean Water Act or under common sense, for making this distinction. If the facility no longer fits within this definition, it then may be subject to the ultimate guideline issued by EPA, even if its cooling water source is groundwater. As EPA has recognized, it is inconsistent with Section 316(b) to include groundwater within the scope of the definition of cooling water.

**PAPERWORK ACT VIOLATION**

By including this sentence and possibly subjecting facilities using groundwater as their cooling water intake source to the guideline, the first statutory requirement (statutory authorization/practical utility) is violated, because the Agency is requesting information beyond the scope of Section 316(b).

**REQUESTED CORRECTIVE ACTION**

The sentence should be eliminated from the definition.

**RESPONSE** EPA modified the definition of "own groundwater supply," but has retained the sentence "[t]he facility, however, would not provide potable water to residential populations like a local water supplier." In this case, a facility would not be subject to the ultimate guideline issued by EPA as the commenter suggested. Under this scenario the facility would be classified as a "local water supplier," which also is not subject to Section 316(b).

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/BIOSTUDY             |
| <b>COMMENT ID</b>          | 316.AFPA.011                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** PAGE 63-78 QUESTION 36-45

**PROBLEM**

EPA asks numerous technical questions about biological studies pertaining to impingement or entrainment not related to cooling water. By definition, these are studies not within the scope of section 316(b).

**PAPERWORK ACT VIOLATION**

By including this question, the first statutory requirement (statutory authorization/practical utility) is violated, because the Agency is requesting information beyond the scope of Section 316(b).

**REQUESTED CORRECTIVE ACTION**

EPA should delete the questions. If EPA elects to retain the questions, at a minimum they should be restricted to studies pertaining to cooling water intake structures.

**RESPONSE** These questions are all related to cooling water intake structures. EPA specifically asks for biological studies on impingement or entrainment at a facility's cooling water intake structure. For this question, EPA asks for data exclusive of a 316(b) demonstration study since previous questions ask for data with respect to required demonstration studies.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q46             |
| <b>COMMENT ID</b>          | 316.AFPA.012                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** PAGE 79 QUESTION 46

**PROBLEM**

The Questionnaire asks whether, since, 1980, the facility "carried out any measures to compensate for or to mitigate potential environmental impacts." As written, this question is extremely broad. It literally would cover any action ever taken in compliance with an environmental permit and would cover all media--air, water, waste.

**PAPERWORK ACT VIOLATION**

By including this question, the first statutory requirement (statutory authorization/practical utility) is violated, because the Agency is requesting information beyond the scope of Section 316(b). In addition, the information sought would be so voluminous that it would impose a terrible burden on respondents, thus violating the third statutory certification of the PRA, which requires that the agency "reduce to the extent practicable and appropriate the burden on persons who shall provide the information to the agency, including with respect to small entities... the use of such techniques as ... establishing different compliance or reporting... timetables that take into account the resources available to those who are to respond." Section 3506(c)(3)(C).

**REQUESTED CORRECTIVE ACTION**

EPA should delete the question. Several questions in the Questionnaire previous to Question 46 sought very detailed information about any kind of study possibly related to Section 316(b) and every technological response undertaken pursuant to those studies. There simply is no other question left to ask that can be within the statutory authority.

**RESPONSE** EPA has modified the question to reduce its breadth.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/CWDEF                |
| <b>COMMENT ID</b>          | 316.AFPA.013                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** PAGE 81 QUESTION 48

**PROBLEM**

EPA asks about planned cooling water intake structures "that will directly withdraw surface water to support, at least in part, contact or noncontact cooling operations within the facility." (Emphasis added.) The wording exacerbates the problem we identified in our cover letter--that EPA is not making a clear enough distinction between cooling water and process water. Water which only incidentally performs a cooling function should not be within the scope of the Detailed Questionnaire and the ultimate regulation, if any.

**PAPERWORK ACT VIOLATION**

By including this question, the first statutory requirement (statutory authorization/practical utility) is violated, because the Agency is requesting information beyond the scope of Section 316(b).

**REQUESTED CORRECTIVE ACTION**

EPA should adopt one of the options the Commenter has suggested in its comments on the Screener (see Attachment IV) for making the distinction between cooling water and process water. All questions in the Detailed Questionnaire should then remain consistent with the option EPA chooses.

**RESPONSE** EPA recognizes that one intake structure might withdraw both cooling water and process water. For the purposes of planned intake structures, EPA is not interested in as much detail as provided on existing operational intake structures. EPA limits the data requested to the minimum needed to provide EPA with a general understanding of any planned cooling water intake structures.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q15            |
| <b>COMMENT ID</b>          | 316.AFPA.015                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** PAGE 14 QUESTION 15**PROBLEM**

Question 15 asks several questions about the burning of wastes. Note that in the Nonutility Power Producers Questionnaire (pages 13-15, Question 20), EPA asks for even more detailed information about waste combustion. The problems with these questions follow.

First, the definition on page 14 (and 13 of the nonutility power producers Questionnaire) is not the same definition as that contained in the glossary, which defines waste combustion as the burning of wastes "to generate electricity," a phrase not included in the definition on page 14 (or 13 of the Nonutility Power Producers Questionnaire). Second, it is unclear what burning waste has to do with cooling water. Third, the term "waste" can have several meanings and no definitions of "waste" is provided. Fourth, EPA again requests the respondent to hypothesize potential costs if the facility were to cease burning the waste. In short, the question is not precise enough for the respondent to be able to determine what information is sought and it asks for information that is too speculative and unrelated to Section 316(b) or to the task of performing a cost/benefit analysis of the guideline.

**PAPERWORK ACT VIOLATION**

By including this question, the first statutory requirement (statutory authorization/practical utility) is violated, because the Agency is requesting information beyond the scope of Section 316(b) and beyond the scope of the cost/benefit analysis EPA is developing.

**REQUESTED CORRECTIVE ACTION**

EPA should delete the questions.

**RESPONSE** In response to this and other comments, the questions requesting information on waste combustion were deleted from the questionnaire.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q17            |
| <b>COMMENT ID</b>          | 316.AFPA.016                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** PAGE 15 QUESTION 17

**PROBLEM**

Question 17 asks several questions about market competitors, both domestic and international. This information is not relevant to the costs to the facility of compliance with a potential regulation.

**PAPERWORK ACT VIOLATION**

By including this question, the first statutory requirement (statutory authorization/practical utility) is violated, because the Agency is requesting information beyond the scope of Section 316(b) and beyond the scope of the cost/benefit analysis EPA is developing.

**REQUESTED CORRECTIVE ACTION**

EPA should delete the question.

**RESPONSE** The questions about domestic and international market competitors are not intended to provide information about the facility's compliance costs from 316(b) regulation. Rather this information will be important in assessing the economic impact on facilities and the industry as a whole from the compliance with the regulation. Information on market competitors provides important information on the market structure of industries subject to regulation, on their potential to pass on compliance costs to their customers, and potential foreign trade implications of the regulation. More detailed justifications of these questions can be found in Attachment 8 of this document.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/CERT                 |
| <b>COMMENT ID</b>          | 316.AFPA.017                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Pg. 1 Certification statement.

The Certification Statement requires that the individual certifying individual to obtain the regulations and determine the relationships of the respondent to a responsible corporate official, who is likely a corporate officer. Resources to address this issue may not be at the facility with the cooling water intake. The language of the certification statement should be changed to eliminate the requirement that the person signing the certification statement be a responsible corporate employee. The remaining text of the certification statement should be sufficient for the Agency to ensure that the person signing the statement is of sufficient authority to ensure the accuracy of the information in the response to the Questionnaire.

**RESPONSE** EPA did not change the requirement that the person signing the certification statement should be a corporate official. It is standard practice for EPA to require the individual certifying the completion of a questionnaire be a "responsible corporate official," pursuant to 40 CFR 122.22 when the information being requested will be used to develop permit related guidelines or regulations. Section 122.22(b) requires that "all reports required by permits , and other information requested by the Director shall be signed by a person described in paragraph (a) [for a corporation this person is a responsible corporate officer] or by a duly authorized representative of that person." As such, information provided through a questionnaire constitutes "other information" since the NPDES permitting authority may use the resulting regulation to establish NPDES permit requirements.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q03            |
| <b>COMMENT ID</b>          | 316.AFPA.018                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Pg. 6 Q.3. Mills may not have the official SIC codes on the premises. Is there an Internet site that contains this information? If so, it would be useful to include it in the question.

**RESPONSE** The question has been modified to include the web address for SIC code references.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q4             |
| <b>COMMENT ID</b>          | 316.AFPA.019                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Pg. 7 Q. 4

Similarly, it is even more unlikely that a mill will be familiar with is NAICS code. Again, is there an Internet site available?

**RESPONSE** In response to comments, the question requesting the facility's NAICS code was removed from the 316(b) questionnaire.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q9              |
| <b>COMMENT ID</b>          | 316.AFPA.021                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Pg.15. Q9(c) and (d)

Latitude and Longitude may not be known by mills. Is there any easy reference (Internet or otherwise) that can be provided to guide these facilities?(Same for Q.11(b) and (c)).

Pg. 16, Q 9(h)

There does not appear to be a category for generation of steam to be used in the process (i.e., cooling water used for boiler shell cooling and steam condensing). This is probably the main use in a mill that does not generate its own electricity. Also, based on the definition of "nonutility power producer," no one filling out a Manufacturers Questionnaire should have any "Electricity Generation." Thus, determining which Questionnaire to fill out may be difficult. Also, nonutility power producers in the paper industry do not have electricity production as the primary activity.

**RESPONSE** Latitude and longitude information can be gotten from a facility's local U.S.G.S. office.

The glossary definition incorrectly implied that every facility that generates electricity and is not an electric utility is considered a nonutility power producer. For the purposes of this questionnaire, this definition is not correct. Rather, for the purposes of this questionnaire, a nonutility power producer is defined as a facility that is not a utility and that generates electricity as its main economic activity. The glossary definition of the term "nonutility power producer" has been modified accordingly. (Please also refer to the response to comment 316.AFPA.001 for a more detailed explanation of the definitions of nonutility power producers and manufacturers for the purposes of this questionnaire.)

**SUBJECT MATTER CODE**     DET/MAN/GENERAL  
**COMMENT ID**             316.AFPA.020  
**COMMENT AUTHOR**        American Forest & Paper Assn.  
**DOCUMENT TYPE**         Industry Association  
**DOCUMENT DATE**         04/10/1998 00:00:00.00

---

**COMMENT**     Page 11, Example Diagram

The example is not yet provided. The example is critical because it will give some sense of the complexity EPA is seeking. If too complex, it may prove very difficult to provide the requested information.

**RESPONSE**     EPA has developed an example diagram to assist respondents in providing the requested flow distribution/water balance diagram. EPA believes that the level of detail requested will not be burdensome to the respondents and many cases can be taken from existing facility flow diagrams.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q12             |
| <b>COMMENT ID</b>          | 316.AFPA.022                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Pg. 18. Q 12(b)(2): Text should read: "Harmonic Mean Flow".

**RESPONSE** EPA has modified the question to ask for Mean Annual Flow.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q13             |
| <b>COMMENT ID</b>          | 316.AFPA.023                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Pg. 19 Q13(b)(4). This definition is not clear. The addition of the second sentence makes it more confusing.

**RESPONSE** The definition has been modified to add clarity.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q19            |
| <b>COMMENT ID</b>          | 316.AFPA.024                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Pg. 26 Q19(j)

"Threatened" and "Endangered" species are terms used in the Endangered Species Act, but "rare" is not. NPDES holders will not be able to respond to this portion of the question. "Rare" should be deleted from the question. Same for page 95, question 56.

Pg. 31, Q19(k)

"Migratory routes" should be limited to fish or other water-borne biota. As written, the question could apply to birds or animals on land within a one mile radius of the facility. This has no relevance to a guideline on cooling water intakes. Same for page 95, Q.56.

**RESPONSE** EPA has modified the question and deleted the term "rare."

EPA has modified the question to ask for aquatic migratory routes in relationship to the "near field" and "far field" of the intake structures.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q31             |
| <b>COMMENT ID</b>          | 316.AFPA.026                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Pg. 51 Q.31

Capital costs and especially operating costs may be available only for the total intake water structure, and not for each technology included in the intake water structure. There should be a mechanism to report total costs if costs are not available on a technology-by-technology basis.

Page 52, 53, table headings: and throughout. "Empirical" should be "Estimated."

**RESPONSE** EPA has deleted the question.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P1/Q22             |
| <b>COMMENT ID</b>          | 316.AFPA.025                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Pg. 22. Question on Modifications

At some mill locations, the intake structures may date from the 1800s. Information may be unknown on older systems and it may be impossible to know what was a modification (versus original equipment). The question should seek modification since 19\_\_, preferably in the last few decades.

**RESPONSE** Respondents should provide data on all known modifications. If records are not available, then respondents may mark the "data not available" response.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q7             |
| <b>COMMENT ID</b>          | 316.AFPA.027                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Pg.9, Q.7

In a capital intensive industry like the pulp and paper industry, typical production costs will be significantly lower than capital costs. Because the Questionnaire asks only about production costs and does not ask about capital costs, EPA is not getting a complete and accurate picture of the costs facing the industry.

**RESPONSE** Question 7 was intended to help EPA estimate facility-level financial data for facilities that do not routinely keep these data. Using the information provided in Question 7, EPA would have estimated other financial variables, including capital costs and used these estimates, not the information provided in Question 7, in its analyses of the facility's ability to absorb 316(b) compliance costs. However, in an effort to simplify the questionnaire, Question 7 was shortened and now only requests if the facility will report actual data or estimated data, providing instructions for estimating facility data, if needed. The option of having EPA allocate parent financial data to the subsidiary and the accompanying questions about the business unit closest to the facility were deleted from the questionnaire.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/CBI                   |
| <b>COMMENT ID</b>          | 316.AFPA.028                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Pg. 10, Part II Generally. The CBI check off boxes for many of these questions were omitted.

**RESPONSE** For the economic and financial sections of the questionnaire, EPA has provided "CBI" (confidential business information) check boxes at the bottom of each page to indicate that all responses on that page are considered CBI. For the technical sections, there are many questions that are inherently not CBI. Therefore EPA did not provide a global CBI check box at the bottom of each page. However, even if EPA has not provided a box to indicate CBI, a facility always has the freedom to indicate confidentiality via a stamp or hand written claim.

In response to this and other comments, omitted CBI check boxes have been added to the final version of the questionnaire.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q16             |
| <b>COMMENT ID</b>          | 316.AFPA.029                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Pg. 14, Q16

It is unclear what the current interest rate on a line of credit or short term debt has to do with anything. Technologies that might be required for cooling water structures will be capitalized and not paid for out of operating expenses, and in any event, the rate would no doubt be very different by the time compliance with a final rule is required. Moreover, long term capital generally is not financed short term.

**RESPONSE**

The commenter is correct in the assertion that the short term interest rate is not the appropriate rate to analyze the cost of long term capital. However, EPA has found in past regulatory efforts that requesting long term rates has yielded very inconsistent responses. While not using the short term interest directly in estimating cost of capital, EPA will use this rate to assess the premium a facility has to pay on borrowed capital and to determine the differences among the surveyed entities' credit worthiness. This premium will then be used to estimate differentials in the entities' long term cost of capital.

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q25            |
| <b>COMMENT ID</b>          | 316.AFPA.030                 |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Pg. 20-21, Q25

As in Question 9(h) of Part 1, there is no place to indicate generation of process steam.

**RESPONSE** In response to other comments, Question 25 was deleted from the Financial and Economic Part of the questionnaire. A response to this comment is provided under comment 316.AFPA.021, regarding Question 9(h) of Part 1.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q26             |
| <b>COMMENT ID</b>          | 316.AFPA.031                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Pg. 21-22, Q26

This question is confusing at best, and likely meaningless. Presumably 100% of the revenues from electricity generation are associated with cooling water, and the definition of "production line" requires that the entire line must be considered as using cooling water then have less than 100% of its revenues to cooling water use is one of the most confusing and burdensome aspects of the Questionnaire and it holds out little promise of providing useful information.

**RESPONSE** In response to comments, Question 26, requesting an allocation of revenues and cooling water use for each economic activity, was deleted from the questionnaire. Question 26 has been replaced with a simpler question requesting the approximate percentage (in increments of 10 percent) of all revenues that depend on the use of cooling water directly withdrawn from surface water. This change is expected to significantly reduce respondent burden.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/BURDEN               |
| <b>COMMENT ID</b>          | 316.APPA.001                 |
| <b>COMMENT AUTHOR</b>      | AMERICAN PUBLIC POWER ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Commenter is a member of UWAG and supports its comments.

Commenter is a member of the Utility Water Act Group (UWAG) and fully supports the comments to be filed by UWAG in this proceeding. UWAG's extensive comments will address in detail three of the five questionnaires proposed by EPA.

UWAG argues that an Information Collection Request to implement the proposed questionnaires should not be submitted to the Office of Management and Budget (OMB) in its current form because the questionnaires do not satisfy the requirements of the Paperwork Reduction Act. UWAG also describes how the questionnaires would be extremely burdensome on electric utilities and are not necessary to meet the general uses indicated in the notice - regulatory development and economic analysis. Furthermore, UWAG points out that it will be extremely difficult, if not impossible, to protect and maintain the confidentiality of some of the business sensitive information requested in the questionnaires. Commenter shares these concerns.

Because EPA's proposal potentially could have significant impact on facilities owned by Commenter members, Commenter also offers the following additional comments that address other specific concerns of small publicly owned utilities.

**RESPONSE** EPA is unable to respond; the comment is too general.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/BURDEN               |
| <b>COMMENT ID</b>          | 316.APPA.002                 |
| <b>COMMENT AUTHOR</b>      | AMERICAN PUBLIC POWER ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Public Power Concerns

In general, Commenter fully supports the goals and objectives of the Clean Water Act (CWA) to protect human health and the environment. This fundamental commitment to the environment, however, must be balanced by the responsibilities and obligations that public power has to the local citizens that own and are served by its electric systems. Today, public power's limited resources are addressing an ever-increasing number of potential environmental concerns. It is incumbent upon all of us to maximize the effectiveness of these limited resources in protecting the environment by developing cost-effective regulatory programs that provide tangible benefits to human health and the environment.

Commenter is concerned that EPA has not fully considered the potential burdens of its proposed questionnaire on small municipal electric systems with small generating units. These small systems have few employees and because of their limited resources likely will be forced to hire outside consultants to complete the survey. At a minimum this would be an unplanned expense totaling thousands of dollars for each facility.

You have estimated that it will take approximately 160 man-hours to complete the survey. Others that have reviewed the questionnaire estimate the amount of time required will be many times that amount. Even assuming that EPA's estimate is correct, this level of effort places a substantial burden on small facilities and is disproportionate because the burden of completing the questionnaire is not wholly dependent on the size of the generating unit.

**RESPONSE** EPA significantly revised the questionnaire, reducing or eliminating the questions identified as the most burdensome. EPA estimates the revised average burden is 156 hours. For small plants, the burden estimate would be actually lower. Based on the pretest of a small plant, the reported burden was 55 hours and zero dollars.

EPA is not able to exempt small facilities from answering the economic parts of the questionnaire because it needs information on small systems to conduct small entity analyses as required under the Small Business Regulatory Flexibility Act (SBREFA). In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. During the questionnaire pretest, publicly-owned utilities have required an average of 5 hours per utility for the utility-level questionnaire and 1 hour per plant for the economic part of the plant-level questionnaire.



---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/GENERAL              |
| <b>COMMENT ID</b>          | 316.APPA.003                 |
| <b>COMMENT AUTHOR</b>      | AMERICAN PUBLIC POWER ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** If the agency decides to go forward with finalizing its questionnaires it must streamline and reduce burden of completion on small electric generating units.

For example, many Commenter members that own generating plants do not use surface water for cooling purposes. Questions regarding whether a facility has a cooling water intake structure, now on page 39, should be moved up front and requirements to complete the questionnaire further should be terminated if a negative response is entered. This simple format change would substantially reduce the time and burden imposed on these small systems.

**RESPONSE** EPA revised the questionnaire, placing all in-scope screening questions near the front. All scoping questions appear in questions 4 through 6. This way facilities that are not in scope will exit the questionnaire before having to answer unnecessary questions. See response to 316.AMP.002.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/BURDEN               |
| <b>COMMENT ID</b>          | 316.APPA.004                 |
| <b>COMMENT AUTHOR</b>      | AMERICAN PUBLIC POWER ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** The agency also should review the necessity of requiring every power plant to complete the questionnaire in order for it to gain the information it needs. A statistical approach making use of representative samples may provide adequate data to support an informed rule development process. Similarly, if water quality and ecosystem reports demonstrate that a particular stream segment is healthy or improving despite the long-term operation of a power plant(s) in that stream segment, few (if any) questionnaires should be required to be completed in those areas.

With ongoing restructuring of the electric utility industry, now more than ever before the survival of small municipal electric systems is threatened by the imposition of new and costly regulatory requirements. To the extent that municipally owned power plants are forced to shutdown because the cost of complying with new requirements is too great to justify, these communities will lose very valuable resources. Early retirement could result in loss of jobs in the community, decreased electric system reliability, and the loss of the ability of these small communities to purchase low-cost, non-firm energy from other power supply sources.

Furthermore, the loss of these small generating units by these small communities will not produce any consequential environmental benefits. The effects of these small generating units on the environment are de minimus and an insignificant part of the nation's total. As mentioned above, most of these units are used primarily for emergency standby or for peaking operation and have low historical and anticipated annual hours of operation.

Also, the loss of these small units would directly contradict and undermine recent congressional and regulatory efforts to create a more competitive electric utility industry. Congress historically has recognized the benefits of competition that these small electric systems provide and has taken into account the limited resources, special characteristics and needs of the municipal power industry when it considers legislation affecting the electric utility industry. For example, when Congress passed the 1990 Clean Air Act Amendments, it specifically exempted small municipally owned electric generating units from the title IV Acid Rain program requirements. It is incumbent upon EPA to follow the lead of Congress and address the special needs of small communities with small units as it develops and finalizes its proposed questionnaire regarding cooling water intake structures.

**RESPONSE** EPA will send the questionnaire to a representative sample within the utility industry.

The commenter expresses concerns that municipally owned power plants may be disproportionately affected by 316(b) regulations and may be forced into early retirement. EPA is aware that many municipally owned systems are small and may be particularly vulnerable to additional environmental compliance costs. However, in order to assess the potential effects of

any new compliance costs resulting from 316(b) regulation, EPA needs to collect the information requested in this questionnaire. Using this information, EPA will conduct the small business analyses required under the Small Business Regulatory Flexibility Act (SBREFA) and will be able to take into account potential effects of the regulation in the rulemaking process.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/SBREFA               |
| <b>COMMENT ID</b>          | 316.APPA.005                 |
| <b>COMMENT AUTHOR</b>      | AMERICAN PUBLIC POWER ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** EPA must comply with the required SBREFA provisions.

In addition to affording special consideration for small units because of the reasons stated above, EPA also must comply with the provisions of the Small Business and Regulatory Enforcement Fairness Act (SBREFA) of 1996 before it adopts new regulations. SBREFA applies to any rule promulgated on or after June 29, 1996, including the proposed rule at issue here. Under SBREFA, EPA is required (1) to prepare a final Regulatory Flexibility Analysis that complies with the requirements of the legislation, and (2) to adopt in the final rule the alternative that best minimizes burdens on small entities, or to justify why it has not. The Act also creates specific procedures for EPA to use in obtaining the input of small entities on the impacts of proposed rules, and on alternatives to a proposed rule that will minimize regulatory burdens on small entities. Commenter urges EPA to consider carefully the provisions of SBREFA before it finalizes its proposed rule.

**RESPONSE** In promulgating 316(b) regulations EPA will comply with all requirements and provisions of the Small Business and Regulatory Enforcement Fairness Act (SBREFA). EPA will convene a SBREFA panel, prepare a Regulatory Flexibility Analysis, and analyze all regulatory options with respect to small business concerns.

---

|                            |                              |
|----------------------------|------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PUB/BURDEN               |
| <b>COMMENT ID</b>          | 316.APPA.006                 |
| <b>COMMENT AUTHOR</b>      | AMERICAN PUBLIC POWER ASSOC. |
| <b>DOCUMENT TYPE</b>       | Industry Association         |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00       |

---

**COMMENT** Small generating units are important and valuable assets to the communities that own them. Commenter urges the agency to take steps in whatever final rule it may ultimately promulgate to recognize the importance of small municipal power generation and avoid any significant and disproportionate economic impacts on these facilities.

**RESPONSE** The commenter expresses concerns about the potential impacts of 316(b) regulations on municipally owned power plants. EPA is aware that many municipally owned systems are small and may be particularly vulnerable to additional environmental compliance costs. However, in order to assess the potential effects of any new compliance costs resulting from 316(b) regulation, EPA needs to collect the information requested in this questionnaire. Using this information, EPA will conduct the small business analyses required under the Small Business Regulatory Flexibility Act (SBREFA) and will be able to take into account potential effects of the regulation in the rulemaking process.

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q6              |
| <b>COMMENT ID</b>          | 316.AFPA.003                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** One other significant problem with part 2 is raised by the questions in that section soliciting information on a facility's parent company. The clear implication from these questions is that when EPA is analyzing the impacts of the guideline on the regulated facility, the Agency will consider the ability of the parent company to absorb the ultimate costs of compliance with the guideline. This is an invalid analytical framework in today's globally competitive marketplace. As a general rule, in today's pulp and paper industry markets, each manufacturing facility must stand on its own financial worth. If a facility is not profitable without relying on the financial resources of its parent, it is not likely to survive. This industry has closed numerous mills over the last several years for that very reason. Requiring parent-level information will add significantly to the burden of those completing the Questionnaire, who will typically be mill-level personnel in the paper industry. In addition, if EPA is going to offer the option, in Section C, of having EPA allocate parent financial data to the subsidiary, EPA should at least explain how EPA will do that if this option is chosen. We seriously doubt EPA could do so in a meaningful way, or that such an exercise would yield useful information.

Even assuming for the sake of argument that the methodology to determine costs and benefits were sound, some of the questions still do not seem to have any logical connection to the exercise of calculating costs and benefits. In Attachment I, we point out some of those questions.

**RESPONSE** Three issues concerning the information requested about the facility's domestic parent firm are raised in this comment:

1. Considering the parent firm's ability to absorb the ultimate compliance cost of the regulation is an invalid approach.
2. Requiring parent-level information will add significantly to the burden of completing the questionnaire.
3. EPA may not be able to allocate parent financial data to the subsidiary in a meaningful way. EPA should at least explain how EPA will do that allocation.

EPA's response:

1. EPA recognizes that, in many cases, a facility's economic viability depends on its own financial worth rather than that of its parent firm. Therefore, the primary level of analysis for this regulation will be the facility and not the parent firm. However, in some cases, facilities operate as cost centers, and their financial worth cannot be evaluated independently of their parent firm. In addition, EPA needs to collect basic information on the facility's parent firm to

comply with statutory requirements which mandate that EPA consider firm-level impacts of a regulation. For example, in compliance with the Small Business Regulatory Enforcement Act (SBREFA), EPA needs to determine whether small firms will be disproportionately affected by a regulation. While EPA will not use the firm's financial worth to determine economic impacts on a facility, it will analyze how facility-level impacts will affect the parent firm's financial health.

2. Questions about the parent firm are limited to the minimum information necessary to comply with EPA's analytic requirements. EPA believes that this information is standard information that should not pose a significant burden on respondents. Detailed justifications of each question asked about the parent firm can be found in Attachment 8 of this document.

3. In response to this and other comments, Section C was simplified and no longer offers the option of having EPA allocate parent financial data to the subsidiary.

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/GENERAL               |
| <b>COMMENT ID</b>          | 316.AFPA.005                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** Question unrelated to CWA Section 316(b)

Many of the technical questions seek information unrelated to the statutory purpose of Section 316(b). They are either not drafted in a precise enough manner or they purposely stray into unrelated and impermissible areas of inquiry. Several of these questions are discussed in Attachment I.

**RESPONSE** In general, EPA has a practical utility for all the data requested in the detailed questionnaire (see attachment to the information collection request for justification on each part of the detailed questionnaire).

---

|                            |                               |
|----------------------------|-------------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/MAN/D1/P2/Q13             |
| <b>COMMENT ID</b>          | 316.AFPA.014                  |
| <b>COMMENT AUTHOR</b>      | American Forest & Paper Assn. |
| <b>DOCUMENT TYPE</b>       | Industry Association          |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00        |

---

**COMMENT** PAGE 13 QUESTION 13**PROBLEM**

Question 13 asks several questions about hypothetical revenues and costs if the facility chose voluntarily to close in the next three years. These questions are so hypothetical and speculative, that they are virtually meaningless.

**PAPERWORK ACT VIOLATION**

By including this question, the first statutory requirement (statutory authorization/practical utility) is violated, because the Agency is requesting information beyond the scope of Section 316(b) and beyond the scope of the cost/benefit analysis EPA is developing.

This question also violates the fifth statutory certification requirement, which requires that the Questionnaire "be implemented in ways consistent and compatible, to the maximum extent practicable, with the existing reporting and record keeping practices of those who are to respond." 44 U.S.C. 3506(c)(3)(E). Because this question could require individual facilities to provide data which does not exist or which is not readily available, it violates the Paperwork Act.

**REQUESTED CORRECTIVE ACTION**

EPA should delete the question.

**RESPONSE**

EPA has requested information on facility liquidation values in past regulatory efforts and found that the responses received were generally of good quality. Economic analyses using this information have showed a high degree of correlation with other economic measures, confirming that responses provided were not merely speculative. While there may be some uncertainty in the numbers provided in this question, the same would be true if a facility were to make a decision on liquidating its assets in real life. Therefore, information provided in this question should be similar to information on which a facility would make a shut-down decision and should provide useful insights into a facility's potential operational decisions in the light of 316(b) regulation.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/AEI            |
| <b>COMMENT ID</b>          | 316.CON.003            |
| <b>COMMENT AUTHOR</b>      | CONSOLIDATED EDISON    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00 |

---

**COMMENT** The starting point for 316(b) is the basis for assessing the presence or absence of an "adverse environmental impact" that can be associated with a particular facility seeking permitted status. The questionnaires provide no indication how EPA intends to define "adverse environmental impact", which would be a necessary precursor to any efforts intended to minimize such impacts. Instead, the questionnaires suggest that EPA is embarking on categorical prescriptions for intake technology regardless of a site-specific determination of adversity. It is Commenter's belief that some objective means of identifying an "adverse environmental impact" is required under 316(b), which serves as the trigger for implementing "best technology available" to minimize those impacts.

We understand the difficulty in developing a scientifically adequate test for the presence of adverse environmental impacts, but feel that any test should be of a holistic nature and sensitive to the general health of the waterbody. Commenter believes that adverse environmental impacts of an existing facility could in many instances be determined by examining available information on the health of the entire aquatic community within the zone of influence of the facility. Characterizations of the relative health of inland and estuarine waterbodies are already performed on an ongoing basis by various state agencies for a number of purposes, and by the National Marine Fisheries Service (NMFS) for marine waters and such information would obviate the need for collecting detailed historical data through the questionnaires as currently proposed. If those assessments do not characterize the aquatic populations of those waterbodies as depleted, stressed, or requiring restorative measures, then the cooling water intake structure should be deemed not to pose an adverse environmental impact, and should be required for the period of the new permit to maintain the intake structure in its existing configuration.

Use of existing aquatic community health assessments as the basis for determining the presence of an adverse environmental impact for 316(b) purposes has several unique advantages to permittees, EPA and permit administrators alike. Among these advantages are the following:

1. Existing data sources are utilized to the greatest extent possible.
2. The preliminary adverse environmental impact screening would rely on extant environmental condition assessment data, instead of requiring development of extensive new data of uncertain applicability to the adverse environmental impact issue, thereby greatly reducing the transactional costs and uncertainty of outcome associated with alternative adverse environmental impact approaches.
3. The complex and data-intensive biological models required for single-source modeling and translating very early life stage mortality into adult population impacts become unnecessary at the adverse environmental impact stage for many facilities.

4. The holistic, ecosystem-wide and watershed-based environmental assessment approach currently favored by EPA itself would be utilized and adhered to for an important 316(b) screening function.
5. The potential for cumulative adverse environmental impact effects stemming from a great number of nonutility mortality sources and a great number of water withdrawals all impacting a given aquatic community would be recognized and accommodated.
6. The potential for "disconnect" between power plant environmental regulation and the regulation of other human activities having the potential to adversely affect aquatic communities is eliminated.
7. Cognizant state and federal natural resource management authorities are recognized as the entities bearing the principal responsibility for aquatic community health assessments, which are then utilized generically for coordinated regulation of all mortality sources, including such activities as fishing, agriculture, and electric power production.
8. Natural resource assessment and management practices for multiple activities all having the potential for interactive influence on aquatic communities are encouraged to become coordinated and more uniform.
9. For each NPDES/SPDES permit applicant the initial 316(b) screening outcome will be largely known at the time application is made, and processing uncertainties will thus be substantially reduced.

**RESPONSE**

EPA appreciates that many factors effect the determination of adverse environmental impact. The purpose of the questionnaire is not to define adverse environmental impact. EPA is considering data gathering approaches that evaluate the total health of the community. EPA will consider your comments as part of that research. See also response to 316.CMA.003.

In June 1998, EPA released to the public a draft regulatory framework which outlines the decision making process on how to determine adverse environmental impacts. The framework is a working draft. The current framework contemplates a three-tiered analysis designed to evaluate a facility's cooling water intake structure and to determine the best technology available to minimize adverse environmental impacts. The intent of Tier 1 is to establish an operational standard commensurate with the performance of the cooling water intake technologies that are most effective in minimizing impingement and entrainment. If a facility cannot demonstrate compliance with that standard, a site specific evaluation in Tier 2 would be necessary. Tier 2 considers the characteristics of source waters. Facilities whose intakes are located in an area of low biological productivity would be deemed to meet the requirements of § 316(b). All other facilities would proceed to Tier 3, which prescribes detailed studies to determine what is the best technology available for minimizing adverse environmental impacts in a given location.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/AEI            |
| <b>COMMENT ID</b>          | 316.CON.004            |
| <b>COMMENT AUTHOR</b>      | CONSOLIDATED EDISON    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00 |

---

**COMMENT** Commenter therefore urges EPA to reconsider the regulatory approach to § 316(b) implementation evidently implied by the questionnaires and adopt a broader view of how impacts on aquatic communities stemming from multiple uses of the nation's water resources can be determined. Such an approach would lead to an integrated program for regulating cooling water intake structures under § 316(b). At that juncture EPA could fashion a § 308 information-gathering effort meeting the needs of a preferred regulatory approach and satisfying Paperwork Reduction Act requirements.

**RESPONSE** The commenter wrongly assumed the regulatory approach EPA was taking with respect to section 316(b). However, the commenter was not privileged to EPA's draft regulatory framework prior to commenting on the draft questionnaire since the framework was not released until after the close of the comment period. EPA will use the questionnaire data to further develop the draft framework. See response to 316.CON.003.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN         |
| <b>COMMENT ID</b>          | 316.CON.001            |
| <b>COMMENT AUTHOR</b>      | CONSOLIDATED EDISON    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00 |

---

**COMMENT** Commenter is a member of the Commenter and has to date participated in the development of comments that are being submitted to EPA by Commenter in connection with the referenced Notice. However, Commenter wishes to emphasize and elaborate upon issues of particular concern to it that are raised by the proposed EPA questionnaires. For the reasons set forth below, Commenter believes that the proposed EPA questionnaires are overburdensome and fail to acknowledge a sufficiently broad scope to 316(b) issues that will permit development of a workable and equitable approach to applying 316(b) in specific facility settings.

