

THE STATE OF NEW HAMPSHIRE
before the
PUBLIC UTILITIES COMMISSION
Public Service Company of New Hampshire
Merrimack Station Scrubber Project

ORIGINAL	
N.H.P.U.C. Case No.	DE 11-250
Exhibit No.	#3
Witness	Panel 1
DO NOT REMOVE FROM FILE	

Docket No. DE 08-103

Progress Report
Addendum

November 18, 2011

Public Service Company of New Hampshire ("PSNH") is pleased to provide this *Addendum* to the November 10, 2011, status update regarding the Clean Air Project ("Project") involving the legislatively mandated installation of a Wet Flue Gas Desulfurization ("FGD") System (i.e., "Scrubber" technology) by PSNH at its Merrimack Generating Station. This *Addendum* will provide a report on a significant milestone achieved since the filing of our Progress Report last week.

I. SCRUBBER CONSTRUCTION, EQUIPMENT INSTALLATION AND START-UP PROGRESS

B. Activities Performed During 2011

iv. Quarter 4 (to date):

The Unit 2 tie-in outage was completed successfully with a return to service on November 14, 2011.

Unit 2 began its tie-in outage on October 12, 2011, with the critical path being boiler inspection and maintenance. This outage was planned ahead of time with the Independent System Operator – New England (ISO-NE) with an end date of November 21, 2011. Scrubber related activities included removal of the existing duct work to the Unit 2 chimney, completion of the connections to the new Scrubber duct work and the



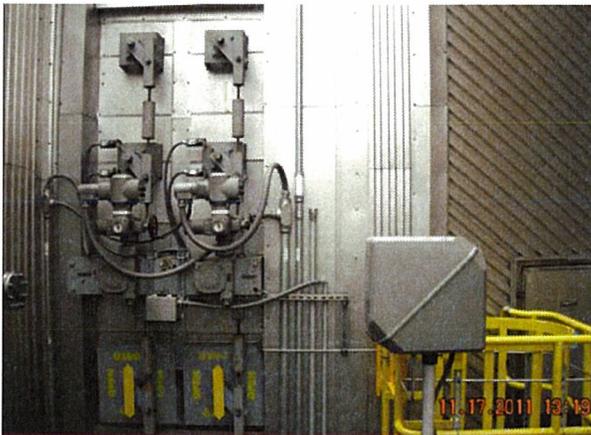
Unit 2 Ductwork

new booster fans and completion of the recirculation ducts. The tie-in of Unit 2 to the Scrubber and all support systems was successfully completed in early November, and Unit 2 start-up began on November 13. Start-up was finished on November 14 when the Unit was phased to the grid with the Scrubber system on-line and in operation. At start-up, portions of the Project specific to Unit 2 were deemed to be in-service declaration, and the accrual of AFUDC for those items ceased.

II. SUMMARY OF PROJECT'S IN-SERVICE STATUS

Unit 2 initiated a very successful start-up Monday, November 14 at 9:55AM When the Unit was phased on-line, providing power to the Grid.

With both Units 1 and 2 on-line, their boiler gas emissions are ducted into the absorber vessel where they are “scrubbed” with a limestone slurry. The chemical reaction between the emissions and the limestone slurry produces calcium sulfate, which is synthetic gypsum. The gypsum produced has commercial value, and will be sold.



Continuous Emissions Monitors

The new Continuous Emissions Monitors (CEMs) have indicated that with both Units 1 and 2 on-line the Scrubber is achieving initial SO₂ reductions of 90% or better; however, it is early in the Project operating life with tuning and testing to occur later in 2011 and early 2012. The new CEMs testing is on-going. Unit 1's CEM is being RATA (Relative Accuracy Test Audit) tested the week of November 14 and additional testing on the other CEMs will continue over the next few weeks.

With both units in operation, there is a clear demonstration of successful operation of the Scrubber. The systems and equipment associated with the Scrubber are operating and performing the intended emissions reduction function as designed in support of operations of both Units 1 and 2.

As stated above, the incremental portions of the Project that began commercial operation upon Unit 2 start-up on November 14, 2011 include the ductwork and two booster fans associated with Unit 2. Also recently put into service on November 9, 2011 was the Enhanced Mercury and Arsenic Removal System (EMARS). This equipment is associated with the primary waste water system and was fully functional and performing its intended service as of that date.

The table below provides an updated list of the Project components that have been installed and which were operating and placed in-service as of November 17, 2011, which now includes the items noted above.

Clean Air Project - including	Total Dollars In-service as of 11/17/11 (in millions)
Scrubber system	
Chimney Island	
Material Handling systems	
Wastewater Treatment system	
BOP- Civil / Structural	
BOP Electrical	
BOP Mechanical	
Program Manager	
EMARS	
Unit 2 Ductwork /Booster Fans	
sub-total	\$339.0
Warehouse	\$1.1
Yellow Meeting Place Building	\$2.0
FGD 115 kV switchyard and sub-station	\$17.0
TOTAL	\$359.1

Remaining items to be placed in-service include the truck wash, truck scales, and additional wastewater equipment.

CONCLUSION

In conclusion, PSNH is pleased to report these additional milestones which were also placed in-service well ahead of the statutory deadline. The Project is successfully achieving significant reductions in emissions from the operation of both units at Merrimack Station more than 18 months in advance of the statutory deadline.