Eversource

Removal of Mercury Boilers at Schiller Station

Monthly Status Report
March 2017

Date: April 28, 2017

Subject: Schiller Station Units 1 & 2 Mercury Boiler Removal

Monthly Status Report # 5 – March 2017

Summary

The mercury boiler equipment removal project through March 2017 is proceeding. Actual expenses for the first five months of activity are in line with the overall estimated cost range. No environmental concerns have been raised beyond those expected and typical at this time.

As reported last month, the current expected project completion date is October 15, 2017. This schedule reflects updated work plans and resources consistent with the actual conditions and productivity experienced during January through March 2017.

Background

On October 21, 2016 in Order No. 25,956 the Commission approved Eversource's removal of two mercury boilers and associated equipment located at Schiller generating station as recommended by the Commission's auction advisor, J.P. Morgan

The Order noted:

"The immediate launching of the Schiller abatement effort offers several advantages within this framework. Eversource has intimate, operationally-developed knowledge of Schiller Station conditions that would enhance the efficiency of the remediation effort. Prompt remediation of the conditions at Schiller Station will tend to make the asset a more attractive acquisition target, and protect potential operational synergies among the Schiller, Newington, and Merrimack Station facilities."

And the Commission concluded:

"We are also satisfied that the cost-review checks called for by the terms of the Stipulation will enable the Commission, Staff, and the other parties to monitor the effort for cost overruns and other potential issues. We will require that Eversource provide monthly updates on the cost and progress of the removal to Staff and we will require Staff to bring any substantial variances to our attention. We therefore find that undertaking the proposed removal of the two mercury boilers and related equipment from the Schiller generation station is prudent within the framework of the divestiture auction. We will monitor the manner in which Eversource conducts the removal to ensure that the removal is prudently managed."

Status

1.0 Cost

The total project cost estimate is in the range of \$20 - 30 million based on information provided by Eversource's vendors. The Company has incurred cost through March 2017 of approximately \$5.5 million. No changes to the overall estimated cost range are expected at this time. Please refer to page 5 and page 6 for details of the actual cost by month.

2.0 Schedule

The anticipated schedule and corresponding status for the project are as follows:

	Projected Schedule	Schedule Status
Nov 2016	Mobilize & Testing (a)	On Target
Dec 2016	ACM (b)	On Target
Jan 2017	ACM & Demolition (c)	On Target
Feb 2017	ACM & Demolition	Schedule Revised
Mar 2017	ACM & Demolition	On Target
Apr 2017	ACM & Demolition	
May 2017	Demolition	
Jun 2017	Demolition	
Jul 2017	Demolition	
Aug 2017	Demolition	
Sep 2017	Demolition	
Oct 2017	Cleanup & Demobilization	
	Target completion date: 15 October 2017	

Notes:

- (a) "Mobilize" includes staging of temporary office trailers, parking, decontamination area, setting up enclosures, and preparing work & safety plans. "Testing" involves *in situ* pre-demolition chemical characterization of materials to determine proper offsite disposal criteria.
- (b) "ACM" = Abatement of Asbestos Containing Material.
- (c) "Demolition" = Demolition of Units 1&2 components over an 11 month period. Components to be removed include: stack, turbines, boilers, control room, coal bunker and all associated piping, lines and conduits.

3.0 Permitting and Notifications

The existing project permits as described in the November 2016 monthly status report are in good standing with no issues. Those are listed below.

- Demolition Permit with the City of Portsmouth
- Abatement Notification to NHDES

To date, the project continues to work under a demonstrated compliance model consistent with NHDES Air Rules. Under this approach, an air emissions permit is not required. As a contingency plan, an air emissions permit application is being prepared. Obtaining an air permit provides additional flexibility to maintain the schedule; and reduces risk associated with work delays. It is expected that the application for this permit will be submitted to NHDES late April 2017.

4.0 Critical Path Items Completed / Underway

Asbestos Abatement – 80% complete

Dismantling/Demolition – 20% complete

Asbestos abatement is taking place over 6 months and dismantling/demolition over 11 months, involving 5 elevations in varied locations of the Unit 1 and 2 boiler house area. The work began at the higher elevations and is proceeding to the lower elevations. Where possible, work is being completed in parallel. The asbestos and dismantling work during March included the following:

- Completed asbestos abatement on El. 11' and El. 24' between column lines 200-300 and on portions of the flue ducts above the coal bunker room
- Collection & disposal of approximately 300 cubic yards of asbestos
- Completed demolition of fan units at El. 82' and coal bunker between column lines 4-6
- Continued Unit 1 & 2 boiler dismantling above El. 82'
- Continued dismantling of flue ducts, pre-heaters, and heat exchangers on El. 82'
- Collection & disposal of approximately 80 tons of metal (non-mercury impacted and mercury impacted)
- Collection of liquid mercury from piping systems associated with Turbine 1 on El. 24' and El. 36'
- Packaging of approximately 22.5 gallons of liquid mercury

During the work described above, other activities included performance of background and area monitoring within the interior and on the exterior of containments for mercury and asbestos. In addition, marking and tagging of active electrical and mechanical lines to remain within the containment area, and cutting and capping of mechanical lines to be removed from the work area was also conducted.

5.0 Significant Issues

There are no significant issues to report this period.

6.0 Cost & Schedule Impacts

Last month it was reported that the expected schedule completion date was extended by one month to October 15, 2017. This expected completion date remains the same as of the March report. This date remains well ahead of the asset transfer date currently in the sale schedule prepared by JP Morgan.

7.0 Agency Visits, Inspections & Audits

No agency visits, inspections or audits occurred during March 2017.