As an initial point, Commenter concurs with Commenter that EPA has significantly underestimated the utilities' burden in reviewing and completing the proposed questionnaires. Commenter, for example, owns nine separate stations that would require a questionnaire response. Even using EPA's estimate of 160 hours per facility, this amounts to 1,440 hours, or three-fourths of a person-year, to complete our response. In fact, our analysis of the proposed questionnaire requirements suggests that the effort would take approximately three (3) times as long. Accordingly, it is imperative that EPA develop in a more effective manner a methodology for gathering information that is truly useful and necessary. In order to comply with the Paperwork Reduction Act, the agency should first identify the broad contours of a proposed 316(b) implementation methodology, and then craft questionnaires designed to either corroborate or test the feasibility and adequacy of the approach(es) under consideration.

**RESPONSE** The questionnaire is not intended to fully address all the issues related to this broad scope rulemaking effort. See response to 316.CMA.003.

With respect to the questionnaire burden, EPA has significantly reduced the data being collected through the questionnaire. EPA estimates the burden of the revised questionnaire to be 156 hours. See response to 316.AEP.007. Also, only a sample, not all, of the utility plants will receive the detailed questionnaire, which significantly reduces the overall burden to a given utility.

In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. During the questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly-owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level

questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN         |
| <b>COMMENT ID</b>          | 316.CON.002            |
| <b>COMMENT AUTHOR</b>      | CONSOLIDATED EDISON    |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00 |

---

**COMMENT** The approach to cooling water intake structure regulation suggested by the proposed EPA questionnaires appears to envision uniform requirements for site-specific data collection and impact assessment at the individual plant level. This not only increases the complexity and burdensomeness of the questionnaires, but if incorporated in the regulatory approach ultimately adopted would unduly burden the 316(b) permitting process. In the context of individual facility permitting, such an approach would unavoidably impose high costs at the outset of each permitting inquiry. This is due to a number of factors, among them that aquatic organisms are never uniformly distributed throughout a waterbody, and the presence of organisms in the vicinity of the plant varies tremendously within the vertical water column and according to time of day, water temperature, salinity, season, and year. The species mix and age and spatial distribution of aquatic organisms also varies tremendously at different times within particular years. Accordingly, studies intended to quantify the impingement and entrainment effects of particular power plants are intrinsically quite data-intensive, involving many hundreds of hours of data collection over multiple years.

**RESPONSE** This commenter makes an assumption on the type of rule that EPA intends to develop. EPA believes that it is immature in the data collection phase to make this assumption. The questionnaire does not establish the intended structure of the proposed cooling water intake structure regulation. Furthermore, EPA recognizes the need to be allow some degree of flexibility to make Section 316(b) determinations on based on site specific characteristics. See response to 316.EPSA.006 and 316.UWAG.029.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN         |
| <b>COMMENT ID</b>          | 316.VP.002             |
| <b>COMMENT AUTHOR</b>      | VIRGINIA POWER         |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00 |

---

**COMMENT** Under the terms of the 1995 Consent Decree signed by EPA as a result of the New York lawsuit (Cronin, et al. v. Reilly), the agency must develop and propose regulations implementing §316(b) of the Clean Water Act by July 2, 1999. As stated in the January Federal Register notice, EPA is conducting "a variety of data-gathering activities" to ensure that these regulations "are based upon accurate information" and that "the detailed questionnaire represents one mechanism" for gathering this information. While we cannot estimate the current status of the proposed rule development, we suspect that in addition to finalizing this questionnaire, EPA will initiate more data-gathering activities. If the agency assimilates the comments received on this proposed questionnaire within 30 days and it is submitted to the Office of Management and Budget (OMB) by June 1, it might be approved by August 1, at the earliest. If the questionnaire was then distributed in the fall of 1998, that would leave a scant 6 - 8 months for EPA to develop the proposed §316(b) regulations.

Given the tight timetables that EPA has for developing the proposed rules, Commenter questions the approach EPA has taken with the proposed questionnaire. A 153-page, extremely detailed questionnaire for which the respondents are given only 90 days to respond is entirely unreasonable. Even with the highly questionable EPA burden estimate of 160 hours per facility to complete the questionnaire, the costs are excessive. Commenter estimates, using this 160-hour assumption, that completing this request for all Company facilities would cost more than \$88,000. We also have reason to believe that the number of hours to complete the questionnaire may be as much as four times the estimate provided by EPA.

Despite its volume, the draft questionnaire does not clearly convey the regulatory structure for which it is being used. Under requirements of the Paperwork Reduction Act, this questionnaire must be developed as part of a clear plan for implementation of a rulemaking. At this time, there is not evidence of any such plan. This plan should first be put in place so that the information needs are clearly identified. Once the rulemaking plan is finalized, an efficient information collection strategy could be developed, that accurately targets only the information necessary to complete the rulemaking. Commenter encourages the agency to adopt such a plan.

**RESPONSE** EPA has filed a motion with the court to extend the Consent Decree deadlines. In addition, EPA has significantly revised the detailed questionnaire reducing it by over 60 pages and reducing the burden to respondents. Plus, there are whole sections where the respondent will only fill out one or two questions. For example, the section on Cooling Water Intake Technology information. In this section (Section C) there are questions for each type of intake structures; the respondent only has to answer the questions for the intake technology that the facility has employed.

EPA has a practical utility for all the questions in the detailed questionnaire. Since the public notice of the questionnaire, EPA has released to the public a draft regulatory framework that indicates the type of regulation that EPA is considering. The questionnaire will help support this framework and help to develop options within the draft framework. In addition, the ICR will contain a justification for how EPA will use the data to help develop the cooling water intake structure regulation. To supplement the questionnaire data, EPA is using secondary sources to gather data that is impractical to collect through the questionnaire. See response to 316.AEP.007.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI            |
| <b>COMMENT ID</b>          | 316.VP.003             |
| <b>COMMENT AUTHOR</b>      | VIRGINIA POWER         |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00 |

---

**COMMENT** Commenter also is very concerned about the confidentiality of some of the data requested and is reluctant to submit data that could be used by competitors to gain economic advantages. While we recognize the opportunity to protect this data by designating it as "Confidential Business Information" we remain skeptical that this designation would provide the safeguards necessary.

**RESPONSE** EPA is aware of concerns expressed by Industry representatives about the danger of inadvertent disclosure of confidential business information and agrees that the protection of CBI is of paramount importance in the course of 316(b) rulemaking. In its past regulatory efforts, EPA has acquired substantial experience in the handling of confidential and highly sensitive information. CBI can be marked as such in the 316(b) questionnaires, and CBI provisions are in place at EPA as well as EPA's contractors to ensure the safety of this information. These provisions include allowing access to CBI only to persons with an absolute "need-to-know" and storing CBI on removable ZIP disks that will be inaccessible through the mainframe and will be stored in an EPA approved, double-locked space. In reports, these data will only be presented in an aggregated form for large geographical regions or the industry as a whole.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BTA            |
| <b>COMMENT ID</b>          | 316.VP.004             |
| <b>COMMENT AUTHOR</b>      | VIRGINIA POWER         |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 04/10/1998 00:00:00.00 |

---

**COMMENT** Commenter urges EPA to abandon or substantially revise the draft questionnaire. The agency should employ the existing substantial database of 316(b) studies as the basis for development of these rules. Many 316(b) studies have been submitted to EPA over the last 20 years. A tremendous amount of effort has gone into these studies and the data collected are, for the most part, still valid. Should EPA go forward with this questionnaire, we urge the agency to use the generic data gathered from this questionnaire only for reference. Given the highly diverse nature of aquatic environments, decisions regarding the applicability of "Best Technology Available" at any facility must be determined only after careful, well-reasoned consideration of all site-specific factors.

**RESPONSE** EPA needs the data from the detailed questionnaire (EPA did revise it significantly reducing the burden associated with historical and technology cost data). Early in the data collection phase or the rulemaking effort, EPA attempted to use existing 316(b) studies as the basis for developing the regulation. Unfortunately, EPA could not draw any valid conclusions. Past section 316(b) determinations and biological studies do not share common objectives, methodologies, data-gathering techniques, durations, or time frames. See response to 316.CMA.003.

EPA recognizes that the regulation needs to provide some element of flexibility to allow for site specific determinations. See response to 316.UWAG.029.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN         |
| <b>COMMENT ID</b>          | 316.TU.001             |
| <b>COMMENT AUTHOR</b>      | TU SERVICES            |
| <b>DOCUMENT TYPE</b>       | Industry Association   |
| <b>DOCUMENT DATE</b>       | 04/09/1998 00:00:00.00 |

---

**COMMENT** Commenter believes the Questionnaire would impose an enormous burden on electric utilities while providing little or no information that would be useful to EPA either in determining key policy choices under Section 316(b) or in complying with economic analysis requirements under the Paperwork Reduction Act. Commenter conservatively estimates that it will take a minimum of 1900 man hours to complete the Questionnaire for its 24 operating sites. The cost of the task will be significant, and wholly disproportional to any possible benefit to either the Agency or the regulated community.

**RESPONSE** See response to 316.AEP.007.

EPA disagrees with the Commenter's statement that the questionnaire would provide little or no information useful in determining key policy choices under Section 316(b) or in complying with economic analysis requirements under the Paperwork Reduction Act. In addition, EPA not only needs to comply with the Paperwork Reduction Act but also with other executive orders and statutes concerning requirements for economic analysis. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.) Each question asked in the Financial and Economic Part of the questionnaire fulfills a specific function in these economic analyses. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

With respect to the burden of this questionnaire, in response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. During the questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly-owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL        |
| <b>COMMENT ID</b>          | 316.COM.001            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT**      Comment: II. Document I: Inventory of Plants and Generating Units

Comment 1: We suggest adding some blank columns for missing plant/unit information. We were forced to place this information in a blank location at the bottom of page 7.

**RESPONSE**      In response to comments, EPA has entirely eliminated Document I: Inventory of Plants and Generating Units and Document II: Utility-Level Information. This comment is thereby addressed.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI            |
| <b>COMMENT ID</b>          | 316.COM.002            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment: III. Document II: Utility-Level Information

Comment 1, General: Based on the instructions provided with this document on page 1, we utilized a stamp with the words "confidential business information" at the top of each page that contains information we want to be treated as CBI. Please note that the stamp at the top of each page applies to all information on that page. Given that the CBI check-off box shows up in other documents, we are curious as to why the Agency did not place similar boxes adjacent to questions in this document.

**RESPONSE** In response to comments, EPA has modified the questionnaire and incorporated CBI check-off circles on all pages of the survey. Please note that the discussion in the General Information and Instructions section of the questionnaire which explains that EPA may require a facility that has checked CBI on a page to justify any claim of confidentiality at a later time.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/REGDEV         |
| <b>COMMENT ID</b>          | 316.COM.003            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** The starting point for §316(b) is the basis for assessing the presence or absence of an "adverse environmental impact" that can be associated with a particular facility seeking permitted status. The questionnaires provide no indication how EPA intends to define "adverse environmental impact", which would be a necessary precursor to any efforts intended to minimize such impacts. Instead, the questionnaires suggest that EPA is embarking on categorical prescriptions for intake technology regardless of a site-specific determination of adversity. It is Commenter's belief that some objective means of identifying an "adverse environmental impact" is required under §316(b), which serves as the trigger for implementing "best technology available" to minimize those impacts.

We understand the difficulty in developing a scientifically adequate test for the presence of adverse environmental impacts, but feel that any test should be of a holistic nature and sensitive to the general health of the waterbody. Commenter believes that adverse environmental impacts of an existing facility could in many instances be determined by examining available information on the health of the entire aquatic community within the zone of influence of the facility. Characterizations of the relative health of inland and estuarine waterbodies are already performed on an ongoing basis by various state agencies for a number of purposes, and by the National Marine Fisheries Service (NMFS) for marine waters and such information would obviate the need for collecting detailed historical data through the questionnaires as currently proposed. If those assessments do not characterize the aquatic populations of those waterbodies as depleted, stressed, or requiring restorative measures, then the cooling water intake structure should be deemed not to pose an adverse environmental impact, and should be required for the period of the new permit to maintain the intake structure in its existing configuration.

Use of existing aquatic community health assessments as the basis for determining the presence of an adverse environmental impact for §316(b) purposes has several unique advantages to permittees, EPA and permit administrators alike. Among these advantages are the following:

1. Existing data sources are utilized to the greatest extent possible.
2. The preliminary adverse environmental impact screening would rely on extant environmental condition assessment data, instead of requiring development of extensive new data of uncertain applicability to the adverse environmental impact issue, thereby greatly reducing the transactional costs and uncertainty of outcome associated with alternative adverse environmental impact approaches.
3. The complex and data-intensive biological models required for single-source modeling and translating very early life stage mortality into adult population impacts become unnecessary at the adverse environmental impact stage for many facilities.

4. The holistic, ecosystem-wide and watershed-based environmental assessment approach currently favored by EPA itself would be utilized and adhered to for an important §316(b) screening function.
5. The potential for cumulative adverse environmental impact effects stemming from a great number of nonutility mortality sources and a great number of water withdrawals all impacting a given aquatic community would be recognized and accommodated.
6. The potential for "disconnect" between power plant environmental regulation and the regulation of other human activities having the potential to adversely affect aquatic communities is eliminated.
7. Cognizant state and federal natural resource management authorities are recognized as the entities bearing the principal responsibility for aquatic community health assessments, which are then utilized generically for coordinated regulation of all mortality sources, including such activities as fishing, agriculture, and electric power production.
8. Natural resource assessment and management practices for multiple activities all having the potential for interactive influence on aquatic communities are encouraged to become coordinated and more uniform.
9. For each NPDES/SPDES permit applicant the initial §316(b) screening outcome will be largely known at the time application is made, and processing uncertainties will thus be substantially reduced.

**RESPONSE**

Even though the focus of EPA's economic analyses will be the plant, EPA requests limited utility-level information to perform certain firm-level analyses required under the Small Business Regulatory Enforcement Fairness Act (SBREFA). Utility-level information collected in this questionnaire will support these analyses.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D2/P1/Q10      |
| <b>COMMENT ID</b>          | 316.COM.004            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 2, Section D, questions 10 (d) & (e), and 11 (l) & (m): No long-term power purchases or long-term firm sales for resale were provided because we had none to report. However, according to personnel in our Bulk Power Operations Department, Commenter does not currently track long-term power purchases or sales for resale separate from any other power purchases or sales for resale. Therefore, even had there been long-term purchases or sales to report, we would have been unable to supply this information.

**RESPONSE** In response to this and other comments, EPA removed Questions 10 and 11 requesting information on long-term power purchases and long-term firm sales for resale from the 316(b) questionnaire.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D2/P1/Q15      |
| <b>COMMENT ID</b>          | 316.COM.005            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 3, Section E, question 15: As noted on the questionnaire, while we marked the question "yes", we are not providing copies of these studies. Our Company feels that this information is highly sensitive which we could not risk divulging, even under CBI, during this voluntary pretest phase.

**RESPONSE** In response to this and other comments, Question 15 has been removed from the questionnaire.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CERT           |
| <b>COMMENT ID</b>          | 316.COM.006            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** IV. Document III: Plant-Level Information, Part 1: Technical Data

Comment 1: Please note that certifications statements were submitted for Documents I and II. We note that the certification statement signed for Document II, is also applicable to Document III. Given that Documents I and II contain utility-level information and Document III contains plant-level information, the Agency may want to consider adding a third certification statement that would apply to Document III. Utilities which will be required to fill out questionnaires for more than one station would logically complete one Document I and one Document II for the Utility and a Document III for each station required to complete the questionnaire.

**RESPONSE** EPA has eliminated both Document I: Inventory of Plants and Generating Units and Document II: Utility-Level Information. The certification statement now only applies to Document III: Plant-Level Information.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q11      |
| <b>COMMENT ID</b>          | 316.COM.007            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 2, Section A, question 11

We answered the question with the assumption that a "Plants Own Surface Water Supply" meant that we were not reliant on another plants intake as a source of cooling water flow. However, this is somewhat confusing, particularly in light of the "Plants Own Groundwater Supply" definition on the previous page. Indeed, our personnel at the plants first thought this to mean that the station had to "own" the surface source water. Perhaps an additional definition of a "Plants Own Surface Water Supply" is warranted on the proceeding page along with the other definitions.

**RESPONSE** A definition for "plants own water supply" has been added into the questionnaire for clarification.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q12      |
| <b>COMMENT ID</b>          | 316.COM.008            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 3, Section A, question 12

We reduced our burden significantly by utilizing the flow diagrams submitted as part of the NPDES permit renewal applications (as suggested in the note associated with this question), updated with 1997 flow values. However, if the Agency deems these flow diagrams to be inadequate, our burden to complete new diagrams will increase significantly.

**RESPONSE** EPA expects that the information needed to complete the diagrams requested will require limited modifications to already existing plant diagrams.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q16      |
| <b>COMMENT ID</b>          | 316.COM.009            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 4, Section B, question 16 (c) & (d), and 18 (b) and (c)

We significantly reduced our burden in supplying this latitude/longitude information by using condenser discharge information provided in our NPDES permit renewal applications. As such, both the intake and discharge questions contain the same latitude/longitude information. We felt this was justified given that our intakes are within the same general area as the discharge points. If the Agency determines that these data are inappropriate, our burden would increase significantly.

**RESPONSE** Providing the latitude/longitude information for the condenser is appropriate only if the intake structure is within a relatively short distance from it. This information is being requested to allow GIS mapping of cooling water intake structures. See response to comment 316.UWAG.073.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q24      |
| <b>COMMENT ID</b>          | 316.COM.010            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 5, Section C, question 24(b)(3) - Commenter, question 25(b)(2)

Both questions relate to "Depth of Water Source at Withdrawal Point". This question also caused some confusion among plant personnel completing the questionnaire. Some thought the question was asking for the distance from the water surface to the point water is withdrawn into the intake structure. Others felt the Agency was simply looking for the source water depth at the point the intake structure made contact with the source water. We ultimately answered the question with the latter interpretation in mind. If our assumption is correct, perhaps this question could better be worded "Depth of Water Source at Withdrawal Point Intake Structure".

Comment 6, Section C, question 24(b)(4) - Commenter, question 25(b)(3)

These questions relate to "Average Distance of Intake Structure Below Water Surface". Again, we debated internally exactly what information the Agency was seeking with this question. In the case of Commenter, the surface shoreline intake bays extend the full length from a point above the water surface, and continuing down to the bottom of the riverbed. Since all of the intake bays extend the same amount of distance, their "average" is equal to 23 feet. On the other hand, if the Agency is looking for the distance midway between the bay(s) opening and the water surface, since these extend the full water depth, the midway point is 1/2 of 23 feet, or 11.5 feet. The Agency would probably obtain better information under this question by first asking for a range (in feet) of the intake structure opening as well as the average. Or, at minimum, explain what distances we are to be averaging.

Commenter Station, with its sub-surface intake structure was no less confused by this question. Ultimately, we answered this question by assuming it was looking for the average depth of the intake structure opening below the surface of the water. Here again, the Agency may have benefited by first asking the range (which amounts to the size of the opening) as well as the average.

**RESPONSE** In response to this and other comments, EPA has modified the question to request both the average distance of the top of the intake structure opening below the water surface and the average distance of the bottom of the intake structure opening below the water surface.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26      |
| <b>COMMENT ID</b>          | 316.COM.011            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 7, Section C, question 26

A general comment about this section is that if we marked the answer as "Data Not Available", to us, this meant the same as "Don't Know". In other words, we are unsure if others, such as a natural resource agency (or other entity) had data available within a one-mile radius of our intake structures. The bottom line is that we are unaware of the existence of any such data. Again, this ultimately reduced our burden in completion of the questionnaire. Presumably, the Agency is not requiring the responders to undertake an extensive literature review in an attempt to answer all the items under question 26. If so, this would become a very costly task which most, if not all, would have to outsource.

Comment 8, Section C, question 26(a), (b), & (c)

Commenter: Commenter Station is located on Lake Michigan with a submerged, offshore intake. These question items appear to be directed at those facilities located on riverine systems. For the Commenter questionnaire, we left them blank, since there obviously is no "upstream" or "downstream". Perhaps another box should be added to these items stating "Not Applicable", or perhaps these items should be placed under question 19 relative to rivers and streams.

Comment 9, Section C, question 26(d)

Commenter: We marked this question "No" for Commenter Station because, even though there are wetlands located within a one-mile radius of Commenter's intake structure, these are inland from shore and not hydraulically linked via a surface water source to Lake Michigan.

We presume that EPA is asking for wetland information due to the use of wetlands as habitat by certain aquatic organisms that potentially may be impacted by a facility's intake structure. However, for an intake structure to have a possible impact, these wetlands would seemingly need to have a direct surface hydraulic connection to the intake source water.

We would suggest the Agency expand their current definition of wetlands in Document III, Part 3 (Glossary) to state that for purposes of answering Section C, question 26(d), the responders only need note wetlands that are directly linked to the surface water source via a surface connection.

**RESPONSE** The purpose of this question is to identify where the plant is located in proximity to what could be considered biologically sensitive habitat. EPA has reworked this question to be less redundant on the types of sensitive areas information is requested on. Also, the question has

been changed in response to comments from asking about the sensitive areas in a one mile radius to requesting whether the it is in the near-field or far-field. This is intended to determine whether the sensitive area is being influenced by the cooling water intake structure in the near-field or not in the far-field.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q27      |
| <b>COMMENT ID</b>          | 316.COM.012            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 10, Section D, Question 27, 28,29, and 30

Question 27 asks if bar racks/trash racks are available, then requests no further information on this technology. However, the definitions for bar/trash racks and traveling or other intake screen systems are identical.

Consequently, the remaining questions on traveling screen technology and passive intake technology ignore what we feel is one of the technologies relative to exclusion of aquatic organisms.

At facilities with surface water intakes, this is probably the first technology employed between the source water and the intake structure. Secondly, we would argue that bar racks/trash racks could be considered a "passive" intake system that, with little or no mechanical activity, stop debris and/or organisms from entering a plant's water system. Granted, these structures can occasionally be cleaned mechanically, but the bars themselves, are stationary. It is unclear whether the term "mechanically" is being used in reference to moving parts or in terms of physical barrier approaches versus behavioral-based technologies. All in all, we feel that bar/trash racks should be given more importance than these questions allow.

**RESPONSE** Bar racks/trash racks are employed at almost every type of intake structure. The main purpose of this technology is to exclude large pieces of debris and trash from going into the intake structure. EPA believes that it is important to understand if all cooling water intake structures employ this technology, but since the purpose is not to for fish protection, detailed information is not necessary.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q33      |
| <b>COMMENT ID</b>          | 316.COM.013            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 11, Section D, Question 33

The measurement point indicated for both "Approach Velocity" and "Pass-Through Velocity" are defined identically (a point just before the traveling or other intake screen system). This could cause a problem if both velocities were being provided.

Since the definitions of bar/trash racks and intake screen systems are also identical, a utility could interrupt that the bar rack is the first cooling water technology and provide velocity data that reflects conditions in front of the bar rack, which may or may not be appropriate. Indeed for Commenter that was our first thought, however in the end we provided velocities related to the traveling screens.

Additionally, the questionnaire is currently structured such that if one has no approach velocity data, those items can be skipped, going directly to items relative to pass-through velocity. One is then required to supply either actual or calculated pass-through velocity information. We feel this provides a "disincentive" to supply approach velocity and could result in only calculated pass-through velocity information being provided. Perhaps the Agency should reverse this approach and ask for pass-through velocity if available and require approach velocity, which we feel, is the more meaningful statistic.

**COMMENT** Comment 12, Section D, Question 33(d)

Commenter: Commenter Station employs a barrier net around the intake velocity cap between mid-April through mid-October. During the time the net is removed, the pass-through velocity at the first intake structure technology is at the velocity cap. When the net is in place, it becomes the first intake technology; therefore, we provided a second pass-through velocity value to encompass the time period the net is in place.

Perhaps the questionnaire should be modified to include the seasonal, or otherwise intermittent, operation of certain intake technologies.

**RESPONSE** EPA has modified the question to ask for the "design pass-through velocity under low flow conditions."

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q34      |
| <b>COMMENT ID</b>          | 316.COM.014            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 13, Section D, Question 34

In order to reduce our burden in completing this question for both plants, we utilized flow information submitted on monthly Discharge Monitoring Reports (DMRs) required under each plants NPDES permit. We called these flows "actual" for this reason. However, please note that few if any, plants directly measure condenser cooling water flow since there really is no equipment available to perform this task. Rather, for NPDES compliance purposes, flows are derived from pump log times and pump rates. This is typically done on a daily basis.

Commenter, question 34: No minimum flow for February, 1994 was provided due to operator error. Beginning in March, 1995, minimum flows were no longer required by Commenter's reissued NPDES permit, therefore, these data were unavailable.

Commenter, question 34: Minimum flows were not required per this stations NPDES permit for the years 1993 through 1997, therefore, these data are unavailable.

We believe maximum and average flows to be the most important in the context of 316(b) rule/guidance development and that minimum flow would probably be of less value to the Agency. If we were ultimately required to provide minimum flow data our burden would increase significantly.

**RESPONSE** EPA understands that flows are not measured directly, but typically are estimated based on pump rates. Flows estimated that way should be categorized as "calculated" instead of actual. EPA has modified the question to provide clarification. In addition, Question 34 which requests flow data has been modified to require only 3 years of data which should reduce the burden. Minimum flows are being requested so that EPA can understand better how the intake structures are operated.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q37      |
| <b>COMMENT ID</b>          | 316.COM.015            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 14, Section D, Question 37 (s) & (b)

The Commenter station (as well as some other Commenter facilities) employs hot-water recirculation, not for ice control, but as means to control zebra mussel infestations. The current wording of the question items would exclude these auxiliary hot water diversion systems. Perhaps the question should be modified to be more inclusive.

**RESPONSE** It is EPA's understanding that control for zebra mussels entails more of an internal plant recirculation of heated water (e.g., heat treatment), whereas, for ice control entails recirculating small amounts of the heater discharge to the intake structure. Therefore, EPA has not included the recirculation of heated water for zebra mussels control because its operation does not have anything to do with the cooling water intake structure.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q38      |
| <b>COMMENT ID</b>          | 316.COM.016            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 15, Section D, Question 38 (a), (b), & (c)

The Commenter facility does not keep detailed accounting information that would have allowed completion of these items. Commenter Station did keep cost information on the barrier net separate from other intake technology costs since the barrier net work is contracted out. However, Commenter could only make a broad estimate as to costs associated with the traveling screens. Additionally, both facilities were unsure as to the "Expected Total Life Span" column on the question 38 table. Is it the total life the system needs to be maintained, or the life of individual equipment? If the Agency seeks the latter, this is a difficult question to answer where traveling screen systems are involved. These systems typically include motors, screen panels, sprockets, etc., all with greatly varying life spans.

**RESPONSE** Capital and O&M costs of technologies are not longer being requested in the questionnaire. In addition, life spans of the technologies are no longer needed.

---

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q41      |
| <b>COMMENT ID</b>          | 316.COM.017            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** Comment 16, Section E, Question 41, 43, 47

The way these question items are currently worded could result in the Agency potentially excluding source water aquatic population data that would be useful as a "screening" tool.

For instance, Commenter has not performed any specific impingement or entrainment studies, but has been involved in source water biological monitoring that was used by the state regulatory agency to demonstrate that additional 316(b)-type studies are not warranted at the present time. These studies would also be missed under question 43 and 47 relative to discrete biological studies of impingement/entrainment.

**RESPONSE** EPA understands that there are some facilities that have participated in source water biological monitoring studies. This type of data is important in determining whether impacts are occurring. However, the purpose of collecting information on biological studies in this section is not to provide data upon which to make a determination of impact, but rather to identify the types of impingement and entrainment studies plants have performed. Source water data will be collected on a site-specific basis for case studies.

|                            |                        |
|----------------------------|------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA       |
| <b>COMMENT ID</b>          | 316.COM.018            |
| <b>COMMENT AUTHOR</b>      | ComEd                  |
| <b>DOCUMENT TYPE</b>       | Industry (specific)    |
| <b>DOCUMENT DATE</b>       | 05/18/1998 00:00:00.00 |

---

**COMMENT** V. Document III: Plant-Level Information, Part 2: Financial and Economic Data

Comment 1, General: As with Document II, we utilized a stamp with the words "confidential business information" at the top of each page that contains information we want to be treated as CBI.

Again, please note that the stamp at the top of each page applies to all information on that page. We recommend that the Agency provide CBI check-off boxes adjacent to questions in this document.

Comment 2, Section A, question 4: For both facilities, we pulled information from FERC Form 1 to complete this question. Given that this information is provided on FERC Form 1, it may not be necessary for the Agency to require re-submittal of this information.

For Commenter Station, values of zero are provided for the year 1997. This plant was officially closed January 14, 1998 and the assets were fully depreciated as of December 31, 1997.

Comment 3, Section A, question 5(c): We utilized information provided on FERC Form 1, line 11, since both of these facilities are wholly owned by Commenter.

Comment 4, Section B, question 8: While nuclear station units typically have a predetermined retirement date due to the length of the operating license, fossil-fuel plant usually have no planned retirement date. As such, for Commenter, we simply stated that a retirement date had yet to be defined. Perhaps the question could be reworded to ask if a retirement date has been defined with a "yes" or "no" answer. If a respondent answers "yes", then have them provide the month/year.

Commenter Station is unique in that the plant was officially closed January 14, 1998. However, the original operating license for this facility expires in the year 2014. This is also when the Company plans to commence decommissioning of the plant. Therefore, the date we provided was 2014.

Comment 5, Section B, question 10: Commenter is a single unit facility, therefore, some plant economic data were available. However, most economic data for this facility were combined with the Company's Commenter Station - a two-unit facility. For these questions, we used a proportional share based on Commenter megawatt capacity relative to Commenter capacity.

For Commenter Station, and for other multi-unit facilities, this information is unavailable on a unit-specific basis. Accordingly, for Commenter Station, the information provided in Section B

of this part is on a plant basis rather than unit basis. This information, on a plant-level basis, was found in FERC Form 1.

Given that Commenter generating stations all have single intake systems (exclusive of Commenter and Commenter which each have their own), we feel plant-level economic data are appropriate.

**RESPONSE** Several issues concerning specific questions in the questionnaire are raised in this comment:

1. CBI check-off boxes should be provided next to each question.
2. Information requesting plant-level balance sheet information is publicly available.
3. The question about a unit's retirement data should be preceded by a question requesting whether a retirement date has been defined.

EPA's response:

1. In the financial and economic part of the 316(b) questionnaire, a CBI check-off box is provided at the bottom of each page that contains data eligible for CBI status. If that box is checked, all information provided on that page will be considered confidential. EPA believes that treating all information on a given page as confidential will improve CBI data handling efficiency and further ensure that sensitive data will not be disclosed.
2. In response to this and other comments, privately-owned and publicly-owned utilities are no longer requested to provide plant-level balance sheet information in the 316(b) questionnaire as this information is publicly available.
3. In response to this and other comments, EPA added the option of indicating that no retirement date has been determined.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/AEI             |
| <b>COMMENT ID</b>          | 316.UWAG.007            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 2. Adverse Environmental Impact (AEI) and Options For Minimizing AEI

a. Proper Interpretation Of Adverse Environmental Impact/Assessment Of Options For AEI Minimization

As discussed above, one of the unique aspects of § 316(b) is its focus on minimizing "adverse environmental impact" ("AEI"). With AEI, the proper performance of EPA's functions under § 316(b) will necessitate development of a regulation that appropriately defines the concept and requires permit writers to determine that AEI exists before examining whether additional or different intake technology should be considered in a particular situation. The concept of adverse environmental impact describes an adverse effect on the ability of aquatic populations to propagate and survive. *Seacoast Anti-Pollution League v. Costle*, 597 F.2d 306, 310 (1st Cir. 1979).

Population effects do not correlate directly with intake effects because, due to a variety of factors, the cropping of organisms caused by intake structures will have markedly different effects (if any) on aquatic populations in different ecosystems. Questions of AEI must take into account complex biological considerations describing the environment's response to natural and man-induced conditions, including intake effects.

For this reason, EPA has long recognized that a determination of AEI must reach well beyond a simple calculation of the losses of individual organisms caused by intake structures. *Matter of Public Service Co. of New Hampshire (Seabrook Station Units 1 and 2)*, NPDES No. NH0020338, Case No. 76-7 (June 10, 1977) (decision of the Administrator) (Seabrook I). See also 1976 Rules, 41 Fed.Reg. 17,389 (factors relating impingement and entrainment to ecosystem effects must be considered in assessing AEI.) The courts have sustained EPA's position that adverse impacts are not necessarily caused even by the loss of many fish through intake effects. *Seacoast*, 597 F.2d at 309, 311. EPA has implemented its population-based interpretation of AEI in numerous § 316(b) determinations over the years.[8]

Consequently, the concept of AEI must be applied on a case-by-case basis. The biological significance of intake losses - i.e., the existence and degree of adversity to populations - depends on the interaction of multiple variables that will be unique in each environmental setting. These include, for example, the composition, size, and range of aquatic communities, natural mortality rates of early life forms, compensation and recruitment mechanisms, and the effects of other factors such as population pressures from commercial and recreational activities and enhanced productivity due to existing conservation measures.[9] Because of these unique, place-based considerations and their interactions, similar facilities with similar intake technologies located on similar water bodies cannot be presumed (let alone demonstrated) to have comparable effects on aquatic populations' ability to propagate and survive.

Equally important, options for minimizing AEI, where it occurs, must be identified and assessed on a site-specific basis. A technology that reduces impacts below the level of adversity for one species or life stage in a given location may not be workable or effective in a different location. [10] Moreover, technologies that reduce impacts for one species or life stage may increase effects on other species or life stages. Therefore, assessing intake structure options must be done on a site-specific basis, taking into account effects on the aquatic community as a whole.

For these reasons, EPA has correctly maintained for over 20 years that a § 316(b) determination must be site-specific. In its 1977 guidance, for example, the Agency explained that "[t]he environment-intake interactions in question are highly site specific and the decision as to best technology available for intake design, location, construction, and capacity must be made on a case-by-case basis." [11] Neither the relevant scientific principles nor the data generated over the past two decades has changed in any manner that would alter this basic conclusion. In fact, the site-specific studies which have been performed pursuant to § 316(b) only serve to reinforce that conclusion.

b. The Questionnaire Does Not Appropriately Address Determination Of AEI And Options For Minimizing AEI

The Questionnaire does not appear to have been designed to support development of a regulation that properly defines AEI and facilitates site-specific determinations of whether AEI is occurring and, if so, what intake structure technologies are the "best available" for minimizing AEI. On the contrary, it appears designed for the development of categorical, technology-based performance standards. EPA staff have indicated in the past that the Agency intends to consider such an approach, modeled after traditional effluent guidelines methodologies. Commenter believes that EPA cannot justify an information collection under the PRA that is designed to support development of such a regulation, because that regulation would not be consistent, with the proper performance of the Agency's functions. For the reasons discussed above, Commenter believes that such an approach is wholly impracticable, because the factors that dictate whether an adverse environmental impact is occurring, what technological options are available for minimizing AEI, and which option is the "best available," are so myriad and so inherently site-specific.[12]

The effluent guidelines model is blind to the question of AEI. Effluent guidelines address the performance and cost of technology for meeting a limited statutory objective - reducing the generic propensity (pollutants discharged) of an activity to degrade water quality. This objective consciously ignores receiving water impacts, in keeping with the statute's goal of forcing common technology for similar pollution sources. Congress deliberately chose to establish a technology-based regulatory floor, and to employ water quality standards as a separate, place-based strategy for imposing more stringent requirements where they are needed.

The statutory approach for addressing intake effects under § 316(b) differs fundamentally from this two-step process for limiting pollutant discharges. First, instead of prescribing two independent steps based on analytically distinct approaches, § 316(b) combines aquatic impact and technology considerations into one procedure. Second, § 316(b) reverses the sequence of evaluation by first assessing whether adverse aquatic impacts are present, and then applying technology requirements only where appropriate in light of identified adverse impacts, costs and other considerations. It authorizes imposition of the best technology available "for

minimizing adverse environmental impact," not for reducing the theoretical propensity of the regulated activity to cause any impact regardless of the population characteristics and other variables encountered in actual environments.

