From: allan.palmer@nu.com
To: Cobb, Michael
Subject: RE: Schiller Station Circulating Water Pumps
Date: Thursday, May 30, 2013 6:20:29 PM

No rush Michael, got plenty to do right now!

Are you thinking of just one sheet for the entire facility? If so, I'd probably need to dumb it down considerably.

Enercon report will be coming soon, Allan.

From: "Cobb, Michael"
To: "allan.palmer@nu.com"
Date: 05/30/2013 12:03 PM
Subject: RE: Schiller Station Circulating Water Pumps

Allan,
Thanks for your response to some of the questions. We are making steady progress on the permit renewal. I would like to include in the fact sheet a simplified 1-page flow schematic for the facility, similar to the large flow schematic included in the 2010 application documents. Do you anything that may be used for this?
Thanks,

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From: allan.palmer@nu.com [mailto:allan.palmer@nu.com]
Sent: Tuesday, May 28, 2013 12:06 PM
To: Cobb, Michael
Cc: linda.landis@nu.com; william.smagula@nu.com; elizabeth.tillotson@nu.com; richard.despins@nu.com; peter.leavitt@nu.com; felicia.giordano@nu.com; jeffrey.patry@nu.com
Subject: Schiller Station Circulating Water Pumps
Michael, In response to your questions regarding the operation of circulators at Schiller, I have the following additional information to offer:

Typically we operate both pumps and will keep them running when the units are on a cycling schedule (dispatched to run on an intermittent basis). If the pumps have been off, they are typically both started as part of the normal procedure when a unit is called on to generate. We believe it is possible, however, to start Unit 6 with only one pump and to bring it on-line to slightly more than 10 MWhr . We believe Unit 5 is similar, however, it has not been tested since this wood-fired unit is generally base loaded. We are fairly confident that Unit 6 could operate at this low load on one pump for an extended period (assuming we can maintain compliance with the thermal limits), however, Unit 5 would never be kept at a 10 MWhr load. Unit 4 requires both pumps to operate. So unless Unit 6 were to remain at low load for an extended period, there appears to be little gained from running a unit with a single pump.

Regarding shutdown, we believe all three units can turn off both pumps within roughly two hours of securing the turbine. This modification could reduce station water flow by an appreciable amount and we are currently considering implementing this change as standard procedure.

Please let me know if you have any questions. Thanks, Allan.