8.0 Next Report Due

The next monthly report will be submitted to the Commission by May31 2017.

Schiller Station Units 1 & 2 Mercury Boiler Removal

Monthly Status Report - March 2017

Public Service Company of New Hampshire d/b/a Eversource Energy Removal of Mercury Boilers Deferred Costs Monthly Status Report for March 2017

																									Total
Line #		Jan 2017		Feb 2017	Mar 2017	Ap	or 2017	Ma	y 2017	Ju	n 2017	Ju	l 2017	Aug	g 2017	Se	p 2017	Oc	t 2017	No	v 2017	De	c 2017		2017
1	Internal Cost:																								
2	-Employee Labor	\$ 34,463	\$	31,022	\$ 32,376	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	97,861
3	-Employee Misc. Expense	105		225	254		-		-		-		-		-		-		-		-		-		584
4	-Materials & Supplies	-		-	-		-		-		-		-		-		-		-		-		-		-
5																									
6	Vendor Cost:																								
7	-O'Connor Corp.	\$ -	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
8	-William Scotsman Inc.	1,510		1,510	1,510		-		-		-		-		-		-		-		-		-		4,530
9	-Mohlin & Company	12		-	-		-		-		-		-		-		-		-		-		-		12
10	-GZA GEO Environmental Inc.	51,358		39,130	59,349		-		-		-		-		-		-		-		-		-		149,837
11	-Ayer Electric Inc.	-		-	-		-		-		-		-		-		-		-		-		-		-
12	-Manafort Brothers	1,086,678		240,929	2,065,674		-		-		-		-		-		-		-		-		-	:	3,393,281
13				-	-		-		-		-		-		-		-		-		-		-		
14	Monthly Total	 1,174,126		312,817	2,159,162		-		-		-		-		-		-		-		-		-	- :	3,646,105
15																									
16	Balance	\$ 2,986,806	\$	3,299,622	\$ 5,458,784	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
17																									
18	Average Balance	\$ 2,399,743	\$	3,143,214	\$ 4,379,203	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
19	Tax Impact @ 40.330%	(967,816))	(1,267,658)	(1,766,133)		-		-		-		-		-		-		-		-		-		
20	Average Investment	\$ 1,431,926	\$	1,875,556	\$ 2,613,071	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
21	Stipulated Rate of Return	0.67%	5	0.67%	0.67%		0.67%		0.67%		0.67%		0.67%		0.67%		0.67%		0.67%	ı	0.67%		0.67%		
22	Interest	\$ 9,588	\$	12,558	\$ 17,497	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	39,643
23																									
24	Monthly Total Including Interest	1,183,714		325,375	2,176,659		-		-		-		-		-		-		-		-		-		
25																									
26	Cumulative Total Including Interest	3,003,565		3,328,940	5,505,599	5,5	505,599	5,5	05,599	5,	505,599	5,	505,599	5,5	05,599	5,5	05,599	5,5	05,599	5,	505,599	5,	505,599		

Schiller Station Units 1 & 2 Mercury Boiler Removal Monthly Status Report - March 2017

Public Service Company of New Hampshire d/b/a Eversource Energy Removal of Mercury Boilers Deferred Costs Monthly Status Report for 2016

Line #	Description	Jan	2016	Feb 2016	Ma	ır 2016	Apr 2	2016	May 2	2016	Jun	2016	Jul	2016	Au	g 2016	Sep	2016	Oct	t 2016	N	ov 2016	De	ec 2016		Total 2016
1	Internal Cost:																									
2	-Employee Labor	\$	- :	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	34,510	\$	34,490	\$	69,001
3	-Employee Misc. Expense		-	-		-		-		-		-		-		-		-		-		230		243		473
4	-Materials & Supplies		-	-		-		-		-		-		-		-		-		-		9,889		183		10,072
5																										
6	Vendor Cost:																									
7	-O'Connor Corp.	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	23,000	\$	33,058	\$	(149)	\$	55,909
8	-William Scotsman Inc.		-	-		-		-		-		-		-		-		-		-		4,993		1,510		6,503
9	-Mohlin & Company		-	-		-		-		-		-		-		-		-		-		10,100		1,838		11,938
10	-GZA GEO Environmental Inc.		-	-		-		-		-		-		-		-		-		-		23,000		33,809		56,809
11	-Ayer Electric Inc.		-	-		-		-		-		-		-		-		-		-		46,941		(11,238)		35,703
12	-Manafort Brothers		-	-		-		-		-		-		-		-		-		-		680,010		886,262	1	,566,272
13																										
14	Monthly Total		-	-		-		-		-		-		-		-		-		23,000		842,732		946,948	1	,812,679
15																										
16	Balance	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	23,000	\$	865,732	\$ 1	,812,679	\$ 1	,812,679
17																										
18	Average Balance	\$	- :	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	11,500	\$	444,366	\$ 1	,339,206		
19	Tax Impact @ 40.330%		-	-		-		-		-		-		-		-		-		(4,638)		(179,213)		(540,102)		
20	Average Investment	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	6,862	\$	265,153	\$	799,104		
21	Stipulated Rate of Return		0.67%	0.67%	,	0.67%	(0.67%	C	0.67%		0.67%		0.67%		0.67%		0.67%		0.67%		0.67%		0.67%		
22	Interest	\$	-	\$ -	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	46	\$	1,775	\$	5,350	\$	7,171
23																										
24	Monthly Total Including Interest		-	-		-		-		-		-		-		-		-		23,046		844,507		952,298		
25																						•		•		
26	Cumulative Total Including Interest		-	-		-		-		-		-		-		-		-		23,046		867,553	1	,819,851		