Thus, quite unlike the categorical, purely technology-based process for which Congress presumed that pollution discharge controls are necessary everywhere, § 316(b) provides, at the outset, for a threshold determination of the existence and extent of adverse impacts. EPA underscored this central feature of § 316(b) in the preamble to its 1976 final rule: "Once such adverse effects have been identified (or, in the case of new structures, predicted) then the effort must be to select the most effective means of minimizing...those adverse effects." 41 Fed. Reg. 17,388 (April 26, 1976). EPA has not been authorized to establish a generic threshold presumption, as Congress did for pollutant discharges, that adverse environmental impacts will be caused by the activity being regulated. This makes sense as a matter of policy because, as, noted above, the existence and extent of environmental impacts that may be caused by intake structures depend on myriad environmental factors that cannot be predicted or effectively modeled for all intake structures on a generic basis. Rather, the propensity for a given intake structure to cause AEI to a given aquatic community in a given environmental setting must be assessed site-specifically. While this need not always require monitoring or modeling, and may make use of existing relevant fisheries information, literature, and the like, it must take into account the characteristics of the site.

The Questionnaire appears tailored to the effluent guidelines model - an inappropriate approach under § 316(b). It would gather extensive data on intakes, technologies, and associated intake effects, as well as financial data designed to evaluate cost impacts, but virtually would ignore the need to gather meaningful information on AEI. The enormous burden imposed by the Questionnaire, even using EPA's estimate, is not justified by this approach.

The proposed Questionnaire gives short shrift to important biological concepts and factors. For example, in soliciting the results of biological studies, EPA has defined the concept very narrowly; the "biological effects" of impingement and entrainment are limited to an evaluation of "the rate or volume" at which organisms are impinged or entrained. Glossary at 3. If EPA means to use these data in designing performance standards based on various technologies, the Agency's objective is inappropriate, considering the deliberate statutory distinctions between the typical effluent guidelines approach and § 316(b). These data stop far short of addressing AEI in the manner required by § 316(b).

Similarly, in its solicitation of biological studies related to impingement and entrainment (Document III, pp. 69-70, 75-76), EPA has focused on only a handful of the most important questions relevant to the evaluation of non-intake factors that will influence population-level impacts. For impingement, EPA inquires about measurements of seasonal losses due to disease or predation (question 44(e)). For entrainment, EPA poses the same question, and also asks whether aquatic communities have been characterized (question 48(e)). There is no effort to systematically evaluate impingement/entrainment based on relevant population-related information, such as the life stages affected, their reproductive mechanisms, spawning range and method, diet, habitat, size, and swimming speed; water quality limitations; historical data on fish abundance and population fluctuations; mitigation data; or any other information that would create an overall perspective for intake-effects data. [13]

---

[8] See, e.g., *Matter of Public Service Co. of New Hampshire (Seabrook Units 1 and 2)* NPDES No. NH0020338, Case No. 76-7 (June 10, 1977); *In re Boston Edison Co. (Pilgrim*

Power Plant) Determination Regarding Issuance of Proposed NPDES Permit No. MA0025135 (March 11, 1977); In the Matter of Indian River Plant, Orlando Utilities Commission, Cape Canaveral Plant, Florida Power and Light Company (July 11, 1983).

[9] Regardless of whether a permitting authority would approve the implementation of proposed conservation measures (in lieu of, or as an adjunct to, technology), the fact remains that existing conservation measures should be considered in evaluating whether adverse environmental impact is being caused by a cooling water intake structure. Conservation measures (e.g., wetlands restoration) and fish aquaculture and stocking measures designed to offset intake losses should be fully accounted for in assessing the likelihood of population effects.

[10] For example, some studies indicate that certain sonic fish avoidance devices that were very effective in a lake setting were ineffective in a river setting with the same species.

[ 11] "Guidance for Evaluating the Adverse Impact of Cooling Water Intake Structures on the Aquatic Environment: Section 316(b) P.L. 92-500" p. 4 (Draft of May 1, 1977).

[ 12] Even if EPA were under an obligation to consider such an approach, Commenter believes that the types of general and case study information the Agency says it already has collected or plans to collect would provide an ample basis for evaluating and rejecting such an approach. And if EPA did decide to pursue development of a generic categorical approach it would need far more detailed data than it proposes to collect, in order to capture all of the relevant site-specific factors.

[ 13] The Notice states that the Agency does not intend to rely completely on the environmental data collected through the proposed Questionnaire to assess adverse environmental impacts (63 Fed. Reg 3,739), and the Questionnaire asks whether impingement entrainment studies and data are readily available for review by EPA (e.g., questions 44(h), 45(b)(4), 46(d)). If EPA is planning a large-scale review of impingement studies after it receives the Questionnaire responses, Commenter questions whether this effort will be effective, given the very short period of time between receipt of responses and the deadline for issuance of the proposed regulation. Nonetheless, Commenter cautions against over-reliance on the Questionnaire data, as it will be virtually sanitized of any site-specific population context.

## RESPONSE

In reference to the Commenter's interpretation of adverse environmental impact(AEI)/assessment of options for AEI minimization. EPA appreciates the Commenter's opinion on what they believe constitutes an AEI. Defining AEI is one of the major issues that EPA needs to address in the Section 316(b) rule. EPA will consider the Commenter's opinion in future analysis of options to define AEI.

In reference to the Commenter's concern that the questionnaire does not appropriately address determination of AEI and options for minimizing AEI. The questionnaire is not intended to address AEI at this level of analysis. EPA is primarily using secondary sources such as case studies to help define AEI and will consider the Commenter's suggestions in developing the case study model. See response to 316.CMA.003. Furthermore, the Commenter incorrectly deducted that EPA intends to develop a regulation based on the effluent guideline model. Since the close of the questionnaire public comment period, EPA has made public a draft

regulatory framework that clarifies the type of regulation that EPA is considering. The contemplated framework is a three tiered approach that provides a decision framework for determining AEI and allows for flexibility on a site specific basis. See response to 316.CON.003.

EPA recognizes that mitigation (conservation measures) is another issue that needs to be addressed in the 316(b) rule. However, the purpose of the questionnaire is not to help determine the role, if any, of mitigation. EPA will primarily use secondary sources to evaluate options for addressing mitigation. EPA will consider the Commenter's opinions with respect to mitigation when EPA addresses this issue.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/AEI             |
| <b>COMMENT ID</b>          | 316.UWAG.009            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** In sum, the starting point for decision-making under 316(b) - determination of AEI - is virtually ignored in the Questionnaire. If this signals that EPA is pursuing a purely categorical, technology-based model for this regulation, then Commenter seriously questions whether the Agency will meet its PRA obligations. Even if a categorical approach were feasible (which we believe it is not), such an approach would require much more data collection and analysis than is currently planned by EPA, based on its public announcements. Such an effort, in Commenter's view, is impractical, unnecessary, and not consistent with statutory requirements. Moreover, EPA need not compile an extensive historical database from all steam electric plants in order to support a determination that such an approach is neither practically feasible nor legally warranted. In Section II.E, Commenter suggests an alternative approach to the rulemaking which more closely fulfills the statutory requirements. Commenter recommends that EPA focus on this option and, in its discretion, other equally practical regulatory options, well-grounded in the § 316(b) statutory mandate.

**RESPONSE** EPA is not considering a purely categorical, technology-based model for this regulation. EPA recognizes that every plant's site characteristics are different and therefore the regulatory framework must be flexible enough to take site specific data in to consideration when determining whether a facility is minimizing adverse environmental impact. However, the purpose of the questionnaire is not to define adverse environmental impact. EPA will primarily use secondary sources to help define adverse environmental impact. Based on this and other comments, EPA reduced the amount of historical data requested and decided to send the detailed questionnaire to only a sample of the utility industry. See response to 316.CMA.003, 316.CON.003 and 316.UWAG.007.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/AEI             |
| <b>COMMENT ID</b>          | 316.UWAG.029            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** D. EPA Has Not Explained Its Plan For Efficient Use Of the Information

The Agency has provided only a very general explanation of how it intends to use the information being collected. This is not surprising, since EPA has yet to indicate the type of regulation being developed, but the PRA requires that there be an efficient plan for using these data before an information collection is authorized.

EPA has indicated simply that the data it seeks will "help quantify the adverse environmental impacts from cooling water structures, evaluate the efficacy of control technologies, and determine the economic reasonableness of the final rule," and that the information will help to organize the collection of even more data. 63 Fed. Reg. at 3.739.

Commenter questions whether the first of these purposes - quantification of AEI - ever could be achieved on an aggregate basis. Because § 316(b) determinations and biological studies performed by respondents will not share common objectives, methodologies, data-gathering techniques, durations, or time frames, EPA will not be able to develop and support general conclusions based on these impacts. EPA has not provided any explanation of its plan to use these data to meet the stated objective.

Similarly, EPA has not explained how it hopes to evaluate the efficacy and costs of control technologies for minimizing AEI. Impingement and entrainment studies will provide data on the intake effects attributable to particular combinations of existing intake structure features, but as noted above, it is not apparent that EPA has any workable plan to develop gross correlations between the performance of intake technologies and reduction of AEI.

Finally, Commenter is not aware of any EPA plan for assessing the economic reasonableness of the rule based on the data being collected. As noted above, the future cost of biological studies and technology-related costs cannot be predicted for a particular location based on historic data aggregated or otherwise generalized from other respondents. The Agency needs to explain how it intends to meet this objective, and to do so it first needs to explain the nature of the regulation being developed.

**RESPONSE** Since the public notice of the questionnaire, EPA has released a draft regulatory framework that indicates the type of regulation that EPA is considering. The questionnaire will help support this framework and help to develop options within the draft framework. In addition, the ICR will contain a justification for how EPA will use the data to help develop the cooling water intake structure regulation. See response to 316.CON.003.

EPA does not intend to quantify adverse environmental impacts on an aggregate basis. Rather, EPA intends to use the data from the detailed questionnaire to help characterize impingement and entrainment and to understand past efforts to minimize such impacts. See response to 316.CMA.003.

EPA recognizes that the efficacy of a technology may vary depending on the site characteristics. The draft regulatory framework that EPA developed provides the flexibility to make site specific determinations. EPA, in general, will assess through case studies the efficacy of technologies to reduce impingement or entrainment under certain conditions. The detailed questionnaire will help EPA characterize the technologies currently being employed and to assess trends. Based on a number of comments, EPA deleted all questions in the detailed questionnaire that ask for technology cost data. EPA decided that it could obtain adequate cost data from intake structure technology vendors.

The data from the questionnaire is designed help EPA conduct standard economic analysis required for all regulations of this type and significance. EPA must prepare a general assessment of the impacts of the regulation to satisfy Executive Order 12866; prepare an assessment of the impacts of the proposal on small entities; and prepare an assessment of the impacts of the proposal on state, local, and tribal governments and the private sector under the Unfunded Mandates Reform Act of 1995 (UMRA), 5 U.S.C. § 1501, et seq.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BIOSTDY         |
| <b>COMMENT ID</b>          | 316.UWAG.026            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 3. The Questionnaire Is Not Likely To Produce Control Technology And Environmental Data That Are Comparable

The data supplied in response to the questions in Section D (Cooling Water Intake Control Technology Data) are from 1993 through 1997 or from 1993 through June 30, 1998. Section E (Environmental and Technology Studies and Mitigation Studies) requests data from studies that were conducted at any time during the period from 1976 to the present. Without correlating time periods between these data sets, [26] EPA may not be able to draw any valid conclusions on the environmental impact of the various intake control technologies, or on the impact of control technologies in general. Commenter recommends that the data requests in Sections D and E be designed to allow correlation of all data relevant to an assessment of environmental impact for cooling water intakes.

---

[26] Although EPA requests the dates of the § 316(b) studies summarized in Section D, this is an insufficient check on the possible inappropriate correlation of data.

**RESPONSE** EPA does not intend to draw conclusions between control technologies and environmental data. Each section provides data for a separate purpose. Information from Section D (Section C in the August 1999 version) of the questionnaire will help EPA characterize the types of technologies currently being employed at plants. Information from Section E (Section D in the August 1999 version) will help EPA identify research that plants have already undertaken on Section 316(b) related topics and the availability of the study data.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BIOSTDY         |
| <b>COMMENT ID</b>          | 316.UWAG.027            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 4. The Questionnaire Is Not Likely To Produce Useful Data On Environmental Assessment Costs

In addition to technology capital costs and operation and maintenance costs, the Questionnaire requires respondents to provide the costs of impingement and entrainment studies (Document III, Part 1, p.70, question 44(g); p.72, question 46(c); p.76, question 48(h) and p.78, question 50(c)). These costs will be very difficult to identify for the majority of facilities. For older § 316(b) studies, cost data may not be available, as the original records may have been destroyed or lost.

Furthermore, the questions presuppose that only separate and distinct studies of precisely defined scope and duration are conducted in association with a §316(b) demonstration. In fact, some studies are performed on ongoing or overlapping bases, and may be conducted to support a §316(b) demonstration directly, or for monitoring purposes separate from a demonstration study. As such, it will often be difficult to precisely identify costs associated with studies directly supporting a §316(b) study in a particular year. Thus, the Questionnaire is unlikely to produce complete study cost information. EPA will be hard-pressed to develop any general conclusions regarding compliance costs based on these data alone.

**RESPONSE** EPA deleted all questions asking for data on technology, and operation and maintenance costs. EPA will obtain this cost data from vendors. EPA has retained three questions asking for environmental cost data. EPA is requesting data on the cost of the most representative impingement and entrainment study, and the cost of ongoing monitoring programs. EPA allows facilities to provide actual or estimated costs. To accommodate facilities that do not have the data available for reasons such as the original records destroyed or lost, EPA has provided an option to check "No Data Available to Provide Estimate." EPA will use this data generally characterize study costs. EPA believes that the data provides a baseline to extrapolate regulatory costs to comply with entrainment or impingement studies.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BTA             |
| <b>COMMENT ID</b>          | 316.UWAG.008            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** The data EPA seeks regarding intake technologies also appears narrowly focused, so as to permit consideration of only a few of the many factors that may influence assessment of the BTA. For example, EPA divides the respondents according to waterbody type for purposes of Section D, Document III. Within that section, EPA asks questions about the types of intake technologies employed by the facility. Apparently, EPA hopes to find a correlation between intake technology types and waterbody types. However, this approach ignores other factors that influence technology selection, such as compatibility of new intake technologies with existing plant design and location, and types/life stages of organisms potentially affected by plant operations. Statistical manipulation of the raw data on types of intake technologies employed in different types of waterbodies, while not necessarily unimportant, does not explain how and why technologies are selected. These same factors, as well as others relating to specific waterbody and facility characteristics, are essential to any assessment of possible technological options for minimizing AEI.

**RESPONSE** The Commenter incorrectly assumes that EPA hopes to find a correlation between intake technologies and water body types. On the contrary, EPA intends to merely characterize technologies that are used nationally. EPA appreciates that plant characteristics, other than water body type, effect the use and efficacy of a specific intake technology. Information from Section C (Section B in the August 1999 version) will enable EPA to characterize the distribution of plants that have cooling water intake structures and the types of water bodies from which cooling water is being withdrawn. Information from Section D (Section C in the August 1999 version) of the questionnaire will help EPA characterize the types of technologies currently being employed at plants. EPA is using secondary sources of information to help EPA evaluate how and why technologies are selected.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BTA             |
| <b>COMMENT ID</b>          | 316.UWAG.010            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 3. Cost-Benefit Comparisons

If permit writers determine that a cooling water intake structure is causing adverse environmental impacts, they must address the issue of what technology constitutes the best technology available ("BTA") to minimize AEI.

As discussed above, many possible technologies to modify water intakes vary greatly in their applicability to site and waterbody conditions and their performance with respect to different species and life stages. Equally important, they vary substantially with respect to their costs and other environmental side-effects, depending upon site-specific conditions, including the nature and placement of the existing intake structure, the availability of additional land, and many other factors.

Technology chosen as BTA should have costs that are comparable to the benefits. Because both the costs and the benefits are highly site-specific, permit writers must be able to assess the balance between them on a case-by-case basis. As the Agency concluded in its 1973 Development Document, "[o]wing to the highly site specific cost versus benefit characteristics of available technology ... No technology can be presently generally identified as the best technology available, even within broad categories of possible application." [14]

---

[14] Development Document for Proposed Best Technology Available for Minimizing Adverse Environmental Impact of Cooling Water Intake Structures, EPA No. 440/1-74/015, p. v (Dec. 1973).

**RESPONSE**

One of the major issues that EPA will address in this rulemaking proceeding is what economic test, if any, to include in the § 316(b) regulations. Section 316(b) does not state a cost test on its face. In many past § 316(b) permitting proceedings, EPA and State permit writers have employed a "wholly disproportionate" cost test, under which the cost of the cooling water intake technology that is the basis for the permit is not "wholly disproportionate" to the benefits to be gained from the use of that technology. EPA recognizes the importance of evaluating the benefits related to the technology employed to minimize environmental impacts. The questionnaire, however, is not the primary source of data that EPA intends to use to establish the economic test or to evaluate benefits.

Four primary issues are raised in this comment:

1. EPA will not be able to identify particular technologies for particular plants as "BTA."

2. There will be no data on the net benefits, including reduction of AEI, to which cost and economic impact data can be compared.

3. EPA should focus on the methodological issues involved in comparing overall benefits of 316(b) regulations to their costs to meet economic analysis obligations under Executive Order 12866.

4. It is questionable whether case study results could be applied to the generic data EPA seeks to collect in order to quantify benefits across the board.

EPA's response:

1. The primary purpose of the economic and financial questions asked in the questionnaire is not to identify particular technologies for particular plants as "BTA" but to assess potential economic impacts of the regulation on affected plants, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. As such, EPA needs to collect information necessary to assess the ability of plants and firms to absorb the costs associated with compliance with 316(b) regulations.

2. While the 316(b) questionnaire will be an important instrument in determining BTA, compliance costs and potential benefits of 316(b) regulation, it is important to note that additional data sources will be utilized in making these determinations. This is particularly the case for the assessment of benefits from this regulation. EPA has collected a great deal of information concerning BTA technologies and anticipates to collect further information from 316(b) studies identified through administration of the 316(b) questionnaire. Furthermore, EPA has made many site visits and intends to conduct more as part of a case study of the costs and benefits of the regulation. Finally, EPA is in the process of collecting biological and ecological data on aquatic populations and habitats around plants subject to 316(b) regulation. All relevant data will be used together with information from the questionnaire to estimate potential adverse impacts as well as potential benefits from 316(b) regulation of surveyed plants.

3. The commenter suggests that EPA focus on the methodological issues involved in comparing overall benefits of 316(b) regulations to their costs to meet economic analysis obligations under Executive Order 12866. The commenter further suggests that it would not be appropriate to project site-specific compliance response analyses of the regulation. However, Executive Order 12866 is not the only statute with which EPA will have to comply in the 316(b) regulatory process. Various other statutes and mandates require that EPA conduct economic analyses to determine the impact of 316(b) regulation on affected facilities, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. Examples of these other statutes and mandates include Executive Order 12898, the Unfunded Mandates Reform Act of 1995, the Regulatory Flexibility Act of 1980, and the Small Business Regulatory Enforcement Act of 1996. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.) In order to meet the obligations specified in these statutes and mandates, EPA needs economic and financial data from facilities and their parent firms. Each question asked in the financial and economic parts of the questionnaire fulfills a specific function in economic analyses which EPA is required to conduct. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

4. As stated in the response to issue 2 above, EPA will utilize various data sources to estimate potential benefits from 316(b) regulation. EPA will use a case study approach to more closely examine selected plants in terms of their likely 316(b) technology requirements and potential benefits. EPA is in the process of collecting biological and ecological data on aquatic populations and habitats around plants subject to 316(b) regulation. Results from the case studies will not be extrapolated in a generic way without taking into account site-specific factors important in the context of 316(b) regulations.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BTA             |
| <b>COMMENT ID</b>          | 316.UWAG.054            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document III Page 1 General Information and Instructions.

Commenter applauds EPA's statement that it does not intend to make BTA judgements regarding individual facilities on the basis of responses to the Questionnaire. Commenter believes any such determination must be made on a case-by-case basis, considering a broad range of site-specific factors.

**RESPONSE** No response required.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.UWAG.002            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Moreover, Commenter believes that EPA has significantly underestimated the burden associated with completing the Questionnaire. See Section II.B. Even if EPA's estimate were accurate, however, Commenter believes the Questionnaire would be unnecessarily burdensome, because it will not provide the type of information EPA needs to properly implement § 316(b). As a result, Commenter believes that the Questionnaire does not satisfy the requirements of CWA § 308 and the Paperwork Reduction Act ("PRA"), 44 U.S.C. § 3501 et seq. (1991 and Cum. Supp. 1997)

**RESPONSE** EPA has a practical utility for all the questions in the detailed questionnaire. This data will support implementation of section 316(b). To supplement the questionnaire data, EPA is using secondary sources to gather data that is impractical to collect through the questionnaire. See response to 316.CMA.003 and 316.AEP.007.

In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These questions are expected to pose minimal burden on respondents. During the questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly-owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.UWAG.015            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 2. The Questionnaire Is Likely To Be Much More Burdensome Than EPA Has Estimated

As emphasized above, the burden associated with the Questionnaire is highly dependent on a number of facility-specific factors. EPA's burden estimate should take into account both the variability in the burden of the Questionnaire across facilities in different categories and the relative number of facilities in each category within the overall universe.

EPA provides no information on the source of its assertion that the "average" facility would be able to complete and transmit the Questionnaire results to EPA in a total of 160 hours. Assuming a universe of 1,705 facilities (EPA's estimate) and an average hourly rate of \$70 per hour, EPA's assertion would result in a total burden of about \$19 million.

In an attempt to assess the potential burden of the Questionnaire, Commenter, has developed estimates of the time involved in responding to the Questionnaire for four types of electric utility facilities: (1) a large and complex facility; (2) a medium facility; (3) a small facility; and (4) a very small facility. We use these estimates - along with rough judgments about the number of facilities that would fall in each category to generate a possible estimate of the total burden of the Questionnaire on electric utilities. Attachment A provides the details behind this estimate, including some information on how response times for individual questions figure into the overall estimate.

Though admittedly somewhat speculative, our methodology suggests that the total burden of the Questionnaire will be much greater than that proposed by EPA. Using the same assumptions on the hourly rate and universe of facilities, our illustrative estimate puts the overall burden on electric utilities at about \$72 million, almost four times greater than the figure generated based on EPA's estimate. Therefore, Commenter requests that EPA revisit its estimate, and consider the information provided in Attachment A as one potential approach.

**RESPONSE** The burden estimate is an average. Therefore, some facilities will have a lower burden, while others will have a higher burden. EPA recognizes that the burden will vary based on facility-specific factors. EPA significantly revised the draft questionnaire modifying or eliminating the questions identified as the most burdensome. EPA estimates that the burden for the revised questionnaire is 156 hours. See response to 316.AEP.007 and 316.UWAG.015.

In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These question are expected to pose minimal burden on respondents. During the

questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly-owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.UWAG.016            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** C. The Information Collected Will Lack Practical Utility

In order to ensure that the information requested in the Questionnaire will have "practical utility," EPA must demonstrate the actual usefulness of each question to carry out its functions. 5 C.F.R. 1320.5(d)(1)(iii), .3(1). In numerous respects, the Questionnaire fails to meet this criterion.

As we emphasized above, there is a disconnect between the proper performance of EPA's functions and the apparent purposes of this information collection. The Questionnaire requires respondents to provide large amounts of data that will be irrelevant to developing an appropriate regulatory structure for site-specific decision-making. Unless it is pursuing a technology-based categorical approach, EPA does not need to characterize, in detail, the history and current status of intake technology implementation, it does not need vast data collections of historic costs incurred by respondents to study, develop, construct and update equipment, and it will have little use for historic financial information. [22] Thus, while a portion of the Questionnaire data may be useful if integrated into a coherent regulatory approach fully cognizant of the data's limitations and not designed to put primary emphasis on such data, the great majority of data generated by the Questionnaire will not facilitate EPA's decision-making.

---

[22] If EPA were to attempt to pursue a purely categorical approach, the Agency would need this data, and much more current information, which likely can be collected only by extended additional site-by-site inquiries.

**RESPONSE** EPA has a practical utility for each question. EPA has significantly lowered the burden, by reducing the questionnaire by approximately 60 pages. EPA also modified the questions identified as the most burdensome based on public comments and pre-test results. Specifically, EPA deleted all questions requesting historical technology cost data. EPA has a practical utility for select historical data such as flow and technology type. See response to 316.CMA.001.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/DEF             |
| <b>COMMENT ID</b>          | 316.UWAG.157            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 1 Definition - 7Q10 Value: The lowest average flow for a river or stream taken over any consecutive 7 day period for the past 10 years.

Comment - Commenter recommended definition: "The lowest average 7 consecutive day low flow with an average recurrence frequency of once in 10 years determined hydrologically."  
Source: Water Quality Standards Handbook (EPA 1994), p. 5-1.

Page 1 Definition - Annual Cooling Water Intake Flow Rate: The total volume of cooling water withdrawn by a specific intake structure over a 365-day period.

Comment - Commenter recommended definition: "The total volume of cooling water withdrawn by a specific intake structure per year."

Page 1 Definition - Approach Velocity: The speed at which cooling water is being withdrawn just prior to the first cooling water intake control technology (if such technology exists) or the cooling water system.

Comment - Commenter recommended definition: "The speed at which cooling water is being withdrawn just prior to the first cooling water intake control technology (if such technology exists) or the intake structure."

Page 1 Definition - Average Annual Operation and Maintenance Costs: Total annual O&M costs divided by the number of years over which the costs were incurred. O&M costs include costs for labor (operational and maintenance); electric power, fuels; chemical repair maintenance material, and supplies; and costs for insurance, taxes, and overhead burden. Transportation costs may also be included.

Comment - Commenter considers replacement power costs related to operation and maintenance requirements as a part of total operation and maintenance costs.

Page 1 Definition - Bar Rack/Trash Rack: A device placed at or near the opening of an intake structure to mechanically stop debris and/or large organisms from entering a facility's water system.

Comment - Commenter recommended definition: "A device consisting of parallel, spaced bars placed at or near the opening of an intake structure to mechanically stop debris and/or large organisms from entering facility's water system."

Page 1 Definition - Confluence of Tributaries: The point of juncture of two or more tributaries, characterized by high levels of nutrients, enhanced productivity, and a complex composition of species.

Comment - The confluence of tributaries should not be based on a characterization of "high levels of nutrients, enhanced productivity, and complex composition of species." The confluence of some tributaries may actually exhibit opposite characteristics. Commenter recommended definition: "The point of juncture of two or more tributaries."

Page 2 Definition - Cooling Pond: A still body of water that is generally constructed on dry land used to transfer heat added to water from operations within a facility to the atmosphere. Constructed cooling ponds are often larger than many natural lakes. They are used with both once-through and recirculating cooling water systems.

Comment - Commenter recommends deleting the second sentence of the definition.

Page 2 Definition - Cooling Tower: A framed structure that is typically higher than its width. It can stand apart or be attached to a larger structure. Cooling towers are used to transfer heat added to water from operations within a facility to the atmosphere. Cooling towers are generally used with recirculating cooling water systems.

Comment - Commenter recommended definition: "A heat exchanger designed to aid in the cooling of water that was used to cool exhaust steam exiting the turbines of a power plant. Cooling towers transfer exhaust heat into the air instead of into a body of water."

Page 2 Definition - Cooling Water: Refers to both contact and noncontact cooling water, including water used for air conditioning, equipment cooling, evaporative cooling tower makeup, and dilution of effluent heat content. The intended use of the cooling water is to absorb waste heat rejected from the process or processes employed or from auxiliary operations on the plant's premises.

Comment - For purposes of this questionnaire, the term "cooling water" should specifically exclude groundwater as it is outside the purview of Section 316(b) of the Clean Water Act. Commenter recommended definition: "Water used to remove waste heat resulting from a facility's production or support processes, excluding groundwater."

Page 2 Definition - Cooling Water System: A system that provides water to/from a plant to transfer heat from equipment or processes therein. The system includes, but is not limited to, water intake and outlet structures, cooling towers, ponds, pumps, pipes, and canals/channels. For plants that use surface water for cooling, a system begins at the first barrier(s) to ingress and/or regress by fish and other aquatic wildlife (e.g., at the Weir wall, at the trash rack, etc.) and ends at the discharge outlet(s). See also Cooling Water Intake Structure.

Comment - The definition should be amended to replace "regress" with "egress,"

Page 2 Definition - Critical Habitat: Biological or physical features of an area that are essential for the conservation and preservation of a protected species and may require special management considerations or protection.

Comment - Commenter recommended definition: The questionnaire's definition is at odds with the definition of "critical habitat" contained in the Endangered Species Act (EPA). Any information available on critical habitats is likely to be based on the EPA definition. The EPA definition is: "(i) [T]he specific areas within the geographical area occupied by the species, at the time it is listed [as a threatened or endangered species], on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection, and (ii) specific areas outside the geographical area occupied by the species at the time it is listed [as a threatened or endangered species], upon a determination of the Secretary of the Interior or the Secretary of Commerce that such areas are essential for the conservation of the species." 16 U.S.C. § 1532(5)(A).

For purposes of this questionnaire, EPA should clarify that "critical habitat" designations should be based only on official determinations issued by the Department of the Interior or the Department of Commerce and related to specific threatened or endangered species.

Page 2 Definition - Daily Maximum Flow: The maximum flow recorded for any one day during a given month.

Comment - EPA should specify a formula for calculating daily maximum flow. Commenter reserves the right to comment on any such calculation.

Page 2 Definition - Daily Minimum Flow: The minimum flow recorded for any one day during a given month.

Comment - EPA should specify a formula for calculating daily minimum flow. Commenter reserves the right to comment on any such calculation.

Page 2 Definition - Discharge: Outflow of wastewater from a plant to waters of the United States.

Comment - EPA is proposing that the terms "discharge" and "effluent" have the same definitions. This would create great confusion. Commenter recommends that EPA define "discharge" as it does in its regulations, 40 C.F.R. § 122.2: "Discharge, when used without qualification, means the 'discharge of a pollutant,'" "Discharge of a pollutant" means:

(a) Any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or

(b) Any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

This definition includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. This term does not include an addition of pollutants by any 'indirect discharger.'"

Page 3 Definition - Effluent: Outflow of wastewater from a plant to waters of the United States.

Comment - As noted earlier, EPA is proposing that the terms "discharge" and "effluent" have the same definition. This would create great confusion. Commenter recommends changing the definition of "discharge," and leaving the definition of "effluent" as it is.

Page 3 Definition - Environmental Impact: Human induced change or pressure on the natural environment.

Comment - Given that the environment in the entire developed part of the world is a result of man's interaction with the surrounding environment, this definition is so vague as to be meaningless.

Also, the term "natural environment" would require a baseline definition. Does it mean the environment that would have existed if man had never existed or is it the condition of the environment at a particular point in time?

Furthermore, what does EPA mean by "pressure" on the natural environment?

Page 3 Definition - Far-field: The area of a water body, from which cooling water is obtained, where the water velocity and/or salinity/density is primarily influenced by ambient water conditions and where the cooling water intake is shown to have minimal effect.

Comment - "Farfield" is a term more commonly used when describing effluent plumes. This term should be replaced with the term "Secondary Study Area," which is used in EPA's 1977 316(b) guidance. "Secondary Study Area" should be defined as: "The remainder of the waterbody or segment of the waterbody outside of the primary study area."

Page 4 Definition - Fish Diversion or Avoidance Systems: Mechanisms designed to deflect or divert fish away from an intake Structure.

Comment - Commenter recommended definition: "Mechanisms designed to divert or induce fish to swim away from a cooling water intake structure."

Page 4 Definition - Fish Handling and/or Return System: Any system that collects, diverts, or transports live organisms and debris away from an intake Structure.

Comment - This definition, particularly through the inclusion of the term "divert," overlaps with the definition of fish diversion or avoidance systems.

Page 4 Definition - Groundwater: The supply of fresh water found beneath the earth's surface. It is usually held in aquifers and is often the source of water for wells and streams.

Comment - Groundwater, particularly in coastal areas, may suffer from salt water intrusion and may not be "fresh water."

Page 4 Definition - Helper Canals/Channels, Lakes, or Ponds: Cooling structures used in conjunction with a once through cooling water system that treats only a portion of the cooling water discharge from a plant.

Comment - Commenter recommended definition: "Cooling structures that treat only a portion of the cooling water discharge, from a plant, used in conjunction with a once through cooling water system."

Page 5 Definition - Impingement: The trapping and holding of larger aquatic organisms against the outer part of a cooling water intake structure during periods of cooling water withdrawal.

Comment - We suggest adding the phrase "or against screening devices" after "structure" because at some facilities with open coastal intake structures organisms are first drawn into the offshore end of the structure and conveyed a significant distance via conduit to the onshore end of the intake structure. At these facilities, impingement generally occurs at the traveling screens near the onshore end, and not at the outer part of the intake structure located offshore. Commenter recommended definition: "The trapping and holding of organisms against the outer part of the cooling water intake structure, or against screening devices, during cooling water withdrawals."

Page 5 Definition - Lake: An expanse of water, usually fresh, surrounded by land, lakes may be fed by rivers, streams, springs, and/or local precipitation.

Comment - Commenter recommended definition: "A naturally occurring expanse of water, usually fresh, surrounded by land."

Page 6 Definition - Major Electric Utility: Utilities having, in each of three previous years, sales or transmission services that exceed one of the following must submit the FERC Form 1: (1) One million megawatt hours of total annual sales; (2) 100 megawatt hours of annual sales for resale; (3) 500 megawatt hours of annual power exchanges delivered; or (4) 500 megawatt hours of annual wheeling for others (deliveries plus losses).

Comment - Commenter recommends deletion of the phrase "must submit the FERC Form 1."

Page 6 Definition - Mean High Water Level: [Definition to be developed] Mean Low Water Level: [Definition to be developed] Mean Water Level: [Definition to be developed]

Comment - The lack of proposed definitions for these terms seriously hampers Commenter's ability to comment on portions of the questionnaire which use these terms. Commenter reserves the right to comment on these terms.

Page 6 Definition - Migratory Routes: Route taken by animal populations during seasonal movement from one region to another.

Comment - For purposes of § 316(b), the definition of "migratory route" should apply only to significant routes, for aquatic species. Commenter recommended definition: "Route taken by numerous members of the same aquatic species during seasonal movement from one region to another."

Page 6 Definition - Near-Field: Area of the intake water body where velocity and/or salinity/density become affected by the removal of water.

Comment - "Near-field" is a term more commonly used when describing effluent plumes. This term should be replaced with the term "primary study area." "Primary study area" should be defined as "the segment of a waterbody most vulnerable to localized impact. This concept is most pertinent to organisms subject to entrainment."

Page 7 Definition - Plant: A facility at which are located prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or nuclear energy into electric energy. A plant may contain more than one type of prime mover. Electric utility plants exclude facilities that satisfy the definition of a qualifying facility under the Public Utility Regulatory Policies Act of 1978.

Comment - Commenter recommends deleting the third sentence of the definition.

Page 8 Definition - Privately Owned Treatment Works: A treatment works that is not publicly owned and whose owner is not the operator of the works. The term includes any device and system used to handle and/or treat liquid wastes.

Comment - Commenter recommended definition: A treatment works that is not publicly owned and whose owner is not the owner or operator of the facility sending wastewater to the treatment works. The term includes any device and system used to handle and/or treat liquid wastes.

Page 8 Definition - Protected Sanctuaries: Areas of an aquatic ecosystem established by Federal, State, or Local entities to protect and conserve natural resources and habitat (e.g. National Marine Sanctuaries, areas of special biological significance, game, game and wildlife refuges).

