Attachment 7

Construction Schedule

PSNH Schiller Station Response to United States Environmental Protection Agency CWA §308 Letter Attachment 7

Construction Schedule Conversion of Schiller Station To Closed-Loop Cooling

The construction schedule on the following page is based on an 18-month overall construction timeframe and a twelve (12) week plant outage. Although the 18-month construction time period is somewhat arbitrarily due to inherent flexibility in manloading, the twelve week outage time period is considered largely inflexible due to the complexities and man-power loading restrictions associated with the outage critical-path activities, including completion of the intake and discharge embayments with their associated sluice gates, substation power tie-ins at the switchyard, and reroute and tie-ins of the existing circulating water to the discharge and intake embayments for the CWIS.

These complexities partly stem from the fact that the circulating water return flow from the cooling tower must pass under the existing large bore circulating water discharge piping. This excavation and undermining of the existing large bore piping cannot be performed while the Station is on line.

Other tasks that must be performed while offline are the installation and testing of the sluice gates in the dikes forming the discharge and intake embayments that isolate the circulating water pumps and booster pumping station from the river, and installing cooling tower makeup pump and valves that will draw makeup water from the river (or grey water source) and into the intake embayment.

Tasks that must be completed during the twelve week Station outage include:

- High-voltage tie-ins at the switchyard to supply the new substation.
- Condenser tube-cleaning system tie-ins at existing intakes
- Testing of newly installed components at the CWIS and booster pumping station prior to placement into service
 - Electrical switchgear
 - Cooling tower make-up pump and valves
 - Greywater supply source tie-in (if utilized)
 - Booster pumps (circ water supply to tower)
 - Cooling tower blowdown system
 - Automated PLC control system, including level control in the embayments

It is believed that the 12 week outage duration is conservative, representing best-case construction scenarios, and that emergent issues and/or weather based delays may extend the projected outage duration considerably. Likewise, it is believed that the proposed overall construction schedule may extend beyond the duration indicated, as it is based on heavy man-loading and best-case construction conditions.

	2013 Feb Mar Apt May Jun 311 Aud Seb Cct Nov Dec Jan Feb Mar Apr Ma			el Contract Project Completion				Aug-23-12 Station Online - Construction	-24-12, Cooling Tower Vation		Ing Towier II CT Automated Control System	Jun-21-12. New Cooling Water Discharge and Supply P ping	Install Cooling Water Discharge & Supply Piping	Route Piping fråm Steppy Source to Schiller Site		Const Substation for CT & Booster Pumping Stat on	Install Electrical On Toyler	Install Feeds from Substation to Booster Pumping Station Jun-11-12, Interke and Discharce Emberwants	CWIS & Discharde Mods	Confruct Dike w/Sluice Gales for Intake Embayment	Jun-15-12, Béoster Pumping Station	Construct Pump House	Install Booster Pumps & Plping	For a standard and standard and standard and standard for Males Disch-	Complete Installation of Circ Water Return Piping to Intek		Condenser Tube Cleaning System Tle-Ins	Gose Embryment Sluce Gates	Set and the set of the	Decr 14-12, Demobilization
	2011 Jun Jul Aug Sep Oct Nov Dec Jan		Design Engineering Complete (1-01-10 ithru 6-30-11)		0 View Jul-07-11, Mobilization	Mobilization	D Clearing, Stubbing, Fencing, Storm Drainade, etc.		Prepare Foundation for CT Basin to Final E	D Construct Tower (CT) Basin	Erection of Car																			
1922	Float	7-12 0	0-11' 0	7-12 0	-11 0	-11 0	5-11 0 5-11 0	3-12 82	2-11 0	D-11 0	5-11 0 0-12 0	1-12 82 1-12 82	5-12 131	+12 131 5-12 131	3-12 82	-12 99 3-12 82	6-12 217	-12 99	1-12 0	1-12 135 1-12 135	5-12 131	9-12 131	5-12 131	3-12 16	3-12 16	9-12 41	3-12 0	0-12 0	0-12 0	4-12 0 4-12 0
Clarke	LINSU	17-11 Dec-1	Uec-1 Uec-1	17-12 Dec-1	70-IUL 11-07	17-11 Jul-07	1-11 Aug-2 1-11 Aug-2	12-11 Aug-2	12-11 Jan-20 12-11 Sep-2	23-11 Oct-20	21-11 Dec-1 16-11 Jan-20	4-11 Jun-2'	26-11 Jun-16	26-11 Apr-24	04-11 Aug-2	04-11 Jul-12	16-11 Feb-1	0-12 Jul-31	0-12 Jun-1	20-12 Jun-11	23-11 Jun-15	18-11 Apr-19	0-12 Jun-15	03-12 Nov-3	03-12 Nov-2	8-12 Oct-19	03-12 Nov-2	3-12 Nov-0	19-12 Nov-3	03-12 Dec-1- 03-12 Dec-1-
Contraction of the	naming stan uration	392 Jun-	382 JUI-	1 Dec-	15 Jun-	15 Jun-	40 Jul-0 40 Jul-0	270 Aug-	30 Aug-	20 Sep-	40 Oct-2 26 Dec-	180 Oct-1 180 Oct-1	211 Aug-	173 Aug-	210 Nov-	180 Nov-	45 Dec-	30 Jun-	102 Jan-2	102 Jan-2	191 Sep-	110 Nov-	41 Apr-2	60 Sep-	60 Sep-	10 Oct-C	60 Sep-	20 Nov-	10 Nov-	10 Dec-
The second second	mplete		%0	%0		%0	%0		%0	%0	%0	%0	R	%0		%D	%0	%.0	%0	%0	Dat	%0	%0	%0 bt	m 0%	%0	%0	%0	%0	%0
			-30-11)	hodulo	oninennie		n Drainage, etc.		to Final Elevation		stem	r Piping e & Supply Piping	Rundi J finding to a fi	Source to Schiller Site ake Embavment	Booties Contract	& Booster Pumping Station ation to Cooling Tower	ler	station to Booster Pumping Station	spol	lice Gates for Intake Embayment ce Gates for Discharge Embayment	Vischama Canal	Duse entre	nps & Piping	n eroute of Existing U4 Circ Water Discharge Pipi	tion of Circ Water Return Piping to Intake Embay	oltage Tie-ins at Switchyard	Cleaning System Tie-Ins	atted Control System at Booster Pumphouse	ssioning	
A structure Maximum	Activity Mattie	osed-Loop Conversion - Shiller	ngineering Desian Endineering Complete (1-01-10 thru 6	Contract Project Completion	tion	Mobilization	Site Modifications Clearing, Grubbing, Fencing, Storm	Inline - Construction	Tower Prepare Foundation for CT Basir	Construct Tower (CT) Basin	Erection of Cooling Tower Install CT Automated Control SV	oling Water Discharge and Supply Install Cooling Water Discharg	ter Makeup Supply (IF UTILIZED	Route Piping from Supply S Route & Tie-In Piping to Ini	Il Canal Scinitelian for CT	Const Substation for CI Install Feeds from Subst	Install Electrical On Tow	Install Feeds from Sub	CWIS & Discharge N	Construct Dike w/Slu Contruct Dike w/Slui	Pumping Station	Construct Pump Ho	Install Booster Pun	Excavation and Re	Complete Installa Roostar Dumning	Electrical High-Vo	Condenser Tube	Install/Test Autom	Testing & Commis	zation Demobilization

3

AR-140 Page 190 of 205