Comment - Commenter recommended definition- "Aquatic areas formally established by federal or state governments to protect and conserve aquatic natural resources and habitat."

Page 9 Definition - Reefs: An aggregation of rocks, sand, or coral at or near the surface of water.

Comment - The term "reef" should not include sand reefs because of their transitory nature. Commenter re

**RESPONSE**

Based upon these and other comments, EPA modified a number of definitions in the Glossary to the Detailed Questionnaire to reflect the input provided by Commenters. The definitions modified as a result of the comments are as follows:

7Q10 Value; Annual Cooling Water Intake Flow Rate; Bar Rack/Trash Rack; Confluence of Tributaries; Cooling Lake; Cooling Pond; Cooling Tower; Cooling Water System; Critical Habitat; Discharge; Fish Diversion or Avoidance Systems; Fish Handling and/or Return System; Groundwater; Helper Canals/Channels, Lakes, or Ponds; Impingement; Lake; Mean High Water Level; Mean Low Water Level; Mean Water Level; Migratory Routes; Protected Sanctuaries; Reefs; Shoreline Intake Structure; Submerged Intake Structure Flush with the Shoreline; Submerged Offshore Intake Structure; Submerged Vegetation; Surface Intake Structure Flush with the Shoreline; and Waters of the United States.

EPA also chose not to modify a small number of definitions as suggested by Commenters. The reasons for this include that EPA believes the unmodified definitions convey what the Agency wants from the questionnaire or are a more clear expression of the subject matter. In other cases the definitions that EPA chose to keep are ones drawn from the Code of Federal Regulations. The definitions EPA chose not to modify are as follows:

Cooling Water; Environmental Impact; Privately Owned Treatment Works; Tidal Rivers; and Wetlands.

Finally, based upon changes made to the questionnaire, EPA chose to delete a small number of definitions. The deleted definitions are as follows:

Approach Velocity; Average Annual Operation and Maintenance Costs; Far-field; and Near-field.

EPA has considered the definitions provided by the commenter and will incorporate them as appropriate.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.UWAG.158            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** ILLUSTRATIVE ESTIMATE OF THE TOTAL BURDEN OF THE QUESTIONNAIRE ON MAJOR ELECTRIC UTILITIES

This attachment develops an illustrative estimate of the total burden that might be involved in completing the Questionnaire. It begins with discussions of the potential time involved in answering some of the questions for a specific large, complex power plant. These discussions provide an indication of the complexity of the information that is sought. We then provide estimates of the total time it would take to fill out the Questionnaire for facilities at different levels of complexity. These values are then used, along with other assumptions about the numbers of facilities in different types of facilities and the average hourly cost, to develop an illustrative estimate of the total burden of the Questionnaire.

A. Examples Of the Burden Associated With Specific Questions

It is essential in developing burden estimates to appreciate the nature and extent of the effort involved to collect the data requested in the Questionnaire. The following examples indicate the effort that might be involved in collecting data for some of the questions. The estimates were prepared with a specific large and complex facility in mind. In most of the examples, the response to a single question could entail a burden that exceeds EPA's estimate of the average burden for responding to the entire Questionnaire.

**RESPONSE** EPA is unable to respond specifically to this comment. The comment is too general.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.UWAG.159            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 1. Intake Flow Rates (Question 34 Of Document III, Part 1, Section D)

This question requires data on actual intake flow rates by cooling water intake structure (CWIS) by month for calendar years 1993, 1994, 1995, 1996 and 1997. As defined in the Questionnaire (Document III, p. 18), CWIS includes the total intake structure up to the point of the first intake pump or series of pumps, and therefore appears to include both the larger circulating water pump withdrawals and the smaller service water pump withdrawals, where they are separate. Specifically, EPA requests for each month the number of operating days, and actual or calculated flows in the following format: daily maximum, daily minimum, and monthly average.

While some facilities already may compile such data for NPDES or other purposes, others do not. Those facilities which do not have the necessary data compiled will have to send experienced individuals (e.g., engineers and computer programmers) to each utility's plant site and determine where the flow data reside and in what format. At many plants, this data will be maintained in logbooks and therefore the most expeditious route to retrieve and verify the data will be to develop a computer database. At some plants, a computer database may already exist for the circulating water flow data, and therefore a range of hourly values are presented. We estimate that site visits, database development and initial testing can be completed in 40-80 hours.

Where no database exists, data entry personnel will need to visit each site and enter up to 43,800 pieces of flow information for each pump into the database (24h/day x 365d/yr x 5yr = 43,800). At a large plant, one might expect to find between four and six circulating pumps, and a corresponding number of service water pumps. Assuming four of each type of pump, the company would have to enter 175,200 to 350,400 pieces of information into the database. Assuming 30 pieces of information can be entered into the computer per minute, this would result in 5,840 to 11,680 minutes, or 96 to 195 hours of data entry. Data verification and training will take an additional 24 to 45 hours to accomplish.

Therefore, where no computerized database or other pre-existing reports exist, for one CWIS, we estimate it could take from 160 to 320 hours to compile the data needed to provide a good faith response to this question. If there were two CWIS at the plant, the estimate might be doubled, and would range from 320 to 640 hours for such a large and complex facility.

**RESPONSE** EPA reduced the flow data to three years. Based on this comment and pretest responses, EPA estimates that average burden to complete this question is about 30 to 50 hours. EPA recognizes that this is the most burdensome question for most respondents. Flow data is critical

to the section 316(b) regulation development. The rate at which cooling water is withdrawn influences the degree to which adverse impacts may occur from a specific cooling water intake structure. This question requests information on actual monthly cooling water intake flows (daily maximum, daily minimum, and monthly average) on the basis of each facility's total number of operating days for each intake structure for the years 1996 through 1998. EPA is requesting data as far back as three years to account for facilities that use cooling water on an intermittent (e.g., seasonal) basis as well as on a continuous basis. Three years was determined to be a reasonable period of time over which to evaluate cooling water use and the potential for use in the future. In addition, facilities are required to retain their data for a three year period under the NPDES program. A distribution of averages can then be evaluated for intermittent and continuous users. Such data might support the development of particular regulatory options based on intake flow rates or operational variables.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.UWAG.160            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 2. Costs For Intake Technologies (Question 38 Of Document III, Part 1, Section D)

This question requires, for each intake structure technology installed during the past ten years (1988 to 1998), the total capital costs [1] and the calendar year(s) in which they were incurred. In addition, EPA requires the average annual operation and maintenance (O&M) costs [2] for each technology for calendar years 1993 to 1997.

While some facilities may maintain centralized records on intake structure costs, most do not. Thus, the question will require that experienced personnel (e.g., engineers and economists) go to each utility's corporate headquarters and individual plant sites to determine where the cost data reside and in what format. These data may be maintained, in-part, in various locations within the corporation, for example, accounting, finance, environmental, law, and plant-specific files (written, computer, and log books). We estimate that the initial visits to relevant locations can be completed by two individuals in 1-2 days per location. Assuming that the individuals must check five locations within corporate headquarters and another five at the plant site, this initial step could take between 160-320 hours. The initial visit hour estimate includes the time to locate knowledgeable individuals and interview them; the time to review files and log to obtain required Questionnaire information; and the time to record this information. We estimate that an additional 80-160 hours might be needed to clarify, revise, and verify the information obtained at the initial site visits. Therefore, we estimate that it could take from 240 to 480 hours to provide a good faith response to this question.

If no CWIS technologies were installed within the last ten years to any of the utility's plants, then of course the time to verify this conclusion and complete the Questionnaire would be much reduced. In contrast, for those utilities that have a number of plants with multiple technology installations over the last ten years, the effort to obtain and verify the information would be much greater than the man-hour estimates described above.

---

[ 1] EPA defines "total capital costs" as the total sum of all construction costs; design, engineering, and architectural costs; equipment costs; construction material costs; instrumentation costs; installation labor costs; and allowances for funds used during construction (AFUDC). Glossary at 10.

[2] EPA defines "O&M" costs to include costs for labor (operation and maintenance); electric power; fuels; chemical repair maintenance materials and supplies; and costs for insurance, taxes, and overhead burden. Transportation costs may also be included. See definition of "average annual operation and maintenance costs," Glossary at 1.

**RESPONSE** EPA deleted all the questions requesting historical technology cost data, which significantly reduces the estimated burden to respond to the detailed questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.UWAG.161            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 3. Water Balance Diagram (Question 12 of Document III, Part 1, Section A)

Question 12 of Document III, Part 1, Section A requires the preparation of a water flow diagram based on 1997 flow data. EPA requests that the diagram include three basic components: 1) intake-related data, 2) the distribution of the intake flow from each intake to process, contact and non-contact cooling or other operations to include re-circulating and recycle loops, and 3) discharge-related data. Unless the plant already has prepared such a diagram, or already has generated the data necessary to prepare one, the question as written may require that experienced individuals go to each plant site and determine where the 1997 plant flow data reside and in what format. At most plants, this data will be maintained in either logbooks or a computer database. At some plants, a computer database may already exist for the intake or discharge water flow data, and therefore a range of hourly values are presented. Also, a very limited number of facilities have computerized the intake service water flow data.

We estimate that the plant site visit to understand the water withdrawal, use, and discharge relationships and initial data review by two individuals can be completed in 16-32 hours. We have assumed that the personnel will obtain and review up to 8,760 pieces of flow information for each intake pump (24h/day x 365d/yr 8,760) and a similar number of data points for each discharge. At a typical plant there are from two to four circulating pumps, two to four service water pumps, and one discharge location, which would result in from 43,800 to 78,840 pieces of information to be reviewed, tabulated, and used in preparing a water balance diagram. We have assumed that the data review, tabulation, and summarization for use in preparing the diagram can be performed in from 36 to 72 hours. Data verification and training are assumed to take an additional 6 to 12 hours to accomplish. Therefore, for one CWIS at a large, complex plant, we estimate that it could take from 58 to 116 hours to provide a "good faith" response to this question at the level of detail EPA appears to be requiring.

**RESPONSE** EPA considers the Commenter's estimate of 58 to 116 hours to be rather excessive. EPA anticipates that most plants have a water flow diagram. Water flow diagrams are required when applying for a National Pollutant Discharge Elimination System (NPDES) (or State equivalent) permit (Form 2C for industrial discharges). Therefore, most facilities will only have to modify an existing diagram, which should require little burden on the respondent. EPA is providing an example of a water flow diagram in the questionnaire, which should be helpful to respondents. EPA is asking for total intake flow, total discharge flow, and the distribution of that flow from the intake through the plant to the discharge point. The respondents have to collect intake flow data for another survey question any way so there is minimal burden associated with that piece of data (The Commenter has double counted the burden to collect

intake flow data). Plus, most NPDES permits require the plant to record discharge flow data, so that data should be readily available.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/BURDEN          |
| <b>COMMENT ID</b>          | 316.UWAG.162            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Comment: B. Estimates of the Burden for Different Types of Facilities

The same process can be repeated for each individual question included in the Questionnaire. Summing the burden estimates for all questions results in a rough estimate of the total burden of 2,375 hours for a very large and complex facility. (As noted, this estimate was prepared with a specific large and complex facility in mind.) A similar process was used to develop a rough burden estimate for a specific very small and simple facility of 179 hours, less than 10 percent of the estimate for the large facility. These two figures underscore the variability in the likely burden of the Questionnaire.

Thus, Commenter believes the burden of the Questionnaire on each respondent could range from 179 hours to 2,375 hours depending on the size and complexity of facilities addressed in the response, as well as other factors outlined above. This estimate ranges up to 15 times greater than the burden of 160 hours suggested by EPA.

Respondents might use a wide range of personnel (from senior executives to data-entry clerks) and other resources (e.g., consultants and attorney-,) to complete the Questionnaire. Commenter, believes it is appropriate to assume an average hourly rate of \$70 per hour, which is approximately the hourly cost of an intermediate engineer. Multiplying this rate by the total burden hours produces total financial burden estimates of \$166,250 for a large facility and \$12,530 for a very small facility.

C. Illustrative Estimate Of Total Burden To Electric Utilities

It is possible to use these burden estimates to develop illustrative estimates of the total potential burden of the Questionnaire to electric utilities. The illustrative calculations in this attachment are based upon the following simplifying assumptions:

Facilities can be characterized into four broad groups: (1) large; (2) medium; (3) small; and (4) very small. Electric utilities are equally distributed among the four categories. The average burden hours of medium and small facilities are between the values developed for very small (179 hours) and large (2,375 hours) facilities. Specifically, we assume medium facilities would require 1,600 hours to complete and transmit the Questionnaire and small facilities would require 400 hours.

The average hourly cost is the same for all facilities.

The following table shows the calculations based upon these assumptions. Commenter's illustrative estimate of the total financial burden of the Questionnaire is over \$72 million. This estimate for electric utilities alone is almost 4 times greater than the financial burden of about

\$19 million for all potential respondents generated using EPA's suggested 160-hour average (\$70.00 x 160 hours x 1,705 respondents = \$19,096,000.00).

| Respondents        |     | Burden Hours   | Burden Hours | Costs        |
|--------------------|-----|----------------|--------------|--------------|
| Electric Utilities |     | Per Respondent |              |              |
| Large              | 226 | 2,375          | 536,750      | \$37,572,500 |
| Medium             | 226 | 1,600          | 361,600      | \$25,312,000 |
| Small              | 226 | 400            | 90,400       | \$6,328,000  |
| Very Small         | 226 | 179            | 40,454       | \$2,831,780  |
| Total              | 904 |                | 1,029,204    | \$72,044,280 |

This estimate is based upon many assumptions and should be viewed as illustrative. Nevertheless, the estimate serves two useful purposes. First, it suggests that the likely overall burden of the Questionnaire may be far larger than EPA's current estimate. Second, it provides an indication of the type of considerations we believe EPA should take into account in developing defensible estimates of the total burden of the Questionnaire.

#### RESPONSE

EPA considers these burden estimates to be unreasonably high. The Commenter noted in another comment that EPA pretested three medium size facilities. These facilities actually completed the questionnaire and provided EPA with their associated burden hours. The highest burden reported was 430 hours (the other two were 173 hours and 187 hours). 430 hours is a lot less than the 1,600 hours that the Commenter estimated. Note that 430 hours is the highest, not the average, burden. The large difference between the actual burden data and the Commenter's estimated burden data for a medium facility, leads EPA to believe that the Commenter's estimated burden for large complex facilities is also unrealistically high. The average burden hours reported on the pretest was 211 hours. Plus, based on available data bases, EPA has identified that there relatively a lot more small to medium size facilities than large facilities. The relatively small number of large, complex facilities keeps the estimated average burden on the lower end.

EPA significantly revised the questionnaire modifying or eliminating the questions identified as the most burdensome. EPA estimates the burden of the revised questionnaire to be 156 hours. See response to 316.AEP.007.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI             |
| <b>COMMENT ID</b>          | 316.UWAG.021            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 2. The Questionnaire Seeks Several Categories Of Irrelevant Data

Several categories of data requested in the Questionnaire appear to be unrelated to EPA's stated objective - to "better understand the design and operation of cooling water intake structures ... To support the development of a regulation pursuant to § 316(b) of the Clean Water Act." Questionnaire, Document III, p. 1. In particular, Commenter questions the relevance of Section B (Cooling Water Discharge Outfalls) of Document III and Section D (Utility Electricity Generation Information) of Document II of the Questionnaire. Section 316(b) clearly limits EPA's regulatory authority to cooling water intake structures; EPA has no authority to regulate the entire cooling water system. EPA should clarify how the information requested in these sections relates to determinations under § 316(b).

**RESPONSE** EPA has the authority under 308 of the CWA to collect data that will help EPA develop the Section 316(b) regulations. The discharge is interrelated to the intake. Under Section 316, section 316(a) - thermal discharges, and 316(b) - cooling water intake structures are clearly linked.

In general, EPA has a practical utility for data on the entire facility. This data is needed to fully understand how the cooling water intake structure operates within the whole operation of the facility. See justifications in the information collection request.

In response to this and other comments, Section D of Document II was removed from the questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI             |
| <b>COMMENT ID</b>          | 316.UWAG.033            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Additionally, Commenter remains extremely concerned by the very confidential or highly sensitive financial/economic data sought by the Questionnaire. As we explain below, EPA, if it nonetheless decides to collect this information, would need to exercise extraordinary care in protecting it from disclosure. On the other hand, if EPA moves toward the site-specific option, it might conclude that the majority of these data are unnecessary, and thus ease its burden of safeguarding data that could disrupt the utility market. Indeed, from Commenter's viewpoint, the inherent risk in merely collecting the extremely confidential information sought by EPA weighs in favor of a site-specific approach to § 316(b) implementation.

1. The Uncertainty Of Deregulation Increases The Risk Of Harm To Emerging Competitive Markets

EPA proposes to gather the very information that participants in deregulated markets find most valuable: information that dissects the financial strengths and weaknesses of their competitors, and defines the revenue-generating potential of individual assets of competitors. For example, EPA requests the cost per kilowatt hour of installed capacity (Document III, p.4, Question 4(d)) and the average cost of fuel per unit of fuel burned (Document III, p. 9, Question 11 (a)). The Agency also would gather information about long-term purchased power contracts. This information could be used to undermine stable relationships among industry members.

Other agencies are beginning to reconsider whether their routine collection of electric utility data makes sense in the new era of deregulation. For example, the Energy Information Administration ("EIA") recently announced that it is reviewing the confidentiality status of the electric power data it collects. As stated in its announcement: "EIA is soliciting comments to determine what data should be treated as confidential trade secrets or proprietary information whose release would cause substantial competitive harm to the survey respondents," 63 Fed. Reg. 1,960, 1,961 (Jan. 14, 1998). If EIA is thoughtfully reconsidering its data collection process in light of deregulation, EPA would be ill-advised to proceed with gathering data that the industry categorizes as highly confidential, absent greater justification than it has provided to date.

2. CBI Designation Is An Inadequate Safeguard

Thus, EPA should take into account the need for site-specificity in BTA determinations and the extreme sensitivity of electric utility financial/economic data during the transition to deregulation. If, considering these factors, EPA nonetheless believes it can fully justify collection of financial/economic data that the industry designates as highly sensitive, it must take every precaution to preserve its confidentiality.

EPA most likely believes it can safeguard this information through its normal "confidential business information" ("CBI") procedures, but industry doubts remain. Commenter knows of three EPA contractors currently employed by EPA on the § 316(b) rulemaking. Presumably, each of these contractors will have access to the database that will be established for the responses to the Questionnaire. In addition, many EPA staff will also have access to the database. Despite the best intentions of all parties, inadvertent disclosure of CBI information sometimes occurs, and the probability of inadvertent disclosure increases with the number of individuals who are privy to the information.

Even if EPA were to restrict the number of individuals who could access the CBI-designated material, Commenter believes the accumulation of such valuable information in a single database is very risky, and it questions whether EPA has the facilities and equipment, including database protection systems, it would need to provide adequate security for the information. The misuse or inadvertent disclosure of even one company's responses could quite literally affect the course of deregulation for an entire region. Commenter urges EPA to reexamine its "need" for the financial information sought, and weigh that need against the irreparable harm that could result from disclosure.

**RESPONSE**

The commenter raises two issues:

1. The Uncertainty Of Deregulation Increases The Risk Of Harm To Emerging Competitive Markets
2. CBI Designation Is An Inadequate Safeguard

EPA's response:

1. In order to conduct meaningful economic analyses of 316(b) regulations, EPA needs to obtain information that will allow EPA to estimate the relative competitive position of the different entities potentially affected by the regulation. EPA therefore requests certain financial and economic data that will be used in the assessment of economic viability in the absence of 316(b) regulation as well as in the post-compliance case. Each question serves a specific purpose in the economic analysis, as explained in more detail in the justifications to the 316(b) questionnaire found in Attachment 8.

The commenter highlights EPA's request of the following three items as particularly sensitive: 1) the cost per kilowatt hour of installed capacity; 2) the average cost of fuel per unit of fuel burned; and 3) information about long-term purchased power contracts. In response to this and other comments, EPA removed its request for item 3). EPA also no longer requests item 1) as it is publicly available. However, EPA retains its request for item 2). The cost of fuel is the most significant cost of generating electricity. As such, EPA believes that this information is essential in conducting a meaningful analysis of the financial performance of plants and generating units.

EPA is aware of EIA's current review of the confidentiality status of the publicly available electric power data it collects. According to EIA's most recent proposal on this subject, EIA

has determined that the vast majority of data should not be made confidential but remain publicly available. In light of this determination, EPA feels confident that proceeding with the collection of the data requested in the 316(b) questionnaire is not contrary to EIA's actions.

2. EPA is aware of concerns expressed by Industry representatives about the danger of inadvertent disclosure of confidential business information and agrees that the protection of CBI is of paramount importance in the course of 316(b) rulemaking. In its past regulatory efforts, EPA has acquired substantial experience in the handling of confidential and highly sensitive information. CBI can be marked as such in the 316(b) questionnaires, and CBI provisions are in place at EPA as well as EPA's contractors to ensure the safety of this information. These provisions include allowing access to CBI only to persons with an absolute "need-to-know" and storing CBI on removable ZIP disks that will be inaccessible through the mainframe and will be stored in an EPA approved, double-locked space. In reports, these data will only be presented in an aggregated form for large geographical regions or the industry as a whole.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI             |
| <b>COMMENT ID</b>          | 316.UWAG.034            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 3. Additional CBI Protections Are Unlikely To Remedy The Risks Of Collecting Certain Financial Information

EPA may intend to prevent CBI disclosure problems by coding responses to certain financial questions. Through this coding, EPA would hope that persons reviewing the database could not directly associate confidential answers with individual facilities. Commenter seriously questions whether any coded system could adequately disguise individual facilities, for a number of reasons. If EPA needs the data, it must be planning to analyze it and present it, in some form, for inclusion in the rulemaking record. Even if the CBI data are coded, for it to have any relevance to the rule, it may need to be presented in the context of other plant-specific factors. An enormous body of information about individual generating facilities is available in the public records of state public utility commissions and the Federal Energy Regulatory Commission. With easy reference to this public information, persons knowledgeable about the industry could use common data such as waterbody characteristics, megawattage, or capacity factors to identify specific plants or units or, at the least, to identify a small subset of plants or units. Therefore, Commenter seriously questions whether the collection of confidential data to be codified and used in a collective analysis is possible, considering EPA's absolute duty to safeguard confidential information and trade secrets. If the analysis cannot be made a part of the record due to concerns about identification of the respondent facilities, then the supporting information must not be collected, because EPA's obligation to protect the information supersedes all other considerations.

**RESPONSE** EPA agrees that one of its important obligations in the 316(b) rulemaking is the protection of confidential business information. In its past regulatory efforts, EPA has acquired substantial experience in the handling of confidential and highly sensitive information. While coding the responses to financial and economic question is one strategy employed by EPA to prevent disclosure of CBI, EPA often elects not to present highly sensitive data on an entity specific basis, even in a coded form, if there is a risk of disclosure. In fact, regulated industries have complained in the past that EPA has not disclosed enough information to allow a reconstruction of the economic analysis results. Even if disaggregated data cannot be presented because of disclosure concerns, they will still be used within EPA's models and will serve an important function in the economic analyses. In addition, these data can usually be presented in an aggregated form when presenting analytic results for large geographical regions or the industry as a whole.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI             |
| <b>COMMENT ID</b>          | 316.UWAG.046            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document II Page 1 Question - General Information and Instructions

The instructions for designating responses as confidential business information are not clear. Does the respondent have to submit a separate cover sheet or type in a legend indicating whether the information is "trade secret," "proprietary," or "company confidential," or does the respondent simply check the CBI designations in the Questionnaire?

Additionally, the instructions state that a check box for designating information as confidential business information appears at the bottom of each page. In fact, very few CBI designations appear in the entire Questionnaire and they do not consistently appear at the bottom of the page. Commenter strongly recommends that EPA revise the Questionnaire to provide a consistent means of designating responses as CBI either by the page or by the individual question.

**RESPONSE** EPA agrees that one of its important obligations in the 316(b) rulemaking is the protection of confidential business information. In its past regulatory efforts, EPA has acquired substantial experience in the handling of confidential and highly sensitive information. While coding the responses to financial and economic question is one strategy employed by EPA to prevent disclosure of CBI, EPA often elects not to present highly sensitive data on an entity specific basis, even in a coded form, if there is a risk of disclosure. In fact, regulated industries have complained in the past that EPA has not disclosed enough information to allow a reconstruction of the economic analysis results. Even if disaggregated data cannot be presented because of disclosure concerns, they will still be used within EPA's models and will serve an important function in the economic analyses. In addition, these data can usually be presented in an aggregated form when presenting analytic results for large geographical regions or the industry as a whole.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CBI             |
| <b>COMMENT ID</b>          | 316.UWAG.150            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 99 Question 63(k)  
EPA asks respondents to identify migratory routes located within a one-mile radius of the planned cooling water intake structure. Steam electric facilities do not typically record this type of information. Generally, since the 1970s, the siting and design of new power plants has considered the potential impact of the cooling water intake on fish migratory routes and any predicted impact was minimized.

The identification of migratory routes within one mile of an intake or discharge for aquatic species not susceptible to cooling water intake effects is irrelevant.

Page 99 Question 63(l)  
EPA requires respondents to identify commercial and/or recreational fishing areas within a one mile radius of their planned structures.

This information should be available from public sources, such as state fish and game management agencies. Therefore, EPA should not burden respondents with this inquiry.

Additionally, respondents generally do not survey or monitor the use of the waterbody by fishermen. They cannot be held responsible for knowing whether individual fishermen use an area close to their intake structure. Commenter requests that EPA delete this question.

**RESPONSE** This question has been deleted.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CERT            |
| <b>COMMENT ID</b>          | 316.UWAG.038            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** C. Certification Of Questionnaires

As explained in our comments on the previous draft Questionnaire, Commenter requests that EPA consider redrafting the certification to require a "good faith effort" or "reasonable inquiry" standard. Respondents to the Questionnaire will be required to certify that the information is "accurate and complete," upon penalty of civil or criminal charges. This very stringent certification standard is inappropriate given the age, complexity, and subjectivity of much of the data requested by the Questionnaire. In these circumstances, the companies will be accessing very old corporate records (to the extent that they still exist), and no one presently employed by the company will be available to verify the information. Additionally, companies may not be able to locate all relevant and existing corporate records. Finally, the Questionnaire strongly encourages companies to supply estimated data when actual data are not available. Estimated data, of course, may be much less reliable than actual data, and are capable of being misinterpreted.

Alternatively, if EPA maintains the proposed certification statement, the Agency should provide as much flexibility in the Questionnaire format as possible, so that answers may be appropriately caveated.

**RESPONSE** EPA has modified the certification statement to address this concern. Specifically, EPA added the following language: "In those cases where we did not possess the requested information, we have provided best engineering estimates or judgments."

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CERT            |
| <b>COMMENT ID</b>          | 316.UWAG.049            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 4 Question 3 EPA does not specify whether the contact person for this part of the survey must be the person who certifies to the responses.

**RESPONSE** In response to this and other comments, the instructions to Question 3 have been changed. The instructions now specify that the contact person should be the person most knowledgeable about this part of the survey and does not have to be the person who certifies the responses.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/CERT            |
| <b>COMMENT ID</b>          | 316.UWAG.058            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document III Page 4 General Information and Instructions

EPA states: "A responsible corporate official or his or her duly authorized representative must verify the accuracy of the plant's responses to the entire questionnaire package by reading and signing the Certification Statement." This statement is misleading. The certification statement focuses on the provision of a system geared to produce accurate results, and the certificant's supervision of that system. It does not require that the certificant attest to the absolute accuracy of the information provided.

**RESPONSE** EPA did not change the wording in the instructions. However, EPA changed the wording in the certification statement to include a "good faith effort" clause.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1           |
| <b>COMMENT ID</b>          | 316.UWAG.037            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Moreover, some of the requirements either will be very difficult for utilities to identify and verify, or are available from other sources. For example, official critical habitat designations for threatened and endangered species are made by the Department of the Interior. The regulated community should not be called upon to reproduce the official designations. Also, the Endangered Species Act does not define what is meant by "rare species." In the absence of a federal or state determination that a species is "rare," the regulated community cannot be expected to render its own determination. In addition, identification of critical habitat for aquatic species not susceptible to cooling water intake effects is irrelevant for § 316(b) purposes. The location of submerged vegetation will not, in most cases, be available from federal or state sources, and thus will be very difficult to identify and verify. Identification of all "commercial/recreational fishing areas" could be onerous, since it could include almost any area within a waterbody accessible to the public.

Thus, Commenter believes the question may well be unduly burdensome, unless EPA's inclusion of the "data not available" response means that facilities are not required to answer the questions posed if the data is not readily available.

**RESPONSE** EPA agrees that the definition of the term "rare species" may create confusion and has deleted it where appropriate in the questionnaire. However, the term "threatened and endangered" will remain as species descriptions.

EPA does not require the respondents to collect or generate any additional data to respond to the questionnaire. Therefore, if the information is not in the respondent's possession or have immediate access to it, the respondent may answer "data not available."

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q1        |
| <b>COMMENT ID</b>          | 316.UWAG.061            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A Page 7 Question 1(b)

In cases where the pre-printed label is not correct, the spaces for providing facility identification information does not include a space for facility phone number.

**RESPONSE** Space has been added to provide the facility telephone number.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q1        |
| <b>COMMENT ID</b>          | 316.UWAG.116            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section E Page 63 Instructions to Question 41

The definitions given on this page for "impingement" and "entrainment" differ from those in the questionnaire's glossary. EPA should make the definitions consistent.

Also, EPA should reprint in these instructions the definitions of "discrete biological study of entrainment" and "discrete biological study of impingement" included in the glossary, rather than inserting a separate definition of "discrete study."

**RESPONSE** EPA has included in the glossary definitions of discrete biological study of impingement and entrainment. A separate definition of "discrete study" has been eliminated to avoid confusion.

EPA has modified the impingement definition to include "holding of aquatic organisms against screening devices" and all definitions were made consistent throughout the survey.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q10       |
| <b>COMMENT ID</b>          | 316.UWAG.067            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A: General Plant Information Page 11 Question 10

This question asks whether the plant has obtained 100 percent of its cooling water from one or more of the following sources: a local water supplier, the plant's own groundwater supply, or the water supply of another plant. If the plant in question obtains 100% of its water from these sources, it is exempted from completing the rest of the questionnaire. EPA should redraft this question to exempt facilities making de minimus use of Waters of the United States (e.g. by changing the percentage to 95%).

**RESPONSE** For the purposes of this questionnaire, facilities using any amount of cooling water from a surface water source remain in scope. EPA has not made any a priori decisions regarding whether to include a de minimus cut-off in its proposed regulations.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q11       |
| <b>COMMENT ID</b>          | 316.UWAG.068            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A. Page 12 Question 11

EPA requests respondents to identify the percentage of water provided from various sources annually since 1993. Commenter submits that there is no practical utility in gathering data prior to 1997. Facilities do not normally change their water supply sources. Furthermore, for the purpose of any future § 316(b) regulation, EPA should only be concerned about the current water usage of each facility. Previous water usage is irrelevant to the regulatory process. Also, the phrase "plant's own surface water supply" needs to be defined. Apparently, the phrase includes plants that are using water from public lakes, rivers, and streams, but the term is confusing. It implies that the plant owns the actual water source.

**RESPONSE** The purpose of this question is to identify the proportion of the plant's total cooling water flow obtained from each provider and/or source by calendar year. EPA understands that facilities come online at different times (e.g., summer only) or may not operate every year (e.g., mild summers) and facilities may switch sources throughout the year. EPA, therefore, is requesting data for multiple years to allow for these situations. EPA will reduce the number of years to report to three to reduce burden. EPA will also add a definition of "plants own water supply."

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q12       |
| <b>COMMENT ID</b>          | 316.UWAG.069            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A. Page 13 Question 12

EPA should supply an example water balance diagram demonstrating the level of detail it seeks. Commenter's ability to comment on this question's utility and relevance has been hampered by the absence of a sample diagram in the draft Questionnaire. Commenter reserves the right to comment on the diagram when it is made available by EPA. Revision of a plant's water flow diagram using 1997 flow information will, in most cases, create an additional burden to complete of between 14 to 160 hours depending on the size and complexity of the plant. We suggest that EPA consider a flexible approach that allows the plant to provide the most recently completed diagram that is representative of a plant's flow with a date showing when the diagram was completed. See Attachment A.

**RESPONSE** EPA is providing an example of the water balance diagram in the questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q12       |
| <b>COMMENT ID</b>          | 316.UWAG.070            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A. Page 13 Question 12(a)(2)

The instructions require the respondent to indicate on the water balance diagram the flow of new water into the plant, stated as an MGD value.

The instructions should specify whether EPA is seeking an annual minimum, maximum or average MGD value. If EPA seeks an average value, it should provide instructions for deriving the average.

Page 13-14 Question 12(b), 12(c)

The instructions for the water balance diagram state: "Please note the type of activity (e.g., process, contact cooling, noncontact cooling, or other operation) and the flow to each (in MGD)."

This instruction is likely to be problematic for respondents, because in the electric utility industry "process" water normally means all types of water other than cooling water and service water. It would be helpful for EPA to provide an example relevant to electric utilities.

**RESPONSE** EPA clarified Question 12(a)(2) that the requested information is an annual average of flow. EPA also provided calculation instructions for further clarification.

EPA clarified what is meant by process water for electric utilities.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q13       |
| <b>COMMENT ID</b>          | 316.UWAG.071            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section B: Plant Profile Data Page 16-17 Question 13 and 14

EPA's regulatory authority under 316(b) is clearly limited to intake structures, whereas the information requested in these two questions is only related to cooling water systems.

Page 16 Question 13

If EPA nonetheless decides to retain this question it should change the word "regress" to "egress" in the definition of "cooling water system."

Page 16 Question 13(b)

At many multi-unit plants, the units were constructed at different times. Consequently, this section of the Questionnaire does not work well for such facilities. Specifically, a plant can have numerous units that began and/or terminated operations on different dates. The question should be restructured to allow for a true and factual presentation of these conditions. It is important that this distinction be made because numerous subsequent questions rely on this definition.

**RESPONSE** EPA has practical utility for requesting this data. The statute is not limited to condenser cooling water and, therefore, not limiting inquiries to only the use of cooling water.

EPA changed the word "regress" to "egress" in the definition of cooling water system and in the instructions for Question 13.

Since EPA is requesting data for each CWIS at a plant, EPA continues to request the date the system began operation.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q14       |
| <b>COMMENT ID</b>          | 316.UWAG.072            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section B: Plant Profile Data Page 17 Question 14  
The categories of cooling water systems listed do not track the categories provided for use on EIA Form 767, although EPA references the EIA Form for purposes of this question. The Questionnaire's categories are:

Once-Through CWSs 1.  
Once-Through only 2.  
Once-Through with Helper Canals/Channels, Lakes or Ponds 3.  
Once-Through with Helper Towers.

Recirculating CWSS 1.  
Recirculating Only 2.  
Recirculating with Canals/Channels, Lakes or Ponds 3.  
Recirculating with Towers 4.

Other Form 767 provides the following categories:

Once through with cooling pond(s) or canal(s)  
Once through, fresh water  
Once through, saline water  
Recirculating with cooling pond(s) or canal(s)  
Recirculating with forced draft cooling tower(s)  
Recirculating with induced draft cooling tower(s)  
Recirculating with natural draft cooling tower(s)  
Other.

The distinctions in the two sets of categories, combined with EPA's cross-reference to Form 767, may cause confusion. For example, Form 767 does not provide the category "once through with helper towers."

In both columns 2 and 3 of Question 14, EPA lists the following category: "once-through with helper canals/channels, lakes, or ponds." The terminology of this category is confusing. What does EPA mean by a helper canal/channel? Commenter suggests deleting the word "helper."

**RESPONSE** EPA agrees with the commenter that the references to EIA Form 767 can be confusing and direct the respondent to answer the questions incorrectly, therefore EPA will delete the EIA-767 references. However, EPA will note in the survey instructions that some questions request similar data to that reported in the EIA-767.

Regarding Question 14, EPA has reworded the question and glossary to “once-through with non- recirculating.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q16       |
| <b>COMMENT ID</b>          | 316.UWAG.073            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section B: Plant Profile Data Page 19 Question 16 (c), (d)

Commenter questions the relevancy and utility of longitude/latitude information in the context of the rulemaking. Other portions of the Questionnaire adequately characterize the ecosystem features in the area of the facility. If EPA nonetheless retains the questions, it should explicitly allow estimation of the latitude/longitude of the central point of the intake structure through use of U.S.G.S. maps. Furthermore, a better measuring point may be the central point of the intake bays, and not the central point of the intake structure, since the intake structure could have an intake canal between the intake screens and the pump bays.

For facilities producing greater than 100 MW, EIA Form 767 requires submission of the longitude and latitude of cooling water outlets in degrees and minutes. EPA should use this source, as there is no justification for requiring respondents to pinpoint the intake location by inclusion of longitude/latitude seconds.

Page 19 Question 16(f)

Is the EPA requesting total "representative" design flow or total maximum" design flow? The question needs to be clarified. The question as written includes service water flows, which can vary appreciably by unit (e.g., 5,000 to 20,000 gpm) within a day. Furthermore, at most plants service water flows are not measured or placed in a computerized database. Obtaining, summarizing and presenting the service water flow information will place an additional burden on the utility industry. Typically, service water flows are a small percentage of the total flow for a plant (e.g., 1-2%).

Page 19 Question 16(g)

The question seeks the "percentage of total design flow apportioned to cooling water flow in calendar year 1997."

Many intake structures never operate at design flow, due to site-specific engineering considerations and other factors. For those capable of operating at design flow, they typically do not sustain that level of flow for the entire calendar year. For these reasons, Commenter questions the utility of collecting information about the percentage of design flow apportioned to cooling water.

Additionally, for some facilities, 1997 may not be a representative year, because of extended plant outages or other factors. Therefore, Commenter recommends that EPA reword the question as follows: "For calendar year 1997 (or another year previous to 1997, if 1997 is not representative of normal operations and flows) the total design flow."

What is the relevance, to the rulemaking, of knowing what percentage of the flow is used for different internal plant processes? If the question is retained, it should provide check boxes for indicating whether the percentage is actual or estimated.

Page 20 Question 16(h)

This question requires the respondent to identify "activities for which cooling water was required in calendar year 1997 and percent of total cooling water flow that went to these activities." The question includes the term "cooling water flow" in italics and bold, in the style of defined terms used throughout the questionnaire. However, the glossary does not define "cooling water flow." If EPA has inadvertently omitted the definition, Commenter requests that it be provided an opportunity to comment on the definition as soon as possible.

Commenter questions the practical utility of this inquiry. Why is it important, in considering the possible regulation of cooling water intake structures, to determine the precise uses of cooling water flow?

If EPA nonetheless retains this question, it should provide check boxes for indicating whether the reported percentages are actual or estimated.

For the "other" category, the form provides inadequate space for describing the use.

## RESPONSE

EPA has practical utility for each question and has justified the usefulness of each data point in the ICR. The longitude and latitude will be used for GIS mapping purposes. EPA will allow estimation based on USGS maps and will provide instructions for conducting appropriate measurement. As suggested by the commenter, EPA revised the questionnaire to ask for the central point of the cooling water intake bay as a measuring point.

The EIA-767 data do not contain the precision required by EPA to conduct the GIS mapping. Therefore, EPA has requested the longitude/latitude data be reported in degrees/minutes/seconds.

For Question 16(f), EPA has revised the question to ask for "design intake capacity" instead of design intake flow. This should clarify that EPA is not asking for the measured flow but rather the design capacity. If the structure withdraws water for multiple purposes the respondent should provide the design intake flow for all uses.

As suggested by the commenter, EPA has revised Question 16(g) to estimate the average percentage of the intended design capacity for cooling water flow. EPA also removed the request for data specifically 1997 and is requesting instead an average for 1996 through 1998.

EPA modified Question 16(h) to ask for estimated percent of cooling water flow and remove the italics. EPA has also added a request for three years of data to give a more accurate picture of the cooling water flow. EPA has practical utility for requesting this data. The statute is not limited to condenser cooling water and, therefore, not limiting inquiries to only the use of cooling water.



---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q17       |
| <b>COMMENT ID</b>          | 316.UWAG.074            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section B Page 21 Question 17,18

As noted in our general comments, Commenter questions the relevance of discharge outfall information in the context of the 316(b) rulemaking. Commenter recommends deleting these questions.

**RESPONSE** The discharge outfall information will able EPA to evaluate potential cumulative impacts from cooling water systems. By collecting info that provides a full picture of the water system and potential cumulative impacts, EPA can develop regulatory approaches that will be less burdensome on the regulated universe and permitting authorities.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q18       |
| <b>COMMENT ID</b>          | 316.UWAG.075            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section B Page 21 Question 18(b), (c)

This question requires respondents to provide the longitude and latitude (in degrees, minutes and seconds) for their cooling water discharge outfalls. Commenter questions the relevancy and utility of longitude/latitude information for this rulemaking. Other portions of the questionnaire adequately characterize features in the area of the facility.

For facilities producing greater than 100 MW, EIA Form 767 requires submission of the longitude and latitude of cooling water outlets in degrees and minutes. EPA should use this source, as there is no justification for requiring respondents to pinpoint the discharge location by inclusion of longitude/latitude seconds.

**RESPONSE** The latitude and longitude needs to be more specific than what is reported on the EIA-767 form. EPA will input these data into a GIS mapping system. This will provide EPA with a visual picture to evaluate cumulative impacts.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q19       |
| <b>COMMENT ID</b>          | 316.UWAG.076            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** SECTION C: SOURCES OF COOLING WATER AND INTAKE ARRANGEMENTS

Page 22 Question 19

As described in Commenter's comments on Part 3: Glossary to Technical and Economic Questionnaires, the term tidal river is confusing and potentially overlaps with the definition of estuary. Therefore, it should be deleted. This question should refer to "non-tidal stream or river.

Page 22 Question 19(b)(2)

The harmonic mean of a water body is not a common way of expressing flow data. Using a geometric mean or median flow value would be more appropriate.

**RESPONSE** For the purposes of this questionnaire, the term "tidal river" means the seaward most reach of a river/stream where the salinity is < 0.5 ppt at a time of annual low flow its surface elevation responds to the effects of coastal lunar tides. Where the river salinity exceeds 0.5 ppt, the respective river reach will be viewed as estuarine.

The question has been modified to request the mean low water level related to the NGVD (National Geodetic Datum) (in Feet). EPA believes that the lower the water level, decreasing the surface area of the screen intake, the greater the velocity through the screen, therefore, increasing the likelihood of impingement.

**SUBJECT MATTER CODE**     DET/PRI/D3/P1/Q21  
**COMMENT ID**             316.UWAG.077  
**COMMENT AUTHOR**        Utility Water Act Group  
**DOCUMENT TYPE**  
**DOCUMENT DATE**        04/17/1998 00:00:00.00

---

**COMMENT**     Page 24 Question 21(b)(2); 21(b)(3)

Commenter notes that EPA intends to develop, but has not yet provided, definitions for Mean Low Water Level and Mean High Water Level. See Part 3, Glossary. Without definitions for these terms, Commenter's ability to comment on these questions has been seriously hampered. Commenter reserves its right to comment on the definitions when they become available.

**RESPONSE**     Definitions for these terms have been provided in the Glossary.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q22       |
| <b>COMMENT ID</b>          | 316.UWAG.078            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 25-29 Question 22(b)(4), 23(b)(4), 24(b)(4), 25(b)(3)

EPA requests that respondents provide the "average distance of intake structure below surface water" for facilities with intake canals/channels. What does EPA mean by the "average" distance below surface water? Is this an average over a set period of time, for a set number of seasons? Respondents are not likely to have verifiable information responsive to this question readily available. Commenter recommends that EPA allow respondents to provide a range of distances in response to this question.

**RESPONSE** EPA is requesting the depth of the top of the intake structure at the mean water level.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q22       |
| <b>COMMENT ID</b>          | 316.UWAG.079            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 25 Question 22(b)(5)

Some facilities may have a skimmer/curtain or baffle wall at the mouth of the intake canal. This question would be irrelevant to those facilities.

**RESPONSE** In cases where skimmer/curtains or baffle walls at the mouth of the intake canal, the response would be zero (0). EPA will use the distance data to evaluate the likelihood of species attraction.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q23       |
| <b>COMMENT ID</b>          | 316.UWAG.080            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 26-28 Question 23, 24, 25

Some facilities will have difficulty determining which of these matrices apply. For example, at a particular facility there are two shoreline intakes, one of which is in an embayment, which are joined together by a canal. The canal feeds 12 forebays that provide water to six operating units. Should this facility complete the section on bay or cove intake structure configurations shoreline intake configurations or intake canal configurations?

**RESPONSE** Without knowing the particulars of your situation, it appears your source water would be from a lake. However, facilities should consult their NPDES permitting authority or regional USGS office for site-specific source water classification. The facility should complete the section appropriate for each intake structure.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q24       |
| <b>COMMENT ID</b>          | 316.UWAG.081            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C: Page 26, 27 Question 23(b)(2), 24(b)(2)

The terms "flush with shoreline," "recessed" and "protruding offshore" are not entirely clear. We suggest EPA define these terms. Additionally, "location of intake entrance" is not clear. EPA should clarify the term "intake entrance."

Page 27 Question 24

We suggest the following refinements to the definitions of shoreline intake structure, surface intake structure flush with the shoreline, and submerged intake structure flush with the shoreline (words in bold below are suggested additions):

- 1 . Shoreline intake structure: an intake structure whose opening is closely aligned with the shoreline.
2. Surface intake structure flush with the shoreline withdraws water from or near the surface of the water body.
3. Submerged intake structure flush with the shoreline which withdraws water from substantially below the surface of the water.

**RESPONSE** EPA has clarified or added the definitions.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q25       |
| <b>COMMENT ID</b>          | 316.UWAG.082            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 28 Question 25(a)

Commenter recommends amending the definition of "submerged offshore intake structure" as follows: "an intake structure that extends from a plant outward into a water body. The intake opening is submerged, and the water withdrawn is substantially from below the surface of the water body."

**RESPONSE** The definition has been modified.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q25       |
| <b>COMMENT ID</b>          | 316.UWAG.083            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 28 Question 25(b)(3)

This question requires the respondent to identify the average distance of intake structure below water surface. How is the respondent to arrive at an "average" value? Over what seasons should the average be figured?

**RESPONSE** EPA has modified the question to request the depth of the top and bottom of the intake structure at mean water level.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.036            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** B. The "Order Structures And Sensitive Ecological Areas "Requirements Is Too Burdensome

According to the initial draft questionnaire furnished to Commenter on October 10, 1996, EPA intended to require respondents to prepare a topographical map of the area surrounding their facility and indicate on the map all significant ecological features. Commenter applauds EPA's decision to delete the topographical map requirement, but is disappointed that EPA continues to seek piecemeal information about ecological features in the vicinity of cooling water intake structures. The Questionnaire requires respondents to provide information on "other structures and ecological sensitive areas within a one mile radius of the intake structure" (Document III, p. 29, question 26). Most steam electric facilities do not have on file current information on the occurrence of the 11 features requested within a one mile radius of the intake structures. Our members estimate that collection and evaluation of this information (for most facilities, which do not have the information readily available) alone would require approximately 30 to 150 hours. Additionally, many companies do not have the in-house expertise required to collect the information. Such companies would be compelled to either (1) hire a contractor to do the necessary research, or (2) respond that the data are not available.

**RESPONSE** EPA has greatly reduced the information requested in this question as well as reduced the proximity to 300 meters within the water shed of the intake structure. EPA believes facilities will have this information available at minimal burden since EPA greatly reduced the proximity.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.084            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 29 Question 26

Question 26 identifies, inter alia, wetlands, river confluences and migratory routes and other categories as "sensitive ecological areas." This inquiry is irrelevant to § 316(b). Instead, EPA should seek to identify intake-susceptible indicators. For example, it is irrelevant if a large adult fish, following a migratory route, transacts the cooling water intake zone, since such fish generally are not susceptible to impingement.

If EPA nonetheless retains the question, it should make all responses optional, because many companies will not have the required information. Moreover, for several of the categories (e.g., location of submerged vegetation and reefs) existing information may be dated.

Commenter supplies below specific comments on portions of Question 26.

Except as noted below, EPA should base the radius requirement on the area directly influenced by the maximum water withdrawal rate from the facility. Generally, this would equate to a radius of 1/4 mile or less and would not involve inland features. For facilities where there are physical barriers (e.g., a jetty) between the intakes and the items specified in 26(b)-26(j), the linear distance to these items should be used rather than a radius.

**RESPONSE** EPA will use this information to determine the proximity of the intake structures to sensitive ecological areas that may result in potential to cause adverse environmental impacts. However, EPA has revised the question reducing the proximity to 300 meters within the source water's watershed. It has also modified the requested information to reflect aquatic life impacts.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.085            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 29 Question 26(a), (b), (c)

EPA requires respondents to identify whether their intake structures are located within a one-mile radius of their facilities' discharge, discharges of other plants, and cooling water intake structures of other plants. Questionnaire respondents should not be responsible for determining whether and how the discharge and intake structures of other facilities influence intake water parameters.

Additionally, the upstream/downstream designations of each of these questions is not meaningful for ocean, estuary, and tidal river plants.

**RESPONSE** EPA will use this information to evaluate the proximity of cooling water intake structures to sensitive ecological areas. EPA will consider the data while developing its regulatory approaches. EPA is considering a tiered regulatory options approach based on a facility's potential to cause adverse impacts to reduce burden on the regulated communities and permitting authorities.

EPA has revised the question reducing the proximity to 300 meters within the source water's watershed. It has also modified the requested information to reflect aquatic life impacts.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.086            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 29 Question 26(d), (e), (g), (h)

EPA classifies areas of submerged vegetation, reefs (coral, oyster, or artificial), wetlands and confluence of tributaries as "sensitive ecological areas." While such areas may be areas of ecological sensitivity, it is not necessarily true that they are ecologically significant. The productivity of wetlands, for example, varies widely, and depends on a host of factors, including surrounding land use. Also, formerly productive oyster reefs may no longer be productive due to causes wholly unrelated to cooling water intakes (e.g., MSX). Areas of submerged vegetation and confluences of tributaries may or may not have ecological significance. Additionally, migratory routes would be relevant only if biota in the zone of influence of the facility were susceptible to impingement or entrainment, but not otherwise.

**RESPONSE** EPA will use this information to evaluate the proximity of cooling water intake structures to sensitive ecological areas. EPA will consider the data while developing its regulatory approaches. EPA is considering a tiered regulatory options approach based on a facility's potential to cause adverse impacts to reduce burden on the regulated communities and permitting authorities.

EPA has revised the question reducing the proximity to 300 meters within the source water's watershed. It has also modified the requested information to reflect aquatic life impacts.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.087            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 29 Question 26(f)

EPA designates fish/shellfish spawning and nursery areas as "sensitive ecological areas" and requires respondents to identify whether their intake structure is within one mile of such areas. This question presents several difficulties. First, facilities may not have current information - or any information at all - about fish/shellfish spawning/nursery areas. While EPA provides a "data not available" response, it is not clear when a respondent may resort to this response. Is the respondent expected to gather information from outside sources? Commenter recommends that respondents not be required to generate any new data or conduct external research to answer this question.

Also, fish spawning areas can change. These changes may be associated with changes in water quality, removal of barriers to migration (such as removal of dams), and population pressures. Therefore, to the extent that power plants can identify fish spawning areas, EPA should recognize that the designations are only approximate.

Also, respondents should only be responsible for designation of spawning and nursery areas for recreationally or commercially important species, or designated representative important species. Information on other species is sometimes very limited, and is likely to be irrelevant to any power plant impacts.

**RESPONSE** EPA will use this information to evaluate the proximity of cooling water intake structures to sensitive ecological areas. EPA will consider the data while developing its regulatory approaches. EPA is considering a tiered regulatory options approach based on a facility's potential to cause adverse impacts to reduce burden on the regulated communities and permitting authorities.

EPA has revised the question reducing the proximity to 300 meters within the source water's watershed. It has also modified the requested information to reflect aquatic life impacts. EPA is not requiring facilities to collect new information for this question. EPA is also aware that spawning areas can change and will consider this when analyzing the data.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.088            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 29 Question 26(i)

The definition of "protected sanctuaries" is too vague to provide clear guidance to respondents on this question. More significantly, the existence of many types of areas that might fall within the definition of "protected sanctuaries" (e.g., protected bird nesting areas) is irrelevant in the § 316(b) context because the ecological functions being protected are not affected by the operation of intake structures. See Commenter's comments on this definition in Section V, below.

**RESPONSE** EPA will use this information to evaluate the proximity of cooling water intake structures to sensitive ecological areas. EPA will consider the data while developing its regulatory approaches. EPA is considering a tiered regulatory options approach based on a facility's potential to cause adverse impacts to reduce burden on the regulated communities and permitting authorities.

EPA has revised the question reducing the proximity to 300 meters within the source water's watershed. It has also modified the requested information to reflect aquatic life impacts.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.089            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 30 Question 26(j)

EPA asks respondents to identify any areas of "critical habitat for any rare, threatened, or endangered species" located within a one mile radius of the intake structure. This request raises many issues. First, while power plant operators generally know if their intake area harbors occasional members of a threatened or endangered species, determining whether the area represents "critical habitat" is usually a task for the Department of the Interior. See Commenter's recommended definition for "critical habitat."

Second, facilities cannot be expected to determine what is a "rare" species in the absence of a federal or state determination.

Third, identification of critical habitat for upland species or aquatic species not susceptible to cooling water intake effects is irrelevant.

**RESPONSE** EPA will use this information to evaluate the proximity of cooling water intake structures to sensitive ecological areas. EPA will consider the data while developing its regulatory approaches. EPA is considering a tiered regulatory options approach based on a facility's potential to cause adverse impacts to reduce burden on the regulated communities and permitting authorities.

EPA has revised the question reducing the proximity to 300 meters within the source water's watershed. It has also modified the requested information to reflect aquatic life impacts. If the DOI had deemed critical habitat areas near the CWIS or endangered species are also in the area, facilities should have and provide this information. EPA is not identifying critical habitat or endangered species.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.090            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 30 Question 26(k)

EPA asks respondents to identify migratory routes located within a one-mile radius of the cooling water intake structure. Steam electric facilities do not typically record this type of information. Generally, since the 1970s, the siting and design of new power plants has considered the potential impact of the cooling water intake on fish migratory routes and any predicted impact was minimized.

The identification of migratory routes within one mile of an intake or discharge for aquatic species not susceptible to cooling water intake effects is irrelevant. See also Commenter's comments on the definition of "migratory routes" in Section V, below.

**RESPONSE** EPA will use this information to evaluate the proximity of cooling water intake structures to sensitive ecological areas. EPA will consider the data while developing its regulatory approaches. EPA is considering a tiered regulatory options approach based on a facility's potential to cause adverse impacts to reduce burden on the regulated communities and permitting authorities.

EPA has revised the question reducing the proximity to 300 meters within the source water's watershed. It has also modified the requested information to reflect aquatic life impacts.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q26       |
| <b>COMMENT ID</b>          | 316.UWAG.091            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section C Page 30 Question 26 (l)

EPA requires respondents to identify commercial and/or recreational fishing areas within a one mile radius of their intake structures.

This information should be available from public sources, such as state fish and game management agencies. Therefore, EPA should not burden respondents with this inquiry.

Additionally, respondents generally do not survey or monitor the use of the waterbody by fishermen. They cannot be held responsible for knowing whether individual fishermen use an area close to their intake structure. Commenter requests that EPA delete this question.

**RESPONSE**

EPA will use this information to evaluate the proximity of cooling water intake structures to sensitive ecological areas. EPA will consider the data while developing its regulatory approaches. EPA is considering a tiered regulatory options approach based on a facility's potential to cause adverse impacts to reduce burden on the regulated communities and permitting authorities.

EPA has revised the question reducing the proximity to 300 meters within the source water's watershed. It may be difficult to collect such information so closely (<300 m) to a facility from public sources. EPA has also modified the requested information to reflect aquatic life impacts.

To the contrary, many of the large power generating facilities do monitor the activity around their intake structure very closely for security reasons to limit access to their facility. However, if a respondent does not have the information, they may respond "data not available."

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q28       |
| <b>COMMENT ID</b>          | 316.UWAG.092            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 31 Question 28(a)

The inset box definition of "traveling or other intake screen system" is not the same definition as provided in the glossary. The definitions should be consistent. The glossary definition is: "devices placed at or near the opening of an intake structure to mechanically stop smaller debris and/or organisms from entering a plant's water system."

Page 32 Question 28(b)

The matrix should provide a response of "Other - please describe:."

**RESPONSE** EPA has revised the definition to be consistent and added an "other" category as suggested.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q28       |
| <b>COMMENT ID</b>          | 316.UWAG.093            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 33, 34 Question 28(c)(1)

EPA requests designation of the type of intake screen technology. Should the respondent use the technology codes provided in Matrix 28(b) for these designations?

**RESPONSE** As stated in the instructions in the matrix, respondents should use the codes provided in the previous question.

**SUBJECT MATTER CODE**     DET/PRI/D3/P1/Q28  
**COMMENT ID**             316.UWAG.094  
**COMMENT AUTHOR**        Utility Water Act Group  
**DOCUMENT TYPE**         Industry Association  
**DOCUMENT DATE**         04/17/1998 00:00:00.00

---

**COMMENT**            Section D Page 33 Question 28(c)(5) Page 37 Question 30 (c)(4) Page 40 Question 31(c)(4) Page 43 Question 32(c)(4)

For older facilities, the calendar year of installation of screen technologies, passive intake technologies, fish diversion/avoidance technologies, and fish handling/return systems may not be available or discoverable. EPA should add a "don't know" response option to these questions.

**RESPONSE**            Respondents may respond "data not available."

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q29       |
| <b>COMMENT ID</b>          | 316.UWAG.095            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 35 Question 29(a), (b)

At older facilities, current plant personnel may not know what modifications have occurred or what the reasons for any modifications were. EPA should add a "don't know" response to Question 29(a).

Is the respondent supposed to specify all the types of modifications that apply? If so, the directions should so indicate.

**RESPONSE** As stated in the instructions in the matrix, respondents should check all modifications that apply.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q3        |
| <b>COMMENT ID</b>          | 316.UWAG.062            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A Page 7 Question 3

The term "commercial service" needs to be clearly defined. The question references Item 5, page 1 of EIA Form 767, but Item 5 classifies plants as "existing," "planned," or "retired."

**RESPONSE** EPA has deleted this question.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q30       |
| <b>COMMENT ID</b>          | 316.UWAG.096            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 36 Question 30(b)

It is debatable whether a wedge-wire screen fits EPA's definition of passive intake system, as they can involve significant mechanical activity.

EPA should explain why it is interested in radial wells, a type of groundwater intake, for purposes of § 316(b). Aquatic organisms are not affected by groundwater intakes.

**RESPONSE** EPA has defined a passive intake systems having little or no mechanical activity with low velocity collection. Based on this definition of passive intake systems and available literature EPA has collected from suppliers and the American Society of Civil Engineers, wedge-wire screens will remain classified as passive.

EPA has decided not to collect information on radial wells and is, therefore, deleting the question.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q32       |
| <b>COMMENT ID</b>          | 316.UWAG.097            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 43, 44 Question 32(c)(5)

EPA requests the respondent to provide "Association of fish handling and/or return system with other technologies."

This question is very vague. What information is EPA seeking? EPA should clarify.

**RESPONSE** EPA is requesting the facilities to link their fish handling systems to their previously reported cooling water intake structures. EPA will use this information in developing their tiered regulatory options based on a facility's potential to cause adverse environmental impacts.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q33       |
| <b>COMMENT ID</b>          | 316.UWAG.098            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 45 Question 33(a)

The instructions for measuring approach velocity could be inconsistent with the definition of "approach velocity." For example, fish diversion or avoidance systems, as well as barrier nets, are classified as "cooling water intake technologies" but may not be located very near the intake entrance. In these cases, the measurement point designated by EPA will not be "a point just before the traveling or other intake screen system." For consistent responses, EPA needs to clarify the point at which it wants the approach velocity measured or calculated.

The definition of "approach velocity" is not clear. EPA's definition is: "the speed at which cooling water is being withdrawn just prior to the first cooling water intake technology (if such a technology exists) or the cooling water system." However, as EPA has defined those terms, cooling water intake technologies are part of the cooling water intake structure, which is part of the cooling water system. Therefore, the phrase "or cooling water system" at the end of the definition creates ambiguity, and should be replaced with "or the intake structure."

More significantly, EPA requests "average" and "maximum" actual approach velocities without defining "average" or "maximum." Over what time period should the respondent figure the average/maximum values'? Without some guidance on this question, the answers provided will not be comparable. Approach velocities vary considerably based on operating and waterbody conditions.

If EPA intends to require respondents who have no actual approach velocity data to estimate approach velocity, then it should allow space for the respondent to explain the basis of his estimate.

**RESPONSE** EPA has modified the question to ask for the "design pass-through velocity under low flow conditions."

EPA will revise the definition to state "cooling water intake structure" rather than cooling water system.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q33       |
| <b>COMMENT ID</b>          | 316.UWAG.099            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       |                         |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 45 Question 33(c)

The space provided for describing atypical operating and/or other conditions should be enlarged.

The instructions say that "typical operating and/or other conditions" means that the velocity measurement provided is/was "representative" of the plant's typical operating and other conditions. What does EPA mean by "representative?"

**RESPONSE** If additional space is needed for this question, then respondents can attached a separate sheet of paper with their response clearly labeling it.

EPA has modified the question to ask for the "design pass-through velocity under low flow conditions."

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q33       |
| <b>COMMENT ID</b>          | 316.UWAG.100            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 46,47 Instructions for 33(d); 33(d)

The definition of "pass-through velocity" provided on this page differs from the definition provided in the Questionnaire's glossary. The definition should be consistent throughout the Questionnaire.

For both approach velocity and pass-through velocity measurement, EPA states: "In many cases, [the measurement point] will be a point just before the traveling or other intake screen system." Commenter recommends deleting this sentence for pass-through velocity, and providing better guidance on the measurement point for pass-through velocity.

Additionally, as with the approach velocities, EPA has failed to explain what it means by "average" or "maximum" pass-through velocities. These velocities will vary greatly depending on operating and waterbody conditions. Average/maximum values must be related to some time period, for them to be relevant. Otherwise, the answers provided will not be comparable.

The formula provided by EPA for calculation of pass-through velocity derives the average pass-through rate. EPA provides no formula for deriving the maximum pass-through rate. Does that mean respondents are not required to calculate that value?

**RESPONSE** EPA has modified the question to ask for the "design pass-through velocity under low flow conditions."

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q34       |
| <b>COMMENT ID</b>          | 316.UWAG.101            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 48-52 Question 34

Why does EPA need daily maximum, daily minimum and monthly average flow rates for five years? Commenter submits that the burden of collecting this information outweighs its utility. One year of flow data should be representative, absent unusual conditions.

We suggest that EPA instruct respondents to use facility DMR reports for these flows. However, in many cases, daily minimum flows and number of days operating are not reported on the DMRs and would be extremely onerous to obtain. Furthermore, if service water flows are supposed to be included in the flow calculations, it will require a great deal of additional effort to retrieve this information from plant logs, if it exists at all. Commenter recommends defining daily maximum flow, daily minimum flow, and monthly average flow to exclude all water except that used for cooling.

Additionally, the matrix should relate the actual/calculated designations to each individual flow value to be recorded in the matrix. Also, the matrix should provide an "estimated" designation for each individual flow value. The "estimated" designation is needed because there may be gaps in recorded information, and because utilities do not usually record "operating days" information in the manner required to complete this matrix.

Page 50 Question 34

In the "November" section of the "flow data requested" column, "daily avg." should be changed to "daily min." to be consistent with the rest of the table.

**RESPONSE** EPA has reduced the amount of data from 5 to 3 years. EPA is requesting data as far back as 3 years to account for facilities that use cooling water on an intermittent basis as well as continuous. Such data may support the development of particular regulatory options based on intake flow rates or operational variables.

It is not EPA's intent to collect service water data. However if service water is collected with cooling water in a cooling water intake structure then it should be reported. EPA is interested in the rate cooling water is withdrawn and the degree to which adverse impacts may occur from a specific cooling water intake structure.

See response for 316.UWAG.098 on actual versus calculated data.

EPA has revised the questions to ask for daily minimum for November.



---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q35       |
| <b>COMMENT ID</b>          | 316.UWAG.102            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 53 Question 35(a)

EPA asks: "Has the plant ever implemented cooling water intake flow reduction measures to reduce entrainment"?

Many power plants have been in operation more than 20 years. This question would require current plant personnel to speculate on reasons why cooling water intake flow may have been reduced many years before they were employed.

The question should allow "data not available" and "don't know" responses.

Page 53 Question 35(b)(1), 35(b)(3)

More space should be allowed to describe "other" response.

**RESPONSE** EPA agrees with the commenter that current personnel may not have the data available for a measure such as flow reduction that was employed many years ago. In response to the comment, EPA has added the option to check "don't know."

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q36       |
| <b>COMMENT ID</b>          | 316.UWAG.103            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 54 Question 36

EPA asks, "Does the plant use dilution pump(s) to reduce the temperature of its cooling water discharge"?

This question is irrelevant to the § 316(b) rulemaking effort. EPA's statutory § 316(b) Jurisdiction is limited to cooling water intake structures, which, EPA acknowledges, does not include cooling water discharges. If EPA nonetheless decides to maintain this question, it should provide a definition for "dilution pumps."

**RESPONSE** EPA has modified the question to request information on the occurrence of the reduction of discharge temperature via dilution and the source of the dilution water. EPA is requesting the information on the use of dilution water because it increases the amount of water drawn from a water source, therefore, increasing the likelihood for entrainment.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q38       |
| <b>COMMENT ID</b>          | 316.UWAG.104            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 55 Instructions to Question 38

The inclusion of CBI designations on this instructions page is inappropriate. For the entire questionnaire, the CBI designation boxes should appear on the same page as the information being designated as CBI.

The definition of "average annual operation and maintenance costs" should include replacement power costs related to operations and maintenance requirements.

**RESPONSE** Q.38 has been deleted.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q38       |
| <b>COMMENT ID</b>          | 316.UWAG.105            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 55-57 Question 38(a)-(c)

Respondents may not know the expected total life span of their technologies. EPA should add a "don't know" response for this column.

In Question 38(c), EPA asks respondents to identify the average annual operations and maintenance costs for each type of control technology. As already stated in our general comments, EPA has no authority to mandate operations and maintenance procedures. Nonetheless, EPA should consider operations and maintenance costs when evaluating the selection of intake control technologies, and should consider operations and maintenance issues when evaluating the feasibility of intake technologies. Furthermore, we consider replacement power costs related to operations and maintenance requirements as a part of total operation and maintenance costs.

What does EPA mean by asking respondents to designate costs as "empirical," if they are not "actual?" We suggest replacing the term "empirical" with "estimated" to clarify the issue, and to be consistent with the wording in the rest of the questionnaire. We anticipate that the great majority of responses to this question will be estimated, since utilities typically do not break O&M costs down in this level of detail. Therefore, average annual O&M costs data will be non-comparable unless EPA gathers information on how the data were estimated and in what dollar-years they were expressed.

Many facilities installed intake technologies prior to 1988 that are still in service. While Commenter supports EPA's decision not to gather cost information on such technologies, EPA should recognize that both capital and O&M costs for these technologies may be significant and relevant to this rulemaking.

As explained in our general comments, obtaining capital and O&M cash information for individual intake control components will be very difficult. Facilities have not recorded costs in a manner that will allow easy extraction of this data. Standard industry accounting practices do not separate out such costs. Therefore, Commenter submits that the burden of retrieving this information outweighs any practical utility it may have to the rulemaking.

**RESPONSE** This question has been deleted.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q39       |
| <b>COMMENT ID</b>          | 316.UWAG.106            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 58 Question 39(a)

This question asks: "Has your plant ever used any technologies to minimize impingement and/or entrainment that was/were later determined to be ineffective"?

Current plant personnel may have difficulty answering this question in the context of the facility's entire life span. They may not know what technologies were tried, and for what reasons, prior to their employment.

Also, what does EPA mean by "determined to be ineffective"? Would this include determinations by plant personnel as consultants, as well as regulatory authorities?

Furthermore, actual deployment and testing of intake technologies may not be the best evidence of ineffectiveness. Plant engineers often discount certain technologies based on incompatibility with the site, ineffectiveness at relatively comparable sites, or other factors. EPA should recognize that Question 39, as drafted, will not elicit the full range of technologies potentially determined to be ineffective for a given facility.

Page 58 Question 39(b)(2)

What does EPA mean by "negatively affected operations"?

The question should be reformatted to allow more space for description of the "other" category. Additionally, there are two portions of the matrix that are labeled "39(b)(2)". EPA should revise the numbering within the matrix.

**RESPONSE** This question has been modified to add a "data unavailable" response option.

EPA understands that during the planning and development of cooling water intake structures, plan engineers and personnel consider numerous cooling water system technologies. EPA is requesting data on intake technologies that were actually employed by the facility and were then later deemed ineffective. Technologies used in pilot tests or studies but not employed will be addressed in Section D.

EPA defines "negatively affected operations" as any negative outcome which was not intended from the original design and installation of a technology.

EPA has revised the number of the question as suggested by the respondent. If respondents need additional space for their response at any place in the survey, they can attach additional pages clearly labeling them with their name and referencing the question.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q4        |
| <b>COMMENT ID</b>          | 316.UWAG.063            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A Page 8 Question 4(a)

This question asks: "What are the four-digit Standard Industrial Classification codes associated with your main lines of business?" This question appears to be related to the individual plant's lines of business rather than to utility-level lines of business. We suggest that EPA clarify the question.

Page 8 Question 4(b)

The preceding comment is also applicable to this question.

Page 8 Question 4(b)

What is the relevance/need for the NAIC code information? SIC information is very similar and already provided in response to question 4(a).

**RESPONSE** EPA requires the Standard Industry Code (SIC) for the plant's main line of business (e.g., petroleum refining, electric utility). EPA has clarified in Question 4(a) that this question is for plants specifically. The SIC system classifies establishments by their primary type of activity. Therefore, the SIC code should match the plant's primary activity.

EPA deleted Question 4(b) requesting the North American Industry Classification (NAIC) code information.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q40       |
| <b>COMMENT ID</b>          | 316.UWAG.107            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 59 Question 40

EPA's 316(b) statutory jurisdiction is limited to cooling water intake structures," which does not include cooling towers. Therefore, Commenter recommends deletion of this question, as it is irrelevant to the § 316(b) rulemaking.

**RESPONSE** A facility's cooling water system is related, in general, to the amount of cooling water that must be withdrawn by that facility. Cooling towers are generally used with recirculating systems. This information will allow EPA to determine the number and percent of facilities that use cooling tower technologies, the type of cooling towers used, and to assess the availability, applicability and compatibility of various technologies.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q40       |
| <b>COMMENT ID</b>          | 316.UWAG.108            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 59 Question 40

If EPA nonetheless retains this question, it should be moved from this section of the questionnaire, which is titled "Cooling Water Intake Structure Technology Information." A cooling tower is part of a facility's cooling water system, not its intake structure.

EPA provides a very broad definition of "cooling tower": "a framed structure that is typically higher than its width. It can stand apart or be attached to a larger structure. Cooling towers are used to transfer heat added to water from operations within a plant to the atmosphere. Cooling towers are generally used with recirculating cooling water systems."

It is not necessarily true that a cooling tower's height is greater than its width. Mechanical draft cooling towers may be wider than their height. Does EPA intend to include them in the definition? Also, cooling towers can be used with open-cycle cooling systems. Does EPA intend to include these towers within its, definition of "cooling towers"?

**RESPONSE** The question on cooling towers will be moved to the cooling water system section as suggested.

EPA has modified the definition of cooling tower as suggested by the commenter.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q40       |
| <b>COMMENT ID</b>          | 316.UWAG.109            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 59 Instructions to 40(b)

What does EPA mean by "multiple cooling towers that are designed and/or operated similarly"? The instructions imply that differences in manufacturers and ages of towers would render the towers not similar, for purposes of the questionnaire. However, neither manufacturer nor age necessarily renders a tower dissimilar from another in design or operation.

Page 60,61 Question 40(b)(5)

EPA requests expected life span data for cooling tower technologies. Several utilities indicated that this information won't be readily available. EPA should provide a "don't know" response.

**RESPONSE**

This question was designed so that facilities that build multiple cooling towers at the same time using the same technology and manufacturer would not have to complete multiple matrices. However, as the instructions state, "if there are differences in design or operation of the same technology employed on a given intake system (i.e., different manufacturer, different age, etc.), separate columns of the matrix should be completed."

EPA has provided a "don't know" response option of cooling tower technology expected life span.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q40       |
| <b>COMMENT ID</b>          | 316.UWAG.110            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 60,61 Question 40(b)(6)

The question asks "Is cooling tower part of a helper system"? and directs respondents to the glossary definition of "helper system." However, the glossary does not define helper system - rather, it defines "helper canals/channels, lakes or ponds," and "helper cooling towers." EPA should clarify what it means by "helper systems."

**RESPONSE** This question has been deleted.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q40       |
| <b>COMMENT ID</b>          | 316.UWAG.111            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 60,61 Question 40(b)(7)

The question requires respondents to provide actual or empirical total capital costs for cooling towers installed within past 10 years. This data may be very difficult to assemble for older cooling towers. Should the respondent mark the "no data" response if the costs could not be identified after a reasonably diligent effort?

**RESPONSE** This question has been deleted.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q40       |
| <b>COMMENT ID</b>          | 316.UWAG.112            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 60,61 Question 40(b)(7)

Commenter notes that "total capital costs" does not include land costs, according to EPA's definition. Land costs often are a significant component of the capital costs of cooling towers, and therefore should be included.

**RESPONSE** This question has been deleted.

**SUBJECT MATTER CODE**     DET/PRI/D3/P1/Q40  
**COMMENT ID**             316.UWAG.113  
**COMMENT AUTHOR**        Utility Water Act Group  
**DOCUMENT TYPE**         Industry Association  
**DOCUMENT DATE**         04/17/1998 00:00:00.00

---

**COMMENT**            EPA does not specify what it means by "empirical" data as total capital costs. Use of the term "estimated value" would be more consistent with the rest of questionnaire. If respondents are supposed to estimate costs where actual costs are not available, they should be required to explain how the estimate was derived. Otherwise, data comparisons will be meaningless. Additionally, EPA should add a "not applicable" response box.

**RESPONSE**          This question has been deleted.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q40       |
| <b>COMMENT ID</b>          | 316.UWAG.114            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section D Page 60, 62 Question 40(b)(9)

Determining the average annual O&M costs for cooling towers over a five year period will be very difficult.

Furthermore, the question should be limited to cooling towers routinely operating during the last five years. Some facilities employing cooling towers have experienced lengthy outages in the past five years. Their O&M costs would not be representative.

Should the respondent mark the "no data" response if the costs could not be identified after a reasonably diligent effort?

EPA does not specify what it means by "empirical" data or O&M costs. If respondents are supposed to estimate costs where actual costs are not available, they should be required to explain how the estimate was derived. Otherwise, data comparisons will be meaningless.

**RESPONSE** This question has been deleted.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q41       |
| <b>COMMENT ID</b>          | 316.UWAG.115            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section E Page 63 Question 41(a)

EPA asks whether the facility has ever conducted "a study to demonstrate that the location, design, construction, and capacity of an intake structure reflects the best technology available for minimizing adverse environmental impacts (i.e., 316(b) Demonstration Study)."

This is an erroneous description of § 316(b) studies. The permittee is not required to "demonstrate," through studies, that the technology is BTA. Instead, the studies look at factors to be considered by the agency that will make the BTA determination.

**RESPONSE** The question has been modified.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q42       |
| <b>COMMENT ID</b>          | 316.UWAG.117            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section E Page 64 Question 42(a)

The question asks: "Does your plant's current NPDES permit contain any conditions related to Section 316(b) of the Clean Water Act (i.e., conditions ensuring that the location, design, construction, and capacity of the plant's cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts?)"

The initial question is stated very broadly, so it might include, for example, study conditions related to 316(b). However, the parenthetical suggests a narrower focus on technological conditions. EPA should clarify its intent.

Page 64 Question 42(b)

As noted in response to Question 41 (a), permittees are not required to "demonstrate compliance" with § 316(b). See further discussion under Question 41 (a).

Page 64 Question 42(c)(2)

The question asks the respondent to specify the duration of each of its 316(b)-related studies. Should respondents treat a study as continuous if it started and stopped several times? There is no indication that the definitions "discrete biological study of impingement" and "discrete biological study of entrainment" apply to this question.

**RESPONSE** Questions 42 (a) and (b) have been deleted.

Question 42 (c)(2) intends that if one study is being conducted regardless of starts and stops, it should be considered one study. Questions concerning discrete studies for impingement/entrainment following this question requesting information on 316(b) demonstration studies.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q42       |
| <b>COMMENT ID</b>          | 316.UWAG.118            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 65 Question 42(c)(4)

The terms "biological effects of impingement" and "biological effects of entrainment" are not clear. For example, do they refer to population effects studies, impingement/entrainment monitoring studies, or both?

**RESPONSE** Both. The Agency is interested in determining the content of the demonstration studies. Since no guidelines were ever developed for previous studies, EPA is interested in the types of information that is available in previous studies.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q42       |
| <b>COMMENT ID</b>          | 316.UWAG.119            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 65,66 Question 42(c)(5)(1), 42(c)(6)(1)

The question ask whether § 316(b) study findings led to changes in the types of cooling water intake structure technologies being used or to operational changes. For on-going studies, findings are not yet available. Therefore, EPA should add a check box "on-going study-findings not yet available."

Page 66 Question 42(c)(5)(2), 42(c)(6)(2)

The reasons why technology or operational changes are made may be very complex. EPA should allot more space in the matrix for responses to these questions. The meaning of the phrase "relationship to existing CWISs" is not clear.

Page 66 Question 42(c)(7)

The question asks whether §316(b) study methodologies and findings are readily available for review by EPA. What does EPA mean by "readily available"? Studies subject to attorney-client privilege or other recognized legal privileges should not be considered "readily available".

**RESPONSE** EPA has modified the question to include a response of "on-going study - finding not yet available."

If respondents need additional space for their response, they may attach additional pages to the survey including their name and clearly referencing the question.

EPA is interested in knowing the accessibility of the 316(b) studies. EPA may want to review these studies at a later date. EPA understands that some of these studies may be considered confidential business information and would handle the information accordingly.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q43       |
| <b>COMMENT ID</b>          | 316.UWAG.121            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 67 Question 43(c)(2)

Commenter recommends rephrasing the question as follows: "Have you conducted your studies in a single or on multiple intake structures"?

Page 68 Question 43(c)(3)

The question asks the respondent to specify the duration of facility impingement studies. Should respondents treat a study as continuous if it is stopped and started several times? There is no indication that the definition "discrete biological study of impingement" applies to this question.

Page 68 Question 43(c)(4)

The question asks whether impingement study methodologies and findings are readily available for review by EPA.

What does EPA mean by "readily available"? Note that studies subject to attorney-client privilege or other recognized legal privilege should not be considered "readily available."

**RESPONSE** EPA has revised Q. 43 (c)(2) as suggested.

For Q. 43 (c)(3), see response for 316.UWAG.117.

For Q. 43 (c)(4), see response to 316.UWAG 119.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q44       |
| <b>COMMENT ID</b>          | 316.UWAG.122            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 68 Question 44

Why does EPA specify that the most representative impingement study "study not have been part of any Section 316(b)-related demonstration study reported under Question 42(c)"? This requirement does not make sense. Why should it matter under what context the most representative study was conducted?

Also, the question requests impingement data from the most "representative" study. The most recent representative study as defined by EPA may have occurred prior to recent intake modifications and the available data will therefore be misleading and irrelevant. If recent intake modifications have occurred, the question should require only data obtained since such modifications were installed.

Additionally, this question fails to ask whether survival studies were conducted in addition to impingement enumeration studies. Survival studies can be important in determining impingement impacts.

## Page 68 Question 44(a)

EPA asks respondents to specify impingement study start and end dates. Studies often are completed long after sample collection ceases. EPA should clarify if it wants to know only the sample collection period or the entire period of study design, implementation, and completion of the written report.

## Page 69 Question 44(c)(1)

The question asks: "Did the plant measure natural seasonal losses due to disease or predation for the species evaluated under the study"?

What does EPA mean by "natural seasonal losses due to disease or predation"?

This question should be clarified and rephrased. Natural losses due to disease or predator generally are not measured, but are estimated or modeled.

## Page 69 Question 44(e)(2)

The question should bold "near-field" and "far-field," which are defined terms included in the glossary.

**RESPONSE**

EPA has modified the question to ask if “estimates determined for natural or seasonal losses of any kind of fish or shellfish for biological parameters (e.g., disease, predators, etc.) under the study?”

EPA has modified Q. 44(e)(2) as suggested.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q44       |
| <b>COMMENT ID</b>          | 316.UWAG.123            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 69 Question 44(e)(2)

The question should bold "near-field" and "far-field," which are defined terms included in the glossary.

See Section V for Commenter's recommendations on the definitions of near-field and far-field.

**RESPONSE** EPA has modified Q. 44(e)(2) as suggested.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q44       |
| <b>COMMENT ID</b>          | 316.UWAG.124            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 70 Question 44(f)(1)

This question asks: "Did the plant estimate losses to commercial and recreation harvesting and fishing as a result of the numbers of organisms impinged by the CWISs evaluated under the study?" This inquiry presents several problems. First, this question presumes that losses to commercial and recreational harvesting and fishing have occurred as a result of impingement. Second, the question would require the respondent to speculate on the potential causes of declines in the recreational/commercial catches. Natural fluctuations in fish populations, as well as many other factors, may influence recreational/commercial catches.

Page 70 Question 44(f)(2)

The question asks, as to impingement effects on commercial and recreational harvesting and fishing, "Over what range were the measurements of harvesting and fishing losses made"?

What does EPA mean by "harvesting"? Also, fishing losses due to impingement cannot be measured - they are estimates only.

**RESPONSE** EPA is attempting to understand what types of studies have been conducted and what types of information is available in these studies. These questions are not asking the respondents to "presume" or "speculate" but if such estimates were made when conducting the study. If the estimates were not considered, the respondents should answer "No" or "Don't know" which ever is appropriate.

EPA understands these are estimates as reflected in the previous question.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q44       |
| <b>COMMENT ID</b>          | 316.UWAG.125            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 70 Question 44(g)

EPA asks respondents to list the cost of the impingement study. EPA should recognize that what is a reasonable cost for an impingement study is dependent on site-specific factors, and avoid drawing any generalized conclusions on the basis of the responses to this question.

Also, cost information on older studies may be very difficult to locate and verify.

EPA should provide guidance on the types of costs that are considered to be costs of the study. Appropriate costs to consider would include study equipment and materials, design and analysis of data, and preparation of a written report, as well as any costs incurred through changing plant operating conditions to facilitate the study.

**RESPONSE** EPA understands that many site-specific factors must be considered when conducting studies that affect the cost of the studies. EPA must do a regulatory impact analysis as part of the regulatory development process. This information will allow EPA to estimate ranges of costs for a range of study factors and, therefore, the impact to industry.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q44       |
| <b>COMMENT ID</b>          | 316.UWAG.126            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 70,71 Question 44(h), 45(b)(4)

The question asks whether impingement studies methodology and findings are readily available.

What does EPA mean by "readily available"? Even if the study has been provided to regulatory authorities and should be readily available, respondents should not be required to verify its availability.

**RESPONSE** See response to 316.UWAG.119.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q45       |
| <b>COMMENT ID</b>          | 316.UWAG.127            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 71 Question 45(a)

The question asks: "Did the findings of any of the plant's discrete biological studies of impingement lead to changes being made in (1) the types of technologies being used at the plant's cooling water intake structures, or (2) the plant's operational practices"?

This question invites speculation by the respondent about reasons for technological/operational changes. The question instead should ask whether any written regulatory determinations or requirements reference the study as a basis for decision making.

## Page 71 Question 45(b)(3)

The question asks respondent to identify the types of technological/operational changes that resulted from the most recent or most representative impingement study that led to such changes.

The reasons for technological/operational changes are often very complex, and may involve factors well beyond the scope of the study. The phrase "relationship to existing CWISs" is not clear.

**RESPONSE**

EPA understands that such complex and resource intensive decisions as making technological or operational changes to a cooling water system is based on numerous factors. However, if one of the factors driving the decision was based on a study of impingement/entrainment, then the question should be responded to as appropriate. EPA is also not requiring respondents to "speculate" if the basis for such decisions are unknown then the "don't know" response should be marked.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q47       |
| <b>COMMENT ID</b>          | 316.UWAG.129            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 72 Question 46(d)

The question asks: "Are impingement monitoring data readily available for review"?

What does EPA mean by "readily available"? Often raw impingement monitoring data is collected but not compiled or organized into a report. Also note that attorney-client privilege or other legally-recognized privileges may attach to on-going monitoring studies.

**RESPONSE** See response to 316.UWAG.119.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q47       |
| <b>COMMENT ID</b>          | 316.UWAG.130            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 71 Question 45(a)

The question asks: "Did the findings of any of the plant's discrete biological studies of impingement lead to changes being made in (1) the types of technologies being used at the plant's cooling water intake structures, or (2) the plant's operational practices"?

This question invites speculation by the respondent about reasons for technological/operational changes. The question instead should ask whether any written regulatory determinations or requirements reference the study as a basis for decision making.

**RESPONSE** See response to 316.UWAG.127.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q48       |
| <b>COMMENT ID</b>          | 316.UWAG.131            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 73 Question 47(c)(2)

Commenter recommends rephrasing the question as follows: "Have you conducted your studies in a single or on multiple intake structures"?

Page 73 Question 47(c)(3)

The question asks the respondent to specify the duration of each of its discrete entrainment studies. Should respondents treat a study as continuous if it started and stopped several times? There is no indication that the definition "discrete biological study of entrainment" (which require discrete starting and ending points) applies to this question.

Page 74 Question 47(c)(4)

The question asks whether entrainment study methodologies and findings are readily available for review by EPA.

What does EPA mean by "readily available"? We note that studies subject to attorney-client privilege or other recognized legal privileges should not be considered "readily available."

**RESPONSE** See response to 316.UWAG.117 and 316.UWAG.119.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q48       |
| <b>COMMENT ID</b>          | 316.UWAG.132            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 74-76 Question 48

Why does EPA specify that the most representative entrainment study "should not have been part of any Section 316(b)-related demonstration study reported under Question 42(c)"? This requirement does not make sense. Why should it matter under what context the most representative study was conducted?

Also, the question requests entrainment data from the most "representative" study. The most recent representative study as defined by EPA may have occurred prior to recent intake modifications and the available data will therefore be misleading and irrelevant. If recent intake modifications have occurred, the question should require only data obtained since such modifications were installed.

Additionally, this question fails to ask whether survival studies were conducted in addition to entrainment enumeration studies. Survival studies can be important in determining entrainment impacts.

## Page 74 Question 48(a )

EPA asks respondents to specify entrainment study start and end dates. Studies often are completed long after sample collection ceases. EPA should clarify if it wants to know only the sample collection period or the entire period of study design, implementation, and completion of the written report.

## Page 75 Question 48(f)(1)

The question asks: "Did the plant measure natural seasonal losses due to disease or predation for the species evaluated under the study"?

What does EPA mean by "natural seasonal losses due to disease or predation"?

This question should be clarified and rephrased. Natural losses due to disease or predator generally are not measured, but are estimated or modeled.

**RESPONSE** See response to 316.UWAG.122.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q48       |
| <b>COMMENT ID</b>          | 316.UWAG.133            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 76 Question 48(f)(2), 48(g)(2)

These questions should bold "near-field" and "far-field, "which are defined terms included in the glossary.

See Section V for Commenter's recommendations on the definitions of near-field and far-field.

**RESPONSE** See response to 316.UWAG.123.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q48       |
| <b>COMMENT ID</b>          | 316.UWAG.134            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 76 Question 48(g)(1)

The question asks: "Did the plant estimate losses to commercial and recreational harvesting and fishing as a result of the numbers of organisms entrained by the CWISs evaluated under the study?" This inquiry presents several problems. First, this question presumes that losses have occurred. Second, the question would require the respondent to speculate on the potential causes of declines in the recreational/commercial catches. Natural fluctuations in fish populations, as well as many other factors, may influence recreational/commercial catches.

Page 76 Question 48(g)(2)

The question asks, as to impingement effects on commercial and recreational harvesting and fishing, "Over what range were the measurements of harvesting and fishing losses made"?

What does EPA mean by "harvesting"? Also, fishing losses due to entrainment cannot be measured - they are estimates only.

**RESPONSE** See response to 316.UWAG.124.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q48       |
| <b>COMMENT ID</b>          | 316.UWAG.135            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 76 Question 48(h)

EPA asks respondents to list the cost of the entrainment study. EPA should recognize that what is a reasonable cost for an entrainment study is dependent on site-specific factors, and avoid drawing any generalized conclusions on the basis of the responses to this question.

Also, cost information on older studies may be very difficult to locate and verify.

EPA should provide guidance on the types of costs that are considered to be costs of the study. Appropriate costs to consider would include study equipment and materials, design and analysis of data, and preparation of a written report, as well as any costs incurred through changing plant operating conditions to facilitate the study.

**RESPONSE** See response to 316.UWAG.125.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q49       |
| <b>COMMENT ID</b>          | 316.UWAG.136            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 76, 77 Question 48(I), 49(b)(4)

The question asks whether entrainment studies methodologies and findings are readily available.

What does EPA mean by "readily available"? Even if the study has been provided to regulatory authorities and should be readily available, respondents should not be required to verify its availability. Furthermore, some studies may be subject to the attorney-client privilege and other legally recognized privileges, and thus not "readily available."

**RESPONSE** See response to 316.UWAG.119.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q5        |
| <b>COMMENT ID</b>          | 316.UWAG.064            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A: General Plant Information. Page 9 Question 5(a).

Question 5(a) asks whether the plant presently has an NPDES permit. Due to the positioning of this, question, a respondent who operates facilities clearly excluded from § 316(b) jurisdiction (e.g., a facility that does not use surface water) would have to respond to the financial data questions of Document II before being exempted out of the rest of the Questionnaire. This will create an undue burden on many utilities with small units. Furthermore, there is no practical utility in gathering financial data on facilities that are not subject to EPA's § 316(b) jurisdiction. Commenter requests that this question be moved into Document I (Inventory of Plants and Generating Units), and that facilities answering this question in the negative be exempted from completing the rest of the Questionnaire.

Page 9 Question 5(c)

The form should provide a box for designating that the facility is operating under an expired NPDES permit. In some cases, a facility will have made timely application, but the permitting authority may not have issued the new permit prior to the expiration date.

**RESPONSE** EPA has eliminated Document 1 the inventory of plants and generating units, and Document II Utility Level Information. The questionnaire now has a scoping section at the beginning that will exclude from having to complete the survey, those facilities who would not be covered under the Section 316(b) regulations based on the language of the statute. The question concerning whether a facility has a NPDES permit has been modified to include those facilities that have applied for a permit but may not have yet received the permit.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q50       |
| <b>COMMENT ID</b>          | 316.UWAG.137            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 77 Question 49(a)

The question asks: "Did the findings of any of the plant's discrete biological studies of entrainment lead to changes being made in (1) the types of technologies being used at the plant's cooling water intake structures, or (2) the plant's operational practices (e.g. adjustment of flow volumes, periods of withdrawal, etc.)"?

This question invites speculation by the respondent about reasons for technological operational changes. The question instead should ask whether any written regulatory determinations or requirements reference the study as a basis for decision making.

Page 77 Question 49(b)(3)

The question asks respondent to identify the types of technological/operational changes that resulted from the most recent or most representative entrainment study that led to such changes.

The reasons for technological/operational changes are often very complex, and may involve factors well beyond the scope of the study. Also, the phrase "relationship to existing CWISs" is not clear.

**RESPONSE** See response to 316.UWAG.127.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q51       |
| <b>COMMENT ID</b>          | 316.UWAG.138            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 78 Question 50(d)

The question asks: "Are entrainment monitoring data readily available for review"?

What does EPA mean by "readily available"? Often raw entrainment monitoring data is collected but not compiled or organized into a report. We also note that attorney-client privilege or other legally-recognized privileges may apply to certain on-going monitoring studies.

**RESPONSE** See response to 316.UWAG.119.

**SUBJECT MATTER CODE**     DET/PRI/D3/P1/Q52  
**COMMENT ID**             316.UWAG.139  
**COMMENT AUTHOR**        Utility Water Act Group  
**DOCUMENT TYPE**  
**DOCUMENT DATE**        04/17/1998 00:00:00.00

---

**COMMENT**     Page 79   Question 51(b)(4)(A)

The question asks: "Did the findings of the [technological studies of impingement] lead to changes being made in (1) the types of technologies being used at the plant's CWISs, or (2) the plant's operational practices"?

This question invites speculation by the respondent about reasons for technological/operational changes. The question instead should ask whether any written regulatory determinations or requirements reference the study as a basis for decision making.

**RESPONSE**     See response to 316.UWAG.127.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q52       |
| <b>COMMENT ID</b>          | 316.UWAG.140            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 81 Question 52(a)

Why does EPA specify that the technological studies of entrainment "should be distinct from those that may have been conducted as part of a broader Section 316(b)-related study, as reported under Question 42(c)"? This requirement does not make sense. Why should it matter under what context the studies were conducted?

Page 81 Question (52)(b)(1)

EPA asks respondents to specify starting and ending dates for technological studies of entrainment. Studies are often completed long after sample collection ceases. EPA should clarify if it wants to know only the sample collection period or the entire period of study design, implementation, and completion of the written report.

Page 82 Question 52(b)(4)(A)

The question asks: "Did the findings of the study lead to changes being made in (1) the types of technologies being used at the plant's CWISs or (2) the plant's operational practices"?

This question invites speculation by the respondent about reasons for technological/operational changes. The question should instead ask whether any written regulatory determinations or requirements reference the -study as a basis for decision-making.

**RESPONSE** See response to 316.UWAG.122.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q52       |
| <b>COMMENT ID</b>          | 316.UWAG.141            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 82 Question 52(b)(5)

EPA asks respondents to list the cost of the entrainment study. EPA should recognize that what is a reasonable cost for an entrainment study is dependent on site-specific factors, and avoid drawing any generalized conclusions on the basis of the responses to this question.

Also, cost information on older studies may be very difficult to locate and verify.

EPA should provide guidance on the types of costs that are considered to be costs of the study. Appropriate costs to consider would include study equipment and materials, design and analysis of data, and preparation of a written report, as well as any costs incurred through changing plant operating conditions to facilitate the study.

**RESPONSE** See response to 316.UWAG.125.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q52       |
| <b>COMMENT ID</b>          | 316.UWAG.142            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 82 Question 52(b)(6 )

The questions ask whether entrainment studies methodologies and findings are readily available.

What does EPA mean by "readily available"? Even if the study has been provided to regulatory authorities and should be readily available, respondents should not be required to verify its availability. Furthermore, some studies may be subject to the attorney-client privilege and other legally recognized privileges, and thus not "readily available."

**RESPONSE** See response to 316.UWAG.119.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q54       |
| <b>COMMENT ID</b>          | 316.UWAG.143            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 84 Question 54

The definition provided in this question for "planned cooling water intake structure" is not consistent with EPA's glossary definition of "planned or under construction." The glossary definition is better because it requires that funds have been authorized for the project. EPA should use the definition of "planned or -under construction" within Question 54, and throughout this section. If "planned" intake structures is not tied to an actual funds commitment, very tentative proposals may be included in response to this question. Further "planned" intake structures should be covered only if funds have been appropriated and modifications have been designed with sufficient specificity to produce meaningful estimated or design information.

**RESPONSE** The definition in section has been deleted.  
Respondents must refer to the Glossary for definitions.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q56       |
| <b>COMMENT ID</b>          | 316.UWAG.144            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 85, 86 Question 56(c), (d)

Commenter questions the relevancy and utility of longitude/latitude information in the context of the rule-making. Other portions of the questionnaire adequately characterize the ecosystem features in the area of the facility.

For facilities producing greater than 100 MW, EIA Form 767 requires submission of the longitude and latitude of cooling water outlets in degrees and minutes. EPA should use this source, as there is no justification for requiring respondents to pinpoint the intake location by inclusion of longitude/latitude seconds.

**RESPONSE** The latitude and longitude information requested has been deleted.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q57       |
| <b>COMMENT ID</b>          | 316.UWAG.145            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 87 Question 56(i)

Question 56(i) includes the term "cooling water flow" in italics and bold, in the style of defined terms used throughout the questionnaire. However, the glossary does not define "cooling water flow." If EPA has inadvertently omitted the definition, Commenter requests that we be provided an opportunity to comment on the definition as soon as possible.

Commenter questions the practical utility of this inquiry. Why is it important, in considering the possible regulation of cooling water intake structures, to determine the precise uses of cooling water flow?

For the "other" category, the form provides inadequate space for describing the use.

**RESPONSE** The question has been deleted.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q63       |
| <b>COMMENT ID</b>          | 316.UWAG.146            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 88 Question 57(a)

As described in Commenter's comments on Part 3: Glossary to Technical and Economic Questionnaires, the term tidal river is confusing and overlaps with the definition of estuary. Therefore, it should be deleted. This question should refer to "non-tidal stream or river."

**RESPONSE** For the purposes of this questionnaire, the term "tidal river" means the seaward most reach of a river/stream where the salinity is < 0.5 ppt at a time of annual low flow its surface elevation responds to the effects of coastal lunar tides. Where the river salinity exceeds 0.5 ppt, the respective river reach will be viewed as estuarine.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q63       |
| <b>COMMENT ID</b>          | 316.UWAG.147            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 98 Question 63 identifies, inter alia, wetlands, river confluences and migratory routes and other categories as "sensitive ecological areas." This inquiry is irrelevant to § 316(b). Instead, EPA should seek to identify intake-susceptible indicators. For example, it is irrelevant if a large adult fish, following a migratory route, transects the cooling water intake zone, since such fish are generally not susceptible to impingement,

If EPA nonetheless retains the question, it should make all responses optional, because many companies will not have the required information. Moreover, for several of the categories (e.g., location of submerged vegetation and reefs) existing information may be dated.

Commenter supplies below specific comments on portions of Question 63.

Except as noted below, EPA should base the radius requirement on the area directly influenced by the maximum water withdrawal rate from the facility. Generally, this would equate to a radius of 1/4 mile or less and would not involve inland features. For facilities where there are physical barriers (e.g., a jetty) between the intakes and the items specified in 26(b)-26(j), the linear distance to these items should be used rather than a radius.

Page 98 Question 63(a), (b), (c)

EPA requires respondents to identify whether their intake structures are located within a one-mile radius of their facilities' discharge, discharges of other plants, and cooling water intake structures of other plants. Questionnaire respondents should not be responsible for determining whether and how the discharge and intake structures of other facilities influence intake water parameters. See also Commenter's general comments.

Additionally, the upstream/downstream designations of each of these questions is not meaningful for ocean, estuary, and tidal river plants.

Page 98 Question 63(d), (c), (g), (h)

EPA classifies areas of submerged vegetation, reefs (coral, oyster, or artificial), wetlands and confluence of tributaries as "sensitive ecological areas." While such areas may be areas of ecological sensitivity, it is not necessarily true that they are ecologically significant. The productivity of wetlands, for example, varies widely, and depends on a host of factors, including surrounding land use. Also, formerly productive oyster reefs may no longer be productive due to causes wholly unrelated to cooling water intakes (e.g., MSX). Areas of submerged vegetation and confluences of tributaries may or may not have ecological significance. Additionally, migratory routes would be relevant only if biota in the zone of influence of the facility were susceptible to impingement or entrainment, but not otherwise.

Page 98 Question 63(f)

EPA designates fish/shellfish spawning and nursery areas as "sensitive ecological areas" and requires respondents to identify whether their intake structure is within one mile of such areas. This question presents several difficulties. First, facilities may not have current information or any information at all - about fish/shellfish spawning/nursery areas. While EPA provides a "data not available" response, it is not clear when a respondent may resort to this response. Is the respondent expected to gather information from outside sources? Commenter recommends that respondents not be required to generate any new data or conduct external research to answer this question.

Also, fish spawning areas can change. These changes may be associated with changes in water quality, removal of barriers to migration (such as removal of dams), and population pressures.

Therefore, to the extent that power plants can identify fish spawning areas, EPA should recognize that the designations are only approximate.

Also, respondents should only be responsible for designation of spawning and nursery areas for recreationally or commercially important species, or designated representative important species. Information on other species is sometimes very limited, and is likely to be irrelevant to any power plant impacts.

**RESPONSE** This question has been deleted.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q63       |
| <b>COMMENT ID</b>          | 316.UWAG.148            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 98 Question 63(I)

The definition of "protection sanctuaries" is too vague to provide clear guidance to respondents on this question. More significantly, the existence of many types of areas that might fall within the definition of "protected sanctuaries" (e.g., protected bird nesting areas) is irrelevant in the § 316(b) context because the ecological functions being protected are not affected by the operation of intake structures.

## Page 99 Question 63(j)

EPA asks respondents to identify any areas of "critical habitat for any rare, threatened, or endangered species" located within a one mile radius of the planned intake structure. This request raises many issues. First, while power plant operators generally know if their intake area harbors occasional members of a threatened or endangered species, determining whether the area represents "critical habitat" is usually a task for the Department of the Interior. See Commenter's recommended definition for "critical habitat."

Second, facilities cannot be expected to determine what is a "rare" species in the absence of a federal or state determination.

Third, identification of critical habitat for upland species or aquatic species not susceptible to cooling water intake effects is irrelevant.

**RESPONSE** This question has been deleted.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q9        |
| <b>COMMENT ID</b>          | 316.UWAG.066            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A: General Plant Information Page 10,12 Question 9, 11

The Questionnaire should not request 1998 information, if it is to be completed in a timely and verifiable manner in 1998.

**RESPONSE** EPA has deleted Q.9 from the survey.

EPA modified Q. 11 to request data for a typical calendar year since 1996.

Reflecting EPA's current project schedule, the detailed 316(b) questionnaire will request data for 1996, 1997, and 1998. The questionnaire will not be administered until the later part of 1999. EPA expects that data for 1998 will be available at that point.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/D3/P1/Q9        |
| <b>COMMENT ID</b>          | 316.UWAG.120            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 67 Question 43(a)

The definition of "discrete biological study of impingement" is not clear. Would it include monitoring of the numbers of organisms impinged at a facility? The phrase "biological effects of impingement" implies a study of population-level effects, not simply a count of organisms impinged. Furthermore, the definition describes the purpose of such a study as evaluation of "the rate or volume at which organisms are trapped against the outer part of one or more intake structures during periods of cooling water withdrawal." This is usually an initial step in impingement studies but far from the overall purpose of the studies, which is better stated as an evaluation of the survival rate and condition of organisms that are trapped against the outer part of the intake structures. See Commenter's recommended definition of "discrete biological study of impingement," in Section V, below.

**RESPONSE** The term "discrete biological study of impingement" is a phrase which is meant to identify studies that have not been considered part of a Section 316(b) Demonstrations Study.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/DEF             |
| <b>COMMENT ID</b>          | 316.UWAG.156            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 9, Question 12(b)

The question appears to be incorrectly phrased. Commenter suggests the question was intended to read as follows: "Please list each other economic activity associated with the generation unit in the spaces provided."

**RESPONSE** In response to comments, Question 12 of Document III was removed from the 316(b) questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.011            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 4. Affordability

EPA notes that it intends to use the economic data to assess the economic impacts of § 316(b) requirements, including "how many utilities are likely to incur adverse economic and financial impacts as a result of compliance with [the] regulation, how large the impacts will be, and if the impacts will be more severe for small firms than non-small firms." (Document III, Part 2, p. 1). As with the benefit-cost comparisons, an approach similar to effluent guidelines would improperly evaluate the affordability of intake technologies on a categorical basis rather than a plant-specific basis. Using the effluent guidelines model, EPA frequently determines that a certain level of plant closures or other severe economic impacts is acceptable within a class or category of facilities required to retrofit a particular technology. Because the Questionnaire follows this approach, it suggests that EPA is pursuing the development of a categorical, technology-based regulation.

In the § 316(b) context, such a categorical approach would directly contradict Congressional intent. As EPA correctly stated in the preamble to its 1976 final rule, "the term 'available commercially at an economically practicable cost' reflects a Congressional concern that the application of 'best technology available' should not impose an impracticable and unbearable economic burden on the operation of any plant subject to Section 316(b)." 41 Fed. Reg. 17,388 (April 26, 1976) (emphasis added). The Agency went on to emphasize that "consideration of the economic practicability of installing . . . [best] technology must necessarily be conducted on ... [an] individualized basis." *Id.* The effluent guidelines model does not accommodate this case-by-case evaluation of affordability, and would not be faithful to Congressional intent unless EPA were to establish "best technology available" at a level which assures that no plant would experience an impracticable and unbearable economic burden. As a regulatory strategy, such a least-common-denominator standard surely would be less effective than the flexible approach employed by EPA for over 20 years.

**RESPONSE** EPA recognizes the highly site-specific nature of 316(b) regulations and does not intend to pursue a categorical, technology-based regulation. In fact, EPA intends to collect enough technical and economic information on all utilities and a statistically valid number of plants potentially subject to 316(b) regulation so that a case-by-case evaluation can be accomplished. However, in order to fulfill its analytic requirements, EPA still needs to collect certain economic and financial data. For example, utility-level information is needed because the Regulatory Flexibility Act (RFA) of 1980 and the Small Business Regulatory Enforcement Act (SBREFA) of 1996 define small business at the firm/utility-level, not at the facility-level. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.) In order to meet the obligations specified in these statutes and

mandates, EPA needs economic and financial data from facilities and their parent firms. Each question asked in the Financial and Economic Part of the questionnaire fulfills a specific function in economic analyses which EPA is required to conduct. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.012            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/18/1998 00:00:00.00  |

---

**COMMENT** As with the benefit-cost assessment, EPA might be concerned that it requires the Questionnaire information to meet the requirements for economic analyses when it proposes its § 316(b) regulations. In this case as well, Commenter believes that the site-specific nature of the § 316(b) determinations means that EPA should not attempt to predict future § 316(b) decisions, but rather should provide a framework that guarantees that the substantive concerns of relevant administrative and statutory requirements (e.g., SBREFA) are addressed. See Section III.A.

Commenter believes that, as presently formulated, the Questionnaire is not faithful to the proper performance of EPA's functions. The Agency should not proceed to gather data associated with an inappropriate approach to evaluating economic impacts.

**RESPONSE** EPA recognizes the highly site-specific nature of 316(b) regulations and does not intend to pursue a categorical, technology-based regulation. In fact, EPA intends to collect enough technical and economic information on all utilities and a statistically valid number of plants potentially subject to 316(b) regulation so that a case-by-case evaluation can be accomplished. However, in order to fulfill its analytic requirements, EPA still needs to collect certain economic and financial data. For example, utility-level information is needed because the Regulatory Flexibility Act (RFA) of 1980 and the Small Business Regulatory Enforcement Act (SBREFA) of 1996 define small business at the firm/utility-level, not at the facility-level. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.) In order to meet the obligations specified in these statutes and mandates, EPA needs economic and financial data from facilities and their parent firms. Each question asked in the Financial and Economic Part of the questionnaire fulfills a specific function in economic analyses which EPA is required to conduct. These functions are outlined in the detailed justifications of the questionnaire which can be found in Attachment 8 of this document.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.013            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 5. Supplementing The Questionnaire With Sampling Data From Some Subset Of Facilities Is Not Likely To Overcome The Problems Inherent In EPA's Approach

The Agency acknowledges that even the huge amount of data it seeks may not be enough to allow it to develop § 316(b) rules. Rather, the Agency says, the Questionnaire is just "one mechanism through which the Agency is gathering background technical and cost data on cooling water intake structures." EPA further states that it intends "to use the environmental assessment data and BTA data from the questionnaire, in part, to identify potential facilities for site sampling and analyses in order to collect more in depth data on adverse environmental impacts and BTA efficacy." *Id.* Although the Notice does not describe what type of sampling EPA intends to conduct, Commenter understands it may include impingement and entrainment sampling and, possibly, some sampling to characterize the affected instream population or community. [16]

For the reasons discussed above, Commenter agrees that the Questionnaire responses alone will not provide an adequate basis from which EPA could implement § 316(b) on a generic or categorical basis, even if such an approach were appropriate under § 316(b). But Commenter is concerned that sampling a subset of facilities for a short period of time, as EPA apparently proposes, will not provide data that are sufficiently accurate and complete to support an analysis of the kind EPA apparently contemplates. Commenter does not believe that such sampling is likely to yield results that can be applied at other sites, given the highly site-specific factors that dictate (1) the level of entrainment and impingement occurring at a given facility over time, (2) whether such entrainment or impingement creates any meaningful "adverse" environmental impact, (3) if so, what technically available intake technologies are available to reduce such impacts, and (4) from among available technologies, which one is the "best" for a particular site, taking into account trade offs among different species and life stages, other environmental impacts, and costs. Even as to those sites at which the sampling is conducted, the results may provide only a "snapshot," which may or may not reflect an accurate picture of the effects of the intake structure.

Even if such a sampling program were useful, it is not clear that it can be completed within the currently prevailing time frame. As the Notice indicates, EPA is obliged to consider establishment of § 316(b) regulations pursuant to a Consent Decree entered by the United States District Court for the Southern District of New York. 63 Fed. Reg. 3,739. The Consent Decree requires EPA to issue proposed § 316(b) regulations by July 2, 1999, and to take final action with respect to § 316(b) regulations by August 13, 2001. Assuming that EPA pursues an extremely ambitious schedule for issuing the Questionnaire, it is unlikely to have responses back before December 1998. [17] This leaves only six months for the Agency to organize and analyze the responses, [18] select sampling

sites, plan and conduct the required sampling, and assimilate and analyze the sampling results for use in developing the proposed rule. 19 It seems difficult to believe that EPA could mount a meaningful sampling program in such a relatively short period of time.

---

[16] As discussed above in Section II.A.2, without some analysis of population-level effects, raw impingement and entrainment numbers reveal little about whether impact is "adverse."

[17] It is now early April, and EPA has many steps to complete before it issues the Questionnaire. The Agency must review all of the comments it receives, respond to them, and revise the Questionnaire accordingly. This could take two or three months. EPA also must complete development of the other elements of its ICR package and submit it to OMB for review. OMB then has sixty days to review EPA's submission, all of which time will likely be necessary given the complexity of the issues involved. Even if OMB determines that no changes are warranted, and approves the Questionnaire as submitted, it likely will be September before the Questionnaire can be issued. If EPA gives respondents only the 90 days it has proposed (which Commenter does not believe will be sufficient for many facilities), it would not have data in hand before December 1998.

[18] Indeed, it is unclear that EPA will have adequate time, absent some extension of the current rulemaking schedule, to organize and analyze the data sought by the Questionnaire before it issues its proposed rule. Faced with the daunting task of entering into some analytical framework over 356 pieces of data from 1,705 questionnaires, EPA is likely to require several months for data input alone. As the responses are unlikely to be available until December, 1998, at the earliest, it is not clear how EPA could complete a meaningful analysis of the Questionnaire data, develop an adequate description of that analysis, and use the results to craft its proposal in the six months remaining, even if it concluded no follow-up sampling is necessary.

[ 19] If EPA plans to rely upon the sampling data it collects, or its analysis thereof, the Agency clearly will need to have completed these tasks so that the data and analysis can be made available during the public comment period for the proposed rule.

## **RESPONSE**

EPA is using secondary sources of data to supplement the data collected through the questionnaire. EPA has developed a case study model to evaluate site-specific impacts and associated intake structure technology. EPA believes that this information will support the rule development process, especially with respect to EPA's benefit analysis.

EPA filed a motion with the court on August 2, 1999 to modify the Consent Decree deadlines. For existing sources, EPA is requesting to propose the rule on May 16, 2002, and to take final action with respect to those regulations on April 1, 2004. If EPA is successful in getting its requested extension, then there is sufficient time to available to use the data collected through the case studies to support the rule development.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.018            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT**      b. Limitations Of The Draft Questionnaire With Regard To Benefits-Cost Comparisons

Viewed against the above requirements and EPA's stated objectives, the Questionnaire dwells on areas unlikely to produce useful information while simultaneously omitting subjects that could be important. In particular:

Costs obtained through the survey are not likely to identify the cost of individual control technologies. Utilities typically do not keep data on the capital, operating, or maintenance cost of the intake structures at their facilities. Asking utilities at this point to allocate costs to these structures will not produce accurate and reliable estimates.

The survey seeks historical costs that may not be a good measure of prospective costs. Even if reliable cost data were available on specific intake structures, such historical data, sometimes decades old, would be a poor proxy for the actual costs that utilities would incur in the future for similar situations.

Costs obtained through the survey will not include many components. The survey would not uncover critical components such as replacement power costs or costs associated with adverse environmental effects caused by particular technologies. The survey would also not address the complexities of emerging utility competition on costs. (This is discussed more fully below in the context of the affordability issue.)

Costs obtained through the survey would not be comparable across technologies and utilities. Utilities differ widely in their accounting practices (e.g., treatment of capital depreciation), and thus comparisons or extrapolations are likely to be inaccurate.

Survey data on aquatic circumstances would not provide a sufficient means of developing dollar benefits estimates. Any information on impingement and entrainment levels at particular facilities will have to be combined with fish population information and accepted environmental economic valuation techniques to produce dollar benefit estimates.

Survey data are not likely to isolate the incremental costs and benefits of technological alternatives. Collecting information on current controls at a facility says little about the incremental costs or net benefits of alternative controls.

Survey data do not specify how site variability will be accommodated. Site differences in the marginal benefits of particular technologies are likely to be particularly important, although marginal costs could differ substantially as well.

In sum, all of these difficulties suggest that the survey is not likely to produce usable information on the costs and benefits of technical alternatives for reducing entrainment and impingement. These difficulties are largely inherent in the basic survey approach, which focuses on current situations and the collection of historical data.

**RESPONSE**

While the 316(b) questionnaire will be an important instrument in determining BTA, compliance costs and potential benefits of 316(b) regulation, it is important to note that additional data sources will be utilized in making these determinations. This is particularly the case for the assessment of benefits from this regulation. EPA is in the process of collecting biological and ecological data on aquatic populations and habitats around plants subject to 316(b) regulation. These data will be used together with information from the questionnaire to estimate potential adverse impacts as well as potential benefits from 316(b) regulation of surveyed plants.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.019            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** c. Limitations Of The Draft Questionnaire With Regard To Affordability Considerations

Both the Regulatory Flexibility Act, 5 U.S.C.A. § 601-12 (1996 and Cum. Supp. 1997), and the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA"), 5 U.S.C.A. § 601 note (Cum. Supp. 1997), require that EPA consider the implications of major regulations on the viability of plants and firms, particularly those with a small number of employees. [23] Because the draft questionnaire would not produce valid estimates of the likely costs of potential intake technologies, as discussed above, it would not provide EPA with the information needed to assess these implications.

Moreover, determining the financial and economic impacts of potential § 316(b) requirements on electric utility plants is particularly difficult at this moment because of the upheaval in the industry associated with the movement toward utility restructuring and greater competition. The following are the considerations that need to be taken into account:

Modeling the implications of increased § 316(b) compliance costs on electric utility decisions pertaining to particular facilities in the world of competition would be very complex. The analysis would have to include modeling of electric grid dispatch, transmission practices, pricing and constraints, electric demand (load) projections, and supply alternatives. The 600-plus-page FERC Order 888, issued April 24, 1996, provides some indication of these difficult and complex modeling challenges.

These considerations mean that a plant made uneconomic by additional § 316(b) compliance costs would not necessarily be replaced by another facility at the same, or another identifiable, location or even owned by the same utility. The vertical disaggregation of the utility industry - in which electric generating facilities are owned and operated by companies outside the traditional public utility sector - confounds simple efforts to identify substitute generation.

The widespread uncertainties also mean that historical information on facilities, costs, rates, and other factors will be of little value as a predictor of future utility responses to additional regulatory burdens.

The transition that the electric utility industry is undergoing means that, while utilities are currently regulated, they may well be deregulated by the time final rules are promulgated in 2001. The uncertainties inherent in this transition period make it difficult to assess how either existing or additional regulatory costs will be passed on and what groups will ultimately bear such costs.

[ 23] The Questionnaire may be particularly burdensome to small electric utilities. According to the Small Business Administration, electric utilities producing less than 4 million megawatt hours annually qualify as small business concerns. 13 C.F.R. § 121.20. American Public Power Association ("APPA"), the National Rural Electric Cooperative Association ("NRECA"), and the Edison Electric Institute ("EEI") all have members who meet this criterion. APPA represents approximately 1200 publicly owned electric utilities that would meet this criterion. NRECA represents approximately 30 rural electric cooperatives (or 50 percent of its members) that meet the criterion. EEI represents approximately 30 member companies that meet this criterion.

**RESPONSE**

Two issues are raised in this comment:

1. The draft questionnaire will not produce valid estimates of the likely costs of potential intake technologies necessary to conduct small business analyses.
2. As a result of industry deregulation, determining the financial and economic impacts of potential 316(b) requirements on electric utility plants is particularly difficult.

EPA's response:

1. Using these cost estimates as well as the financial and economic data collected in the questionnaire and from public sources, EPA will conduct the required small business analyses to ensure that small businesses are not disproportionately impacted by 316(b) regulations.
2. EPA agrees that determining economic and financial impacts of entities potentially affected by 316(b) regulation will be difficult considering the transitory state of the industry. While the use of historical financial data may not be perfect in predicting future economic performance considering the widespread uncertainty, these data provide the baseline from which utilities and plants are departing into a future competitive market. As such, these data are the best available to conduct the required 316(b) economic analyses. EPA also agrees that a valid analysis would need to take into account considerations such as electric grid dispatch, transmission practices, pricing and constraints, electric demand (load) projections, and supply alternatives. In order to take these factors into consideration, EPA intends to make use of existing electricity market models.

While the widespread uncertainties associated with industry deregulation will make the determination of economic impact more difficult, EPA nevertheless has to comply with the analytic requirements of various statutes and mandates. Examples of statutes and mandates that require the Agency to carry out these economic analyses are Executive Orders 12866 and 12898, the Unfunded Mandates Reform Act of 1995, the Regulatory Flexibility Act of 1980, and the Small Business Regulatory Enforcement Act of 1996. (See Attachment 2 for a detailed explanation of the Agency's requirements for economic analysis in the rulemaking process.) The information collected in the questionnaire, data from public sources, as well as existing electricity market models will all serve in support of these analyses.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.020            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** The increasing competition that many utilities face means that confidentiality considerations will be important in responding to any survey. Indeed, even repackaging publicly available information (e.g., FERC Form 1) can raise confidentiality concerns.

**RESPONSE** It should be noted that data from FERC Form 1 is publicly available and therefore not eligible for CBI status. Data synthesized and repackaged from publicly available sources is also not confidential. On the other hand, financial data requested in the questionnaire and identified by the respondent as confidential will be protected using EPA's standard CBI procedures.

In response to this and other comments, EPA removed Question 15 of Document II (request for studies on deregulation) from this questionnaire.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.024            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** As to Section D of Document II, Commenter questions how general information about sources of energy, power purchases and disposition of energy from the facility relate to § 316(b). Commenter recommends deleting Section D of Document II in its entirety. If the section is retained, EPA should explain how each of the questions is relevant to its § 316(b) objectives.

**RESPONSE** In response to this and other comments, Section D of Document II was removed from the 316(b) questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.032            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** A. Appropriate BTA Determinations And The Financial/Economic Sections Of The Questionnaire

As we have stressed throughout these comments, § 316(b) decisions must be, in nearly every circumstance and aspect, site-specific. While EPA may be contemplating a categorical approach to BTA determinations, Commenter believes such an approach is impracticable, due to the multiple overlapping factors that can affect BTA selection. The relative significance of these factors varies from site-to-site, and thus they defy reduction to a simple matrix. Given the primacy of site-specific factors, Commenter urges EPA to focus on developing a framework for BTA decision-making, rather than a rule which mandates a certain technology or set of technologies for certain types of facilities.

If EPA's objective is to develop a framework for rendering site-specific BTA determinations, then the financial/economic utility- and plant-level information gathered by the Questionnaire should not attempt to analyze the costs of BTA. The framework itself - if appropriately designed - will incorporate a cost/benefit analysis of BTA technologies, and will ensure that appropriate site-specific cost information, including plant-level effects, are considered.

By moving towards the site-specific BTA approach, EPA will greatly decrease the amount of financial/economic information that it needs to gather as a part of the Questionnaire effort. For example, EPA could delete much of Document II, Section D, because all of the information about utility-level costs of purchased power and revenues could be considered, as appropriate, in individual § 316(b) proceedings. Similarly, many of the questions in Document III, Part 2 could be eliminated.

Admittedly, EPA must address RIA and SBREFA requirements by analyzing the overall cost of the proposed rule. However, EPA's extensive generic "affordability" approach, which it typically uses for effluent guidelines rulemakings, is simply not applicable to § 316(b). EPA can collect much less data and still meet its RIA and SBREFA requirements if its general objective is a site-specific BTA determination framework that builds in, as it would have to, utility and plant-specific cost considerations. Under such an approach, the RIA and SBREFA analyses which EPA must perform for the proposed rule could focus on the utility and plant-related costs, benefits and affordability of applying the decision framework on a site-specific basis, rather than attempting to assess the economic impacts of applying one or more technologies at specific sites.

**RESPONSE** This comment raises several issues:

1. §316(b) decisions must be site-specific. Therefore, EPA should focus on developing a framework for BTA decision-making, rather than a rule which mandates a certain technology or set of technologies for certain types of facilities.
2. Financial/economic utility- and plant-level information gathered by the Questionnaire should not attempt to analyze the costs of BTA.
3. With a site-specific BTA approach, EPA could delete much of Document II, Section D and many questions in Document III, Part 2.

EPA's response:

1. EPA intends to develop a framework for BTA decision-making that can be applied on a site-specific basis by local permit writers. It is not EPA's intention to develop a rule that will mandate certain technologies for certain types of facilities. However, even when developing a BTA decision-making framework, EPA will still need to conduct economic analyses that will assess likely impacts of its regulation. Information requested in the questionnaires will support both the development of a BTA decision-making framework as well as the required economic analyses.
2. The economic and financial questions in the Financial and Economic Part of the questionnaire are not intended to provide information for assessing best technology available (BTA) requirements and 316(b) compliance costs. Rather, this part of the questionnaire is designed to assess the facilities' and their firms' ability to absorb these compliance costs and the economic impacts resulting from 316(b) regulation.
3. In response to this and other comments, Section D of Document II was removed from the 316(b) questionnaire. In addition, both the utility-level and the plant-level economic and financial parts of the questionnaire were further simplified to reduce respondent burden.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.035            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 4. Utility-Generated Deregulation Studies Are Extremely Varied And Speculative And, As Such, Will Not Be Useful

EPA's requirement that respondents submit proprietary studies regarding the possible effects of deregulation is extremely troubling to the industry. In planning for deregulation, companies have been forced to make many assumptions about the future that may or may not hold true. At a most basic level, companies do not know what federal and/or state legislation on deregulation may require. They also have to make assumptions about the future costs of fuel and other raw materials, the likely disposition of major assets, and the strategic moves of competitors. These deregulation planning documents are thus highly speculative and hypothetical.

Additionally, the deregulation planning documents are too varied in content, approach, methodology and quality to allow even generic comparisons.

Individual company factors such as labor relations, status of ratemaking determinations, diversification into other business lines, age and condition of existing units, and available cash flow may influence strategic planning and figure into the design of deregulation planning documents. Drawing generic conclusions from a synthesis of studies designed to fulfill a variety of purposes (albeit all related in some respect to deregulation) will be completely unreliable.

Furthermore, for the many utilities that have been participants in mergers and acquisitions related to deregulation, the burdens associated with producing all of the relevant studies will be extreme. Several companies have spent years planning a merger, only to have political factors or other problems derail the project. Those companies have accumulated a staggering amount of studies related to the merger and its effects on all areas of operations and economic performance. If EPA reasonably expects to analyze these studies, it would need, at a bare minimum, several months to do so. This effort will prove unenlightening in the case of mergers that have failed due to intervening external circumstances.

For all of the above reasons, the collection and analysis of utility-generated deregulation studies is simply untenable. EPA has not demonstrated a compelling need for the studies, and given their diversity and speculative nature, it could not do so. Instead, EPA should gather existing analyses of deregulation from other expert agencies, such as FERC or state public utility commissions. In the proposed rule, the Agency should explain how deregulation issues influenced its regulatory determinations, and seek public comment on those issues. In Commenter's judgment, this approach would be a cost-effective and efficient method of

accounting for changes in the industry due to deregulation.

**RESPONSE** In response to this and other comments, the request for studies on the potential effects of industry deregulation on respondents were removed from the 316(b) questionnaire.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.043            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 3 Question - Instructions for Table 1.

For each steam electric unit operated by the utility, EPA seeks information about the percent of each unit owned by each utility, whether that ownership has changed since January 1, 1995, and, if so, why it has changed. This information appears to be irrelevant to the potential regulation of cooling water intake structures. Commenter requests that these inquiries be deleted

**RESPONSE** EPA solicits information on the ownership of generating units to be able to appropriately assign compliance costs to utilities. While this information will not be useful in determining compliance costs of 316(b) regulation, it will be important in estimating the potential financial impact of the regulation on utilities.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.044            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 3 Question - Instructions for Table 1.  
EPA requests the EIA Generator Code for any plant not listed by the Agency on Table 1. EPA should insert a cross-reference to the appropriate EIA form for this information.

Page 4 Question - Instructions for Table 2.  
For each steam electric unit or partial unit owned by a utility but not operated by it, EPA seeks information about the percent of each unit owned by the utility, whether that ownership has changed since January 1, 1995, and, if so, why it has changed. This information does not appear to be relevant to the potential regulation of cooling water intake structures. Commenter requests that these inquiries be deleted.

Page 4 Question - Instructions for Table 2.  
EPA requests the EIA Generator Code for any plant not listed by the Agency on Table 2. EPA should insert a cross-reference to the appropriate EIA form for this information.

Page 4 Question - Instructions  
EPA does not specify whether the contact person to be listed on page 4 must be the person who certifies the response to EPA.

Page 5,6 Question - Tables 1 and 2.  
Instructions on the tables for operating status and percent of ownership columns instruct the respondent to "check the box" and then correct the information. However, it is not clear where EPA intends respondents to enter the check. The table format should be revised to clarify this action.

**RESPONSE** Four issues are raised in this comment:

1. A cross reference to the appropriate EIA form should be included when requesting the EIA Generator Code for units not listed in Tables 1 and 2.
2. Information on the percentage of a unit owned by the utility as requested in Table 2 is not relevant to 316(b) regulation.
3. Instructions do not specify whether the contact person must be the person who certifies the response to EPA.
4. The table format of Tables 1 and 2 should be changed to provide check boxes.

EPA's response:

1. In response to this and other comments, a cross-reference to the appropriate EIA form has been provided.
2. EPA solicits information on the ownership of generating units to be able to appropriately assign compliance costs to utilities. While this information will not be useful in determining compliance costs of 316(b) regulation, it will be important in estimating the potential financial impact of the regulation on utilities.
3. In response to this and other comments, the instructions to this question have been changed. The instructions now specify that the contact person should be the person most knowledgeable about this part of the survey and does not have to be the person who certifies the responses.
4. In response to this and other comments, check boxes have been added to Tables 1 and 2.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.045            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document Page 1 Question - General Information and Instructions.

The second paragraph states: "in order to evaluate the full costs of the regulation, EPA will consider the costs associated with performing 316b, additions to cooling water intake equipment, and operating and monitoring costs associated with the regulation." This sentence is not clear and should be redrafted. What is "performing 316b"?

**RESPONSE** In response to this and other comments, this sentence has been redrafted to read performing 316(b) studies.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.050            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 5 Question 4

Why does EPA need any information about the total number of full-time equivalent employees of a utility for three separate years? Commenter questions the practical utility of this information to potential regulation of cooling water intake structures.

Page 5 Question 4(c)

The question seeks information on "Total Employees (including electric department and other employees)." What does the term "electric department" mean? EPA should clarify what information it is seeking to obtain.

Page 5 Question 5 (a), (b) Question 5(b) states:

"Please provide the full legal name of the highest level of domestic business entity that, on December 31, 1997, owned the largest interest in the utility." EPA's focus on domestic business entities only is misguided. The rulemaking may adversely affect non-domestic parent corporations or affiliates of U.S. operating companies. These possible effects may have serious ramifications for the United States subsidiary or affiliate.

Page 7,8 Question 10,11

EPA stated, in Question 2 of this document, that the focus of the Questionnaire is calendar year 1997. If that is the case, why does it need purchased power data and disposition of energy data for 1995 and 1996 as well? These data are not likely to be very relevant to the rulemaking, given the rapid changes in the electric utility industry over the last several years.

Furthermore, depending on when EPA issues the final Questionnaire, 1997 data may not be available.

**RESPONSE** Five issues are raised in this comment:

1. Why does EPA need information about the total number of full-time equivalent employees of a utility for three separate years?
2. EPA should clarify the term "electric department."
3. EPA's focus on domestic business entities only is misguided.

4. Why does EPA need purchased power data and disposition of energy data for 1995 and 1996 in addition to 1997 data.
5. Depending on when EPA issues the final Questionnaire, 1997 data may not be available.

EPA's response:

1. EPA requests information on the total number of utility employees to estimate potential employment effects of compliance with 316(b) regulation. Since the utility-level is an important level in the economic analysis of 316(b) regulation, the effects of utility closure may be one of the impact measures employed in the analysis. EPA routinely requires multiple years of data to capture normal business cycle variations and also to reflect the fact that firms typically do not make operational decisions based on a single year's performance. EPA generally maintains this three-year time span throughout the financial and economic portions of this questionnaire.
2. In response to this and other comments, the instructions to this question were modified to more clearly identify the information requested.
3. EPA focuses on the domestic parent firm as a level of its economic analyses because it has to conduct analyses of impacts on small businesses, governments and other small entities as required by the Small Business Regulatory Enforcement Act (SBREFA). These analyses are conducted on the firm-level, which is defined as the highest level of U.S. business entity. As a result, EPA does not collect information on business entities that are foreign companies other than that related to U.S. facilities. While an analysis of all business entities potentially affected by this regulation would be desirable, EPA believes that collecting additional information on affiliates of U.S. operating companies would result in an unjustifiable burden on the surveyed industry.
4. In response to this and other comments, the request for purchased power data and disposition of energy data was removed from the 316(b) questionnaire.
5. Reflecting EPA's current project schedule, the detailed 316(b) questionnaire will request data for 1996, 1997, and 1998. The questionnaire will not be administered until the later part of 1999. EPA expects that data for 1998 will be available at that point.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.051            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document II Page 7,8 Question 10,11

EPA should specify a reference year for calculating all of the dollar figures in these tables.

**RESPONSE** In response to this and other comments, Questions 10 and 11 were removed from the 316(b) questionnaire.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.052            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document II Page 10 Question 15

For reasons stated in Section III.A of our general comments, Commenter strongly objects to the inclusion of this question and requests that it be deleted.

**RESPONSE** In response to this and other comments, Question 15 of Document II was removed from the 316(b) questionnaire.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.151            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 4 Instructions

EPA's instructions say that the bottom of every page will include a box to check indicating that "Information on this page should be considered confidential business information." In fact, that check box does not appear anywhere in the questionnaire. Therefore, it is very unclear how respondents should designate confidential business information.

**RESPONSE** CBI check-off boxes were inadvertently left out on the document published for public comment. In the final version of Documents II and III, Part 2, CBI check-boxes will be placed on the bottom of each page of the final questionnaire that contains data eligible for CBI status.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.152            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 4 Question 4

EPA should specify a reference year that the respondent should use when providing the costs.

Furthermore, EPA should not need 3 years of data for purposes of its analysis. Commenter recommends collecting 1997 data only. If EPA nonetheless retains the three-year chart, it should clarify question 4(b), which asks for "original costs" of structures, improvement, and equipment, but still provides columns for 1995, 1996 and 1997 data. Is EPA seeking amortization costs per year?

**RESPONSE** In response to this and other comments, Question 4 of Document III was removed from the 316(b) questionnaire.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.153            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 5 Question 5

EPA requests the number of plant employees associated with electricity generation for the years 1995, 1996, and 1997. Commenter questions the relevance of this question to the § 316(b) rulemaking.

If EPA nonetheless retains the question, it should be clarified. What does EPA mean by employees "associated with electricity generation?" Would that include clerical, security and grounds maintenance personnel, for example?

**RESPONSE** In response to this and other comments, Question 5 of Document III was removed from the 316(b) questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.154            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 5 Question 6(b)

The question asks: "Please list any economic activity not associated with the generation of electricity. For each activity, please check the box provided if that activity used cooling water in 1997."

Types of economic activities other than electricity generation that may occur at electric utility facilities include coal mining, land leasing and many other varied activities. In many cases, revenues and costs from these activities are not separately reported.

Page 5-6 Question 6

What is the relevance of other economic activities to the regulation of cooling water intake structures under § 316(b)? Commenter requests deletion of this question.

**RESPONSE**

EPA requires information on economic activities other than electricity generation to identify other activities that may be impacted as a result of 316(b) regulation. In cases of estimated full or partial plant closures, these economic activities and their contribution to the plant's and utility's financial well-being will be taken into account when estimating the total effect of plant impacts on a utility.

In response to this and other comments, EPA added instructions to estimate revenues and costs associated with other economic activities if they are not generally reported separately. In addition, EPA acknowledges the possibility that no revenues are associated with an activity by stating that revenues, "if any," should be reported.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/ECONDATA        |
| <b>COMMENT ID</b>          | 316.UWAG.155            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Page 9 Question 11(a)

EPA seeks the average cost of fuel per unit of fuel burned for each steam electric generating unit, for the years 1995, 1996 and 1997. Commenter finds this question very burdensome. It would require extensive research to compile the information. Furthermore, Commenter does not believe that EPA needs three years' worth of data for its analysis. Commenter requests that the question be deleted. Alternatively, it should request only 1997 data.

**RESPONSE**

Since the cost of fuel burned in a generating unit is the most important determinant in the dispatch decision for a unit, EPA believes that it is very likely that this information is routinely tracked by most utilities. EPA requires this information to estimate unit-level variable costs which are needed in the unit closure analysis.

EPA routinely requires multiple years of data to capture normal business cycle variations and also to reflect the fact that firms typically do not make operational decisions based on a single year's performance. EPA generally maintains this three-year time span throughout the financial and economic portions of this questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.UWAG.001            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 1. INTRODUCTION

These comments address three of the five questionnaires proposed by EPA - (1) the major privately owned electric utilities questionnaire, (2) the publicly owned electric utilities questionnaire, and (3) the rural electric cooperatives questionnaire. Page references and question number references throughout the comments refer specifically to the draft questionnaire for major privately owned utilities. However, since many portions of the publicly owned utilities and rural electric cooperatives questionnaires closely track the privately owned utilities questionnaire, Commenter intends these comments, to the extent they are applicable, to address all three questionnaires. Commenter requests that EPA evaluate all three questionnaires in the light of these comments. For ease of reference, these comments will refer to the questionnaires collectively as "the Questionnaire."

As EPA explains in the Notice, it proposes to issue the Questionnaire as one means of collecting data which it will use to develop regulations implementing CWA § 316(b). Section 316(b) provides:

Any standard established pursuant to Section 1311 of this title [CWA § 301] or section 316 of this title [CWA § 306] and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.

EPA says that it needs the Questionnaire information for the following purposes:

- (1) to "quantify adverse environmental impact from cooling water intake structures,"
- (2) to "evaluate the efficacy of control technologies," and
- (3) to "determine the economic reasonableness of the final rule" by performing various economic analyses, including a Regulatory Impact Analysis ("RIA") and an analysis of impacts under the Small Business Regulatory Enforcement Fairness Act ("SBREFA"). 63 Fed. Reg. 3,739.

For the reasons discussed below in Section II.A, Commenter does not believe that the Questionnaire, as proposed, will fulfill these needs, or otherwise provide the type of information the Agency will need to implement § 316(b) appropriately.

**RESPONSE**

EPA is unable to respond to this comment because it does not specifically address questions that the Commenter thinks do not meet EPA's data collection needs. In general, however, EPA has a practical utility for each question. EPA justified the data requested in the supplementary supporting documentation to the Information Collection Request.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.UWAG.003            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Commenter understands and appreciates the significant efforts that EPA has put forth to date in developing the Questionnaire. But Commenter believes EPA already possesses, in large measure, the data necessary to support conclusively the primary tenet of the § 316(b) rulemaking: site-specificity. EPA has gathered existing § 316(b) reports and literature [3] and intends to gather case studies of environmental impacts.[4] These materials form an adequate basis for Agency commitment to a site-specific regulatory approach. These comments explain why the current draft Questionnaire is inconsistent with a site-specific approach, and therefore unlikely to generate much useful data.

Commenter recommends instead an alternative that builds on the record EPA has already assembled, through maximum use of § 316(b) demonstration studies and related literature, as well as technical workshops and public meetings. Such an approach recognizes the complexity of the science, engineering, and economic factors that EPA has long recognized are the fabric of § 316(b) decision-making. Equally important, such an approach would be far more cost-effective and less burdensome to the regulated community. We hope that EPA will give such an approach, which is detailed below in Section II.E, all due consideration.

If EPA nonetheless determines to pursue its current course and issue the Questionnaire, Commenter has many grave concerns about its overall objectives and specific inquiries. Those concerns are described in Sections II - VI.

---

[3] See 63 Fed. Reg. 3,739 (detailed questionnaire is one mechanism through which EPA is gathering background technical and cost data); EPA, First Quarterly Status Report, Jan. 26, 1996, *Cronin v. Browner*, 93 Civ. 0314 (AGS) (S.D.N.Y.) (EPA has collected § 316(b) demonstration studies); Fourth Quarterly Status Report, Oct. 2, 1996 (EPA continues to collect "past case-specific studies conducted by § 316(b) permittees" and "reports on the availability and efficacy of control technologies"); Quarterly Status Report, Oct. 10, 1997 (EPA continues to collect data to determine what is an "adverse environmental impact" and what is the "best technology available" to minimize such impacts). All of the Quarterly Status Reports are attached to these comments as Attachment B.

[4] See EPA, Quarterly Status Report, April 10, 1998, *Cronin v. Browner*, 93 Civ. 0314 (AGS) (S.D.N.Y.) (EPA will develop detailed case studies of environmental impacts). See Attachment B.

**RESPONSE** Early in the data collection phase of the rulemaking effort, EPA attempted to use existing 316(b) studies as the basis for developing the regulation. Unfortunately, EPA could not draw any valid conclusions. Past section 316(b) determinations and biological studies do not share

common objectives, methodologies, data-gathering techniques, durations, or time frames. For this reason EPA needs to the data from the detailed questionnaire along with the data EPA is collecting from secondary sources to develop a scientifically sound rule. See response to 316.CMA.003 and 316.UWAG.007.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.UWAG.005            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** It is not obvious from the Questionnaire what kind of regulatory structure or decision-making logic EPA intends to employ in implementing 316(b). [7] Indeed, other than reciting the statutory language, EPA nowhere clearly describes what it believes § 316(b) requires.

From the general statements EPA has made, and the information sought in the Questionnaire, however, Commenter is concerned that the Agency may intend to approach the § 316(b) implementation process as a traditional, categorical effluent guidelines rulemaking.

As discussed below, Commenter does not believe that, as a legal matter, § 316(b) anticipates such an approach, nor do we believe that such an approach is workable as a practical matter. Thus, the Questionnaire, which appears to be premised on a categorical effluent guidelines approach, is flawed.

---

[7] We recognize that EPA will be completing its Information Collection Request ("ICR") package before submitting the package to OMB, and the Agency may intend to provide additional explanation or support for the Questionnaire in that submittal. But Commenter believes that EPA has an obligation to provide a sufficient explanation of its intended analytical framework and how the data will be used in that framework to provide a meaningful opportunity for comment. EPA's very general statements do not specifically describe how each type of data will be used, what type of other data EPA already has collected or intends to collect to supplement the requested data, and what type of analysis will be applied. Thus, Commenter does not believe EPA's general statements satisfy the Agency's obligation.

**RESPONSE** Since the public notice of the questionnaire, EPA has released a draft regulatory framework that indicates the type of regulation that EPA is considering. The questionnaire will help support this framework and help to develop options within the draft framework. See response to 316.EPSA.006 and 316.UWAG.029

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.UWAG.017            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 1. The Questionnaire Will Not Provide Economic And Financial Data That Is Useful Either In Determining Best Technology Available Or In Complying With The Requirements Of Executive Order 12866

The Questionnaire provides two potential uses of the financial and economic information being collected. First, the Questionnaire notes that "[EPA] will use this information to assess whether the costs of complying with cooling water intake structure guidelines will be disproportionate to the benefits resulting from the regulation." (Document III, Part 2, p. 1). Second, the Questionnaire notes that "EPA needs to determine how many utilities are likely to incur adverse economic and financial impacts as a result of compliance with regulation, how large the impacts will be, and if the impacts will be more severe for small firms than non-small firms.... EPA will estimate impacts on firm cash flow and assess the likelihood of full or partial plant closures as a result of the regulation." (Document III, Part 2, p. 1).

While the introduction argues that the Questionnaire is needed to provide the data for these assessments - which are important both to determine BTA and to provide economic analyses required under Executive Order 12866 - it is not likely to produce information to address either of them. The Questionnaire is likely to produce a vast amount of data that will be of little, if any, use to the EPA in developing appropriate regulatory guidelines or assessing the implications of decisions that are ultimately made with regard to § 316(b) requirements. There are other means of obtaining the necessary information that are much less costly and much more effective.

a. Requirements For Usable Economic And Financial Data

The following are the characteristics that the economic and financial data should have to provide usable information.

Environmental benefits are put in dollar values to the extent feasible. Data must be developed to assess the dollar values that can be demonstrably associated with environmental benefits stemming from alternative control technologies. Data on the number of aquatic organisms (typically in their early life stages) that are entrained or impinged are not sufficient, or even particularly useful, as explained above.

Costs are prospective, not historical. The evaluation of alternatives should be based upon costs that would be incurred to comply with any newly promulgated regulations, which might differ markedly from costs associated with technologies already installed.

Costs are complete. Costs should include all relevant elements, including - in addition to the obvious capital, operating, and maintenance costs - the possibility of replacement power costs

during any plant shutdown due to the retrofit or reductions in station output associated with operating the technology, as well as any costs associated with unintended environmental effects such as increased pollution or waste creation and disposal.

Costs are comparable across technologies and utilities. Costs from different parties should have the same basic assumptions (e.g., accounting practices for amortizing capital equipment) so that they can be compared and aggregated. These practices are not consistent across the utility industry.

The data collection process need not be perfect. But the basic data that are collected must be sound enough to provide a firm foundation for regulatory analysis.

**RESPONSE**

Two issues are raised in this comment:

1. The economic and financial parts of the questionnaire are not likely to produce the information required to determine BTA and to conduct economic analyses required under Executive Order 12866.
2. The economic and financial data should have certain characteristics to provide useable information.

EPA's response:

1. Contrary to the statement in the Introduction to the economic and financial part of the 316(b) questionnaire, the primary purpose of the economic and financial questions asked in the questionnaire is not to determine the costs of the various intake technologies but to assess potential economic impacts of the regulation on affected plants, firms, regions, industries, and subpopulations such as small entities and minority and low income populations. As such, EPA needs to collect information necessary to assess the ability of plants and firms to absorb the costs associated with compliance with 316(b) regulations. EPA believes that the data collected in the economic and financial parts of the questionnaire will provide the information necessary to conduct these assessments. Attachment 8 of this document provides further information on how each data element requested in the 316(b) questionnaire will be used in the regulatory development process.
2. EPA agrees that the characteristics listed by the commenter are important in conducting analyses of 316(b) regulation. However, none of the characteristics listed pertain to the economic analysis of this rulemaking. While these characteristics will be considered by EPA in its benefits analyses and its determination of BTA and costs of compliance, they are not relevant to the economic analyses for which data are collected in this part of the questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.UWAG.028            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** 5. The Questionnaire Does Not Provide Clear Distinctions Between Actual And Estimated Data

The Questionnaire directs respondents to supply estimated data if actual data are not available. However, EPA does not provide clear direction on the level of effort expected to generate estimates, nor does it in some instances even request that respondents designate which responses are estimates.

Without a clear distinction between actual data and estimated data, the utility of the database to be constructed from the completed Questionnaire will be seriously compromised. Therefore, Commenter recommends that the Questionnaire be redesigned so that, in every instance which might require the respondent to supply estimated data, the respondent must designate whether the data are "actual," "estimated" or "design." For any estimated data, the Questionnaire should require that the basis for the estimate be explained in a short narrative statement or phrase. The instructions should provide several examples of how estimated data should be characterized and recorded on the Questionnaire. Furthermore, EPA should clarify that Questionnaire respondents are not required, but may, at their option, generate any estimated data that is non-routine and not readily available.

**RESPONSE** EPA revised the detailed questionnaire, where-ever appropriate, to allow the respondent to check "actual," "calculated," "estimated," or "no data" to indicate the type of data.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.UWAG.031            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** III. MISCELLANEOUS ISSUES RAISED BY THE QUESTIONNAIRE

For the reasons outlined above, Commenter believes that EPA should not implement the proposed detailed Questionnaire. If EPA were to implement the Questionnaire, however, there are several major elements that should be modified, as discussed below.

**RESPONSE** EPA is unable to respond to this comment; it is too general.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.UWAG.039            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** D. Adding Flexibility To The Questionnaire Where Data Are Not Available

The Questionnaire, as currently drafted, does allow a response of "data not available" in many instances, and does not explain what the response "data not available" means. Commenter recommends that a "data not available" check-off box be included throughout the Questionnaire in each question requiring data. This is particularly crucial in Document III, Sections A, B, C, D and E, where certain components of the technical data requested may not be available. The presence of the certification statement (whether in its present form or as modified to require reasonable inquiry) provides assurance that respondents will expend considerable efforts to supply the requested information. Nonetheless, there will be instances in which the requested data are unavailable, and EPA should recognize and allow for this possibility.

Additionally, Commenter recommends that EPA allow respondents to choose the "data not available" option after they have made reasonable efforts to obtain the requested data.

**RESPONSE** EPA revised the detailed questionnaire, wherever appropriate, to allow the respondent to check "don't know" to indicate that the data is not available. EPA chose not to define "data not available;" EPA believes this term is self explanatory and does not need additional clarification. EPA provides the option to check "data not available" only for those questions that the Agency reasonably believes that the data may not exist. EPA's decision to allow, or not allow, this option for each question is based on the pretest results.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/GENERAL         |
| <b>COMMENT ID</b>          | 316.UWAG.060            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document III Page 5 General Information and Instructions

The instructions require respondents to provide an answer for all questions that do not include a "don't know" or no data available" response box. There may be circumstances, however, where the information is not obtainable, or does not exist, and yet EPA has not provided the "don't know" or "data not available" responses. At a minimum, EPA should increase the number of questions where it provides the alternative responses. See Section III .D.

**RESPONSE** EPA is unable to respond to this comment since the Commenter does not specify which additional questions they believe should have the "don't know" check option. See response to 316.UWAG.039.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/INSTRUC         |
| <b>COMMENT ID</b>          | 316.UWAG.042            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** COMMENTS ON INDIVIDUAL QUESTIONS

DOCUMENT 1: INVENTORY OF PLANTS AND GENERATING UNITS Cover page Notice of Estimated Burden See our general comments, Section II.B and Attachment A, for a discussion of the estimated burden of completing the questionnaire.

Page 2 Question - Instructions.

EPA requests that this part of the survey be completed and returned within 30 days of receipt. The instructions do not explain how the questionnaires are to be distributed whether they will be mailed to utility headquarters or to individual facilities). By the time the questionnaires are circulated to the persons responsible for preparing answers, a significant portion of the 30-day period may have already passed. We recommend that EPA extend the response period by 14 days, to allow sufficient time for intra-company communications. See also Section III.E of our general comments.

**RESPONSE** EPA has eliminated Document 1: Inventory of Plants and Generating Units.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/INSTRUC         |
| <b>COMMENT ID</b>          | 316.UWAG.047            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document II Page 1-2 General Information and Instructions

EPA fails to specify clearly the period by which respondents must complete and return Document II. Stating that it must be returned together with the other parts of the Questionnaire is not sufficiently clear, particularly since Document I must be returned within 30 days and Document III within 90 days.

**RESPONSE** In response to this and other comments, the instructions have been changed to clearly indicate the period by which respondents must complete and return Document II.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/INSTRUC         |
| <b>COMMENT ID</b>          | 316.UWAG.048            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document II Page 4 Question 2 Question 2 states:

"This survey focuses on calendar year 1997. If the utility newly began or substantially revised its financial record keeping since January 1, 1995, please check this box." Any respondent who checks the box is instructed to call EPA's hotline for further instructions. What will the instructions be? Why aren't the instructions in the Questionnaire? How will EPA ensure consistency in instructions without writing them down and incorporating them into the Questionnaire?

**RESPONSE** In response to this and other comments, Question 2 of Document II was removed from the questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/INSTRUC         |
| <b>COMMENT ID</b>          | 316.UWAG.055            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document III Page 1 Question - General Information and Instructions.

EPA states that the information in Part I will be used to assess cooling water intakes. However, some of the questions posed in Part I relate to the cooling system, not the cooling water intake structure (e.g. Section B). The questions should be limited to those related to the intake structure, as 316(b) does not EPA authority to regulate cooling systems.

**RESPONSE** The questionnaire does not exceed EPA's authority under the Clean Water Act because Section 308 of the Act authorizes EPA to gather information necessary for the development of a regulation under Section 316(b). In general, the technical portion of the questionnaire is intended to help EPA characterize the design, location, construction, and capacity of cooling water intake structures on a national basis. Specifically, there is a direct link between the type of cooling water system in place and the amount of water (capacity) withdrawn on a daily basis.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/INSTRUC         |
| <b>COMMENT ID</b>          | 316.UWAG.056            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document III Page 2 General Information and Instructions.

EPA states that it is requesting "very basic data" on cooling water towers and that information from Section D of the Questionnaire will help EPA "characterize the types of technologies currently being employed at plants and the relative costs of these devices." EPA's § 316(b) authority is constrained by the statutory language to intake structures. Cooling towers are not intake structures and Commenter questions the utility of EPA's inquiries about cooling towers in the context of this rulemaking. Since EPA's statutory authority begins and ends with the intake structure, it should not be gathering information about other parts of the cooling water system.

**RESPONSE** Questions on cooling towers do not exceed EPA's authority under the Clean Water Act because Section 308 of the Act authorizes EPA to gather information necessary for the development of a regulation under Section 316(b). Cooling Towers are a common technology for recirculating cooling systems which directly relates to the intake capacity. The flow through the intake structure is linked to potential environmental impacts. See response to 316.UWAG.055.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/INSTRUC         |
| <b>COMMENT ID</b>          | 316.UWAG.057            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document III Page 3 Instructions

Commenter recommends that the telephone help lines be designed and operated in a manner that promotes consistent responses. Commenter would favor a process through which respondents receive brief written advice memorandum as documentation of the phone call, and all respondents, upon request, may review all of the written advice memoranda.

**RESPONSE** EPA set up the helpline to provide assistance to the respondents, but EPA does not have the resources to provide written responses to each inquiry. EPA have established a system to ensure consistent responses. EPA maintains a written log of each caller's questions and EPA's responses.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/JURISDIC        |
| <b>COMMENT ID</b>          | 316.UWAG.004            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** II. THE PROPOSED QUESTIONNAIRE DOES NOT SATISFY THE REQUIREMENTS OF THE CLEAN WATER ACT OR THE PAPERWORK REDUCTION ACT

EPA's authority to request dischargers to provide data as part of this rulemaking stems from § 308 of the Clean Water Act, 33 U.S.C. § 1318. Section 308 authorizes the Agency "whenever required to carry out the objective of [the CWA]" to provide such information as is "reasonably, require[d]." (Emphasis added.) As the highlighted language suggests, the authority conferred by § 308, while fairly broad, is not unbounded. Under § 308, EPA is authorized to request only information that is "reasonably required" to implement § 316(b). For the reasons discussed below, Commenter does not believe that much of the information EPA proposes to collect is "reasonably required" to implement § 316(b).

Equally important, before EPA may compel any discharger to provide any information, the Agency must obtain approval of its information request from the Office of Management and Budget, pursuant to the PRA. Commenter questions whether EPA is on course to meet its responsibilities under the PRA in designing the Questionnaire. The Agency's most important PRA responsibilities are summarized below. In the discussion that follows, we outline the conceptual shortcomings of the Questionnaire, and explain how EPA should revise its approach in order to ensure compliance with the mandates of the PRA, and to meet the requirements of CWA § 308.

First, EPA must demonstrate that it has taken every reasonable step to ensure that the proposed collection of information is the least burdensome necessary for the proper performance of the Agency's functions to comply with legal requirements and achieve program objectives. 5 C.F.R. § 1320.5(d)(1)(I) (emphasis added). In this connection, EPA must inform respondents of the way collected information is planned to be used to further the proper performance of the Agency's functions, id., § 1320.8(b)(3)(ii), and must certify that the collected information is necessary for that purpose. Id. § 1320.9(a). To fulfill these responsibilities, it is evident that EPA first must develop a regulatory strategy that is consistent with the proper performance of its functions in implementing § 316(b). Then, EPA should explain how the Questionnaire data will be used to carry out that strategy, and support its certification that the collected information is necessary for that purpose. As discussed below, based on the information supplied in the Notice, these important responsibilities do not appear to have been met.

Second, in support of its duty to ensure that the Questionnaire is the least burdensome necessary, EPA must provide a specific, objectively supported estimate of the burden entailed in providing the collected information. The burden estimate must include components specifically addressing the time, effort, or financial resources expended in connection with nine types [5] of activities involved in responding to the Questionnaire. Commenter believes that EPA's current estimate (on average, 160 hours per facility) [6] seriously underestimates the

actual burden that will be experienced by many respondents. We urge EPA to evaluate its initial estimate very carefully, based on the comments it receives and other available information.

Third, the Agency must ensure that the collected information will have "practical utility." Id. § 1320.5(d)(1)(iii). This means that EPA must demonstrate the "actual, not merely theoretical or potential, usefulness of the information" to "carry out its functions," Id. § 1320.3(l), and those functions must of course enable the Agency to "comply with legal requirements." Id. § 1320.5(d)(1)(I). In this manner, the Agency's obligation to develop a regulatory strategy that is consistent with § 316(b) provides the essential foundation upon which the evaluation of practical utility must be based.

Finally, EPA has an obligation to develop and articulate a plan for the efficient and effective management and use of the information to be collected. Id. § 1320.8(a)(7). The Agency's plan should provide a roadmap explaining how each category of information will be relevant and useful in the development of a regulation that is consistent with the requirements of § 316(b). No such plan is apparent at this time.

Collectively, EPA's PRA obligations should lead the Agency to adopt a straight-forward rulemaking strategy: First, using applicable precedent and available information, the Agency should determine the appropriate regulatory structure and decision-making logic to implement § 316(b) properly. Second, the Agency should solicit from the regulated community only that information that is actually needed to develop such a regulation and that cannot be obtained from public sources.

---

[5] Those activities are:

- (i) Reviewing instructions;
- (ii) Developing, acquiring, installing and utilizing technology and systems for the purpose of collecting, validating, and verifying information;
- (iii) Developing, acquiring, installing, and utilizing technology and systems for the purpose of processing and maintaining information;
- (iv) Developing, acquiring, installing and utilizing technology and systems for the purpose of disclosing and providing information;
- (v) Adjusting the existing ways to comply with any previously applicable instructions and requirements;
- (vi) Training personnel to be able to respond to a collection of information;
- (vii) Searching data sources;
- (viii) Completing and reviewing the collection of information;  
and

(ix) Transmitting, or otherwise disclosing the information.  
5 C.F.R. § 1320.3(b)(1).

[ 6] See 63 Fed. Reg. 3,738, 3,740 (Jan. 26, 1998)

**RESPONSE**

EPA is developing the Information Collection Request (ICR) which will be sent to OMB for approval. In the ICR supporting documentation, EPA explains the burden estimate with respect to time, effort, or financial resources expended in connection with the nine types of activities involved in responding to the questionnaire. EPA has a practical utility for each question. EPA justifies how the data will be used in the ICR supporting documentation. See response to 316.CMA.003.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/JURISDIC        |
| <b>COMMENT ID</b>          | 316.UWAG.006            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** A. EPA Has Not Designed A Questionnaire That Is Necessary For The Proper Performance Of The Agency's Function To Comply With Legal Requirements And Achieve Program Objectives

1. Section 316(b) Presents A Unique Regulatory Challenge

The Clean Water Act demands of the Agency a tremendous range of scientific knowledge and application. The scientific underpinnings for developing water quality criteria and setting effluent limitations guidelines and new source performance standards (collectively "technology- based effluent limitations") are quite different from those required for § 316(b) determinations. By establishing § 316(b) as a distinct regulatory requirement, Congress recognized that uniqueness.

How do § 316(b) requirements differ from purely technology-based effluent guidelines? Technology-based effluent limitations are designed to control end-of-pipe discharges of pollutants added to effluent streams via industrial processes that are under the control of the discharger. To develop technology-based effluent guidelines, EPA identifies for a given industry category or subcategory the pollutants present in waste streams at levels warranting regulation and the technology capable of reducing the level discharged to the greatest extent practicable or achievable, without regard to environmental consequences.

By contrast, § 316(b) directs that the "location, design, construction, and capacity" of cooling water intake structures reflect the best technology available for "minimizing" "adverse environmental impact." Clearly, § 316(b) addresses the effects of intake structures on the environment, which encompasses an incredibly diverse array of aquatic species that go through different life stages. Unlike pollutant discharges, the existence, nature, and behavior of those species and life stages are not under the control of the discharger, and the species present near a given intake structure are not relatively uniform across an industry category or subcategory. Rather, the nature of the aquatic environment that may be affected by any given intake structure is inherently site-specific, may be affected by a host of factors other than the intake structure, and may vary over time and space. As a result, § 316(b)'s focus - the aquatic species, their habitat, and behavior - cannot be understood by formulaic application of biological principles, and are not at all uniform. For example, species behavior in preferred habitats may differ markedly from species behavior in marginal habitats, and intake technologies that perform well for some species or life stages may have the opposite effect on others. For this reason, Congress directed that "adverse environmental impacts" be minimized overall - a task that can only be accomplished by understanding the ecological conditions and other relevant factors at a given site.

Another important difference concerns the methods appropriate for setting and assessing § 316(b) requirements versus technology-based effluent limitations. The Part 136 analytical methods used for analyzing pollutant concentrations in effluents provide a generic basis for measuring effluent concentrations, and for setting and enforcing effluent limitations. Properly validated methods are applied in laboratory settings that are designed and monitored to promote quality assurance and quality control. Data gathered from laboratory analysis of effluents using the same method can be manipulated with a relative degree of confidence that the underlying analytical methods and procedures have produced data of similar quality.

By contrast, studies and analyses conducted in order to assess the environmental impacts of intake structures, and evaluate the performance of alternatives for minimization, can and should vary widely to reflect site-specific circumstances, including the characteristics of the aquatic community, waterbody characteristics, and the intake structure. For some sites, existing data and information may allow for assessment without extensive sampling. Where impingement or entrainment sampling, and/or instream population assessment are warranted, the sampling design and schedule must be developed to take into account the specific characteristics of the affected waterbody, the species of concern, the operating mode of the intake structure, and the model or other type of analysis in which the data will be used. The resulting data cannot be lumped together for purposes of statistical trending because the data are, by design, site-specific and not uniform. This does not impugn the validity of these data - to the contrary, the very specificity of the data is its measure of value in the § 316(b) context.

For these reasons, EPA has long recognized that proper implementation of § 316(b) cannot be achieved through development of generic technology-based requirements. The rulemaking process which spurred EPA's issuance of the Questionnaire represents the second effort EPA has undertaken to develop rules implementing § 316(b). EPA's first set of § 316(b) rules were issued on April 26, 1976. 41 Fed. Reg. 17,387 (the "1976 Rules"). Those regulations provided for implementation of § 316(b) on a site-specific basis for each point source with a cooling water intake structure. EPA took that approach because it correctly concluded, based on the administrative record, that "the factors to be considered would lead to highly site-specific determinations of the best technology available for minimizing adverse environmental impact." Cooling Water Intake Structures, Proposal Regarding Minimizing Adverse Environmental Impact, 38 Fed. Reg. 34,410. (Dec. 13, 1973).

In 1977, EPA's 1976 Rules were suspended by the United States Court of Appeals for the Fourth Circuit due to procedural defects in the rulemaking. See *Appalachian Power Company v. Train*, 566 F.2d 451, 457 (4th Cir. 1977). Even in the absence of formal regulations, however, for over twenty years EPA and the States have continued to implement § 316(b) on a site-specific basis, using informal guidance developed by EPA. See, e.g., "Guidance for Evaluating the Adverse Impact of Cooling Water Intake Structures on the Aquatic Environment: Section 316(b) P.L. 92-500" (Draft of May 1, 1977).

EPA's Notice does not discuss in any detail its anticipated regulatory approach or how it intends to analyze the data it seeks. But the statements EPA has made in the Notice, in combination with the type of information it proposes to collect, suggest that the Agency intends to attempt a generic analysis that will not account for site-specific factors. Specifically, the Agency is proposing to collect a great deal of information on existing intake technologies, costs, and entrainment and impingement values, and very little information from which population effects and factors affecting intake performance could truly be understood. This represents a major departure from past precedent. As discussed below, Commenter does not believe such an

approach would properly implement § 316(b). Thus, data collected for that purpose are not "reasonably required" to implement § 316(b), nor will they have "practical utility" for meeting legal requirements.

**RESPONSE**

EPA understands that an Effluent Guideline is a known regulatory framework. Unless EPA articulates another regulatory framework it is easy to see why the Commenter may think that EPA intends to follow the Effluent Guideline framework. EPA does not intend to follow a strict Effluent Guideline framework. Since the public notice of the questionnaire, EPA has released a draft regulatory framework that indicates the type of regulation that EPA is considering. The questionnaire will help support this framework and help to develop options within the draft framework. See response to 316.EPSA.006 and 316.UWAG.029.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/JURISDIC        |
| <b>COMMENT ID</b>          | 316.UWAG.022            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** For example, EPA should explain how questions posed in Section B about the primary function of cooling water systems, the number of days of cooling water system operation, and the average annual rate of cooling water withdrawn and discharged are relevant to the development of § 316(b) regulatory options.

**RESPONSE** The data on cooling water systems is relative to the development of section 316(b) regulations. Specifically, the cooling water system has a direct link to the amount of water (capacity) withdrawn on a daily basis through the cooling water intake structure. Under section 316(b) EPA has the authority to regulate capacity of the cooling water intake structure. See response to 316.DOW.001.

EPA does not ask for the "number of days of cooling water system operation." Rather, EPA asks for the "number of days of cooling water intake structure operation." EPA will use the average annual rate of cooling water withdrawn to characterize the quantity withdrawn. There is a direct link between flow (capacity) and environmental impacts due to entrainment. EPA recognizes that other the site-specific characteristics also influence impacts and that flow in itself does not necessarily reflect the magnitude of the environmental impacts.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/JURISDIC        |
| <b>COMMENT ID</b>          | 316.UWAG.025            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Likewise, the Questionnaire asks questions about ground water intakes (Questionnaire, Document 111, Part I, p. 36, Matrix 30b.H (Radial Well)). The Clean Water Act does not grant EPA statutory authority to regulate the use of ground water. In fact, Congress considered - and rejected - proposals to extend EPA's Clean Water Act authority to ground water.[25] The only relevant questions EPA should pose about ground water intakes would be those necessary to excuse a facility from answering the Questionnaire based on its exclusive use of ground water.

---

[25] "Several bills pending before the Committee provide authority to establish Federally approved standards for groundwaters...Because the jurisdiction regarding groundwaters is so complex and varied from State to State, the Committee did not adopt this recommendation." S.Rep. No. 414, 92d Congress, 1st Sess. 73, reprinted in 1972 U.S. Code Cong. Ad News 3668, 3739.

**RESPONSE** EPA deleted the radial well question.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/JURISIDIC       |
| <b>COMMENT ID</b>          | 316.UWAG.065            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Section A: General Plant Information. Page 10 Question 9

This question requires the respondent to identify the percentage of effluent discharged to surface water, groundwater, publicly-owned treatment works, privately-owned treatment works or "other." This question inappropriately seeks information beyond the scope of EPA's § 316(b) jurisdiction. As previously stated, EPA's § 316(b) jurisdiction relates only to cooling water intake structures, not to the regulation of discharges. Therefore, information about the discharge location(s) of effluent should not be part of this Questionnaire.

**RESPONSE** This data helps EPA characterize plants and better understand facility options with respect to implementing Section 316(b). For example, if a facility discharges 70% of its effluent to a POTW and 30% to surface water, then the facility has different options than a facility that discharges 100% of its effluent to surface water.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/REGDEV          |
| <b>COMMENT ID</b>          | 316.UWAG.014            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** B. The Burden Associated With The Questionnaire Is Excessive. EPA Has Not Developed An Objectively Supported Burden Estimate

When submitting the Questionnaire to OMB, EPA has an obligation to provide a specific, objectively supported estimate of the burden imposed on respondents to complete the Questionnaire. 5 C.F.R. § 1320.8(a)(4). The burden must be justified by the practical utility of the information being collected. Id. § 1320.5(e). In developing its estimate, EPA must take into account the total time, effort, or financial resources required to generate and provide the information. The most important functions to be evaluated are:

collecting, validating and verifying information;  
training personnel to be able to respond to the Questionnaire;  
searching data sources; and  
completing and reviewing the Questionnaire. Id. § 1320.3(b)(1).

EPA has indicated it believes that, on average, respondents will spend approximately 160 hours per facility to complete the Questionnaire. [20] While EPA has requested comments on the methodology and assumptions it made in developing this burden estimate, 63 Fed. Reg. 3,740, the Agency does not describe those methods or assumptions. Thus, the Agency has not provided

Commenter with sufficient information on which to base any comment. Commenter respectfully requests that EPA issue a supplementary notice describing how it arrived at its estimate, so that Commenter and other interested groups can understand the Agency's approach and offer relevant comments.

The Agency's objectively supported burden estimate must take into account a number of important factors that will vary significantly from respondent to respondent. First, the complexity of a facility and its operating environment (size, number of intakes, length of service, waterbody characteristics) will have an enormous impact on the amount of data to be collected. Second, the facility's regulatory and engineering history (changes to intake structures considered and/or implemented through time, permitting cycles) will, in many parts of the Questionnaire, determine the number of multiple responses required for particular questions. Third, the numbers and types of studies conducted will vary considerably, with a far greater burden imposed on respondents that have collected and evaluated extensive biological data than on others that have not. Fourth, EPA should consider that respondents' efforts to gather data will depend on logistical factors such as the location and availability of information, use of computerized systems, and the numbers and availability of knowledgeable staff to access and evaluate data or train others to do so. Finally, EPA must include a substantial component of its estimate (at least 10 percent) for respondents to undertake the necessary quality assurance/quality control required in light of the Questionnaire's certification statement.

Commenter urges EPA to make every effort to understand these factors, evaluate their variability among respondents, 21 assess their impact on the EPA burden estimate, and consider the Questionnaire's practical utility in light of the substantial burden entailed.

---

[20] 63 Fed. Reg. 3,738, 3,740 (Jan. 26, 1998).

[21] Commenter also understands that EPA is conducting up to nine pre-tests (the number permitted under the PRA). We are aware that the facilities involved include three medium-size facilities and four small ones. Given the unavoidably small size of the sample, which does not include any large or complex facilities, we are sure that EPA appreciates the need to collect additional information from which to develop an objectively supported burden estimate. Such a sample is unlikely to represent the substantial variation of data, or the variation in efforts to collect, analyze and review data among respondents in the universe affected by the Questionnaire. Thus, Commenter recommends that EPA use other available information and methods, like those set forth in Attachment A, to develop its burden estimate.

## **RESPONSE**

EPA recognizes the complexity of facilities vary; therefore, the burden will vary among plants. EPA specifically worked with this Commenter to identify appropriate facilities to pretest the draft questionnaire. The three medium size plants were the ones that volunteered. The primary stated purpose of the pretest is to help EPA develop and substantiate the burden estimate. EPA explains in the information collection request its rational and methodology for determining the burden estimate for the questionnaire that EPA is sending to OMB for approval. EPA considered the pretest results, along with other comments on the burden to estimate the burden hours for the revised detailed questionnaire.

Based on these and other comments, EPA significantly revised the questionnaire reducing or eliminating the questions identified as the most burdensome. EPA estimates the burden of the revised questionnaire to be 156 hours. EPA has a practical utility for each question. EPA's justification for the data is part of the information collection request supporting statement sent to OMB for review and approval. See response to 316.AEP.007.

In response to this and other comments, EPA has further simplified the economic and financial portions of the questionnaire. Many of the remaining questions request a) verification of preprinted information; b) identification and contact information; and c) standard financial information. These question are expected to pose minimal burden on respondents. During the questionnaire pretest, privately-owned utilities have required an average of 47 hours per utility for the utility-level questionnaire and 36 hours per plant for the economic part of the plant-level questionnaire. However, given the additional simplifications of the questionnaires and given the fact that publicly- owned utilities and rural electric cooperatives have required substantially less time for very similar questionnaires (on average 4 hours per utility for the utility-level questionnaire and 2 hours per plant for the economic part of the plant-level questionnaire) EPA believes that the utility-level questionnaire will require 20 hours or less per utility and the plant-level questionnaire 16 hours or less per plant.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/REGDEV          |
| <b>COMMENT ID</b>          | 316.UWAG.023            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** SECTION C: SOURCES OF COOLING WATER AND INTAKE ARRANGEMENTS

Page 24 Question 21 (b)(2); 21 (b)(3)

Commenter notes that EPA intends to develop, but has not yet provided, definitions for Mean Low Water Level and Mean High Water Level. See Part 3, Glossary. Without definitions for these terms, Commenter's ability to comment on these questions has been seriously hampered. Commenter reserves its right to comment on the definitions when they become available.

**RESPONSE** Definitions have now been developed for the questionnaire. The mean high water level is the average height of the high water over at least 19 years and the mean low water level is the average height of the low water over at least 19 years.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/REGDEV          |
| <b>COMMENT ID</b>          | 316.UWAG.030            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** E. Commenter Recommends That EPA Use A Case-Study Approach To Develop A Site-specific Decision-making Framework

Commenter understands that the § 316(b) rulemaking requires data-gathering and analysis, and we want to help the Agency to build a strong and accurate record on which to make decisions about any § 316(b) rule. In that regard, we understand that EPA may feel obliged to consider a range of credible, reasonably foreseeable approaches to implementation of § 316(b). But Commenter does not believe that EPA needs to collect detailed historical data from each and every steam electric power plant in the country [27] in order to conclude that a generic, categorical approach to § 316(b) implementation is not workable, and to support such a conclusion with an ample record (starting, perhaps, with the record it compiled for its first rulemaking, as well as the other data EPA says it is collecting through a variety of activities). [28] 63 Fed. Reg. 3,739. Rather, Commenter believes it would be far more efficient, more cost-effective, and ultimately more supportable for EPA to use readily available § 316(b) case studies, literature, EPA and other agency technical reports, and similar resources (many of which EPA may already have collected) to evaluate and refine its options. Commenter is confident that EPA will conclude, based on such a review, that only some form of site-specific approach is feasible.

Such a site-specific approach would require the development of sound scientific and economic methodologies for making the key § 316(b) determinations. This would lay the proper foundation for data gathering, and would ensure that EPA has an efficient and effective plan for using the data. We recommend the following alternative to the current Questionnaire approach:

1. **Collect Existing Studies.** EPA could begin by establishing a comprehensive library of existing § 316(b) case studies and other relevant studies to provide background on the methodologies that are available to assess AEI and to assess the costs and benefits of alternative water intake technologies. The current Questionnaire contains requests for these studies.
2. **Determine Sound Methodologies.** EPA would use these materials and others to develop recommendations for appropriate methodologies to assess AEI and to assess the costs and benefits of technological options. This process might include focused workshops with experts and structured approaches for discussing options with interested stakeholders.
3. **Determine Data Availability And Data Needs.** If necessary, in light of the methodologies outlined above, EPA could provide a focused data collection process. This process would determine what data currently exist and what data need to be developed in order to make the key decisions required under § 316(b).

4. Obtain Necessary Data. This focused approach would result in collecting specific data on specific issues, including indications of the importance of site-specific variations.

5. Develop Appropriate Regulatory Guidance. The final step would be to use the methodologies and data to develop a proposed regulation that provides a flexible framework for (1) determining the risk of AEI; and (2) if AEI is occurring, determining an appropriate technology or mitigation approach to minimize the AEI.

Not only would such an approach make good sense from a practical and policy view point, it would allow EPA to satisfy the requirements of the PRA and CWA § 308, which the proposed Questionnaire does not.

---

[27] The Notice does not explain how EPA came to the conclusion that it was necessary to collect data from all steam electric power plants, rather than from some subset. This is particularly curious in light of the "large volume of publicly available data" which EPA says it has available on electric utilities. 63 Fed. Reg. 3,741. One plausible reason is EPA believes that such a comprehensive survey sample is necessary to capture the highly site-specific attributes pertaining to the design, construction, location, and capacity of the cooling water intake, structures at each plant, as well as the unique attributes of the waterbodies and biological communities with which they interact. If that is its intention, however, the Questionnaire falls far short of the mark.

[28] We are aware that EPA has (1) conducted a literature survey; (2) gathered a number of § 316(b) technical studies; (3) held meetings with various interest groups; (4) developed the Questionnaire; and (5) visited, at the invitation of individual Commenter members and with the assistance of the Edison Electric Institute, a variety of electric utility plants. Additionally, we have some information about the Agency's plans for its future activities. The Notice announces that EPA plans to use the data from the Questionnaire in part to "identify potential facilities for on-site sampling and analysis in order to collect more in-depth data on adverse environmental impacts and BTA efficacy."<sup>28</sup> And Commenter has recently learned that EPA intends to conduct two public meetings that will allow interested stakeholders to discuss some fundamental § 316(b) issues. This information appears to provide an ample starting point for development of a site-specific framework.

**RESPONSE**

EPA has a practical utility for some historical data. However, based on these and other comments EPA deleted all questions pertaining to historical technology cost data and operation and maintenance data. See response to 316.CMA.005.

For reasons stated in earlier responses, EPA tried to use existing case studies as the bases for the regulation. Unfortunately, EPA determined that the case studies could not be used for this purpose. EPA could not draw conclusions from the studies because they used different methodologies, time frames, species, end points, etc. EPA is using secondary sources of information to supplement the questionnaire data. EPA has participated, and anticipates participating in the future, in focused workshops.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/REGDEV          |
| <b>COMMENT ID</b>          | 316.UWAG.041            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** IV. CONCLUSION AND RECOMMENDATIONS

The current proposed Questionnaire would not provide much data that would be useful to EPA either in determining key policy choices under § 316(b) or in complying with economic analysis requirements under Executive Order 12866 and SBREFA. The two key determinations under § 316(b) are whether the existing cooling water intake structure creates an adverse environmental impact and, if so, what technology constitutes the best technology available to minimize the impact. These determinations are inherently site-specific, as EPA has recognized in more than 20 years of past rulemaking and regulatory guidance. An alternative generic approach - such as that developed to implement the Congressional mandate to set technology based effluent guidelines - is consistent neither with Congressional intent nor with sound public policy.

Commenter has proposed that EPA approach the regulation through an alternative technique based on analysis of the existing body of § 316(b) case studies and available literature, in conjunction with technical workshops and public meetings on policy issues. Commenter acknowledges that a simplified, shortened version of the Questionnaire may have a place in the overall regulatory development, once EPA has developed a regulatory approach that accepts data with all appropriate site-specific factors, and does not attempt to disregard the importance of site-specific distinctions by artificial categorizations. Commenter pledges its support of such an approach.

**RESPONSE** EPA believes the data from the questionnaire will be useful in determining key policy choices under Section 316(b) and in complying with economic analysis requirements. However, based on comments, EPA significantly revised the questionnaire, reducing the burden. EPA has a practical utility each question in the questionnaire.

---

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/RESTIME         |
| <b>COMMENT ID</b>          | 316.UWAG.040            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** E. Time Allotted To Complete The Questionnaire

EPA expects the respondents to complete Document I in 30 days and Documents II and III of the Questionnaire in 90 days from the date of receipt. These time frames are very unrealistic. Commenter member companies estimate that completion of the Questionnaire will require between 179 and 2,375 hours per facility, depending on the number of intakes, the extent of § 316(b) studies relating to the facility, and the age of the information being requested. These estimates are based on the assumption that companies who do not have the "other structures and sensitive ecological area" information would not be required to obtain the current information (an additional burden of 30 to 150 hours).

As described above in our discussion of the burden estimate, locating, assembling, analyzing and checking the data will consume much more time than EPA has assumed. For this reason, Commenter strongly recommends that the allotted response time be increased to at least 180 days.

**RESPONSE** All the facilities that pretested the questionnaire completed it within 120 days to include a facility that reported 430 burden hours (highest report). EPA has eliminated both Document I and II and has significantly shortened Document III. EPA estimates the burden is 156 hours. EPA believes 90 days is sufficient time to complete the revised questionnaire. See response to 316.AEP.003.

|                            |                         |
|----------------------------|-------------------------|
| <b>SUBJECT MATTER CODE</b> | DET/PRI/RESTIME         |
| <b>COMMENT ID</b>          | 316.UWAG.059            |
| <b>COMMENT AUTHOR</b>      | Utility Water Act Group |
| <b>DOCUMENT TYPE</b>       | Industry Association    |
| <b>DOCUMENT DATE</b>       | 04/17/1998 00:00:00.00  |

---

**COMMENT** Document III Page 4 General Information and Instructions

For reasons stated in Section III.E of our general comments, the 90 calendar days that EPA intends to allot for completion of Document is wholly inadequate. Commenter requests that the response period be increased to at least 180 days.

**RESPONSE** No response necessary, EPA has already addressed this comment made by this Commenter. See response to 316.UWAG.040.