THE STATE OF NEW HAMPSHIRE

BEFORE THE NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

JOINT TESTIMONY OF

ROBERT A. BAUMANN and WILLIAM H. SMAGULA

2012 DEFAULT ENERGY SERVICE RATE CHANGE - UPDATE

MERRIMACK SCRUBBER

Docket No. DE 11-215

Q. Please state your names, business addresses and positions.

A. My name is Robert A. Baumann. I am Director, Revenue Regulation & Load Resources for Northeast Utilities Service Company (NUSCO). NUSCO provides centralized services to the Northeast Utilities (NU) operating subsidiaries, including Public Service Company of New Hampshire (PSNH). My business address is 107 Selden Street, Berlin, Connecticut.

A. My name is William H. Smagula. I am Director of Generation for PSNH. My business address is 780 North Commercial Street, P.O. Box 330, Manchester, New Hampshire.

Q. Have you previously testified before the Commission?

A. Yes. We have testified on numerous occasions before the Commission.

Q. What is the purpose of your testimony?

A. The purpose of our testimony is to provide an update to PSNH's September 23, 2011 Energy Service (ES) rate filing to reflect the addition of costs associated with the Merrimack Scrubber Project. Effective September 28, 2011, that project was declared in service. As of that date, the project became used and useful in the provision of service

to customers as it began providing significant reductions to the emissions at Merrimack station. Our testimony provides the latest cost and rate estimates associated with the Project as well as an historic overview of the Project's achievements and ultimate declaration of in service.

Q. Is it PSNH's intent to include the costs associated with the Scrubber in the ES rate effective January 1, 2012?

A Yes. Per RSA 125-O:18 PSNH shall be allowed to recover all prudent costs of complying with the requirements of the Scrubber law. As part of this ES rate filing calculation, we have included a forecast of Scrubber costs beginning September 28, 2011 through the end of 2012.

Q. What is the preliminary all-in ES rate with Scrubber costs that PSNH is providing in this filing?

A. The preliminary all-in ES rate is 9.57 cents per kWh which is the composite rate made up of the initial ES rate filed on September 23, 2011 (8.39 cents) plus the incorporation of the initial preliminary Scrubber impact. Within this rate is a proposed three year amortization of the 2011 Scrubber related under recovery which mitigates the initial rate impact. The supporting calculations for this initial Scrubber impact are contained in Exhibits RAB–5 and RAB–6, attached to this testimony.

Q. Is PSNH proposing a specific ES rate at this time?

A. No, we are not. In prior ES proceedings, the Commission has required PSNH to utilize market information that is most current as of the hearing date. In light of that precedent, at this time PSNH is supplying preliminary market data and operational data for its

owned generation consistent with our September 23, 2011 filing, as well as for existing power purchase obligations (such as IPPs). PSNH will formally propose an ES rate, and provide a rate calculation based on updated market information and the latest Scrubber information, prior to the anticipated hearing in December 2011.

Q. Will the updated filing use the same calculation methodologies as in previous proceedings?

A. Yes.

Q. Please elaborate on the Scrubber project that has been included in this update.

A. The "Clean Air Project", is a legislatively mandated project per 2006 N.H. Laws, Chapter 105, "An Act Relative to the Reduction of Mercury Emissions," which requires the installation of wet flue gas desulphurization ("FGD") technology ("Scrubber" technology) at Merrimack Station. This pollution control equipment significantly reduces mercury and sulfur dioxide emissions. As previously noted, the law provides for the recovery by PSNH of all prudent costs of the Scrubber Project via the ES rate.

The primary costs associated with the Scrubber project that are included in this rate filing are (i) the depreciation costs, which are the recovery of our capital investment expenditures associated with the project, (ii) a return on the capital investment or ratebase, and (iii) additional operating costs associated with the Scrubber. The values contained in this filing are the best available data at this time and we will update these values in our November ES update as additional actual data becomes available.

Q. Is this filing calling for a final detailed review of the Scrubber costs?

A. No. Consistent with all forecasted ES costs used in the forward rate setting process, review of these costs would be performed in future ES actual cost reconciliation dockets for 2011 and 2012.

Q. Please provide an update on the Scrubber Project start-up efforts.

A. Outages to tie-in each of Merrimack Station's two units were planned for Fall 2011 with Merrimack 1 scheduled in the month of September and Merrimack 2 scheduled for mid October to mid November.

The Merrimack 1 outage was a planned 24 day tie-in outage that began on September 6. Ductwork changes, control system integration, and many other tasks associated with the Scrubber tie-in were executed during the outage, along with other corrective and preventative maintenance tasks on the unit. Start-up activities began on the weekend of September 24 -25 with a phase of the unit to the grid and return to service on Sunday afternoon, September 25.

The start-up activities were initiated upon removal of all safety tags and initial fires were started in the boiler at 1:00 AM on Sunday, September 25. The Merrimack boilers' cyclone fired design, which are significantly different than other more traditional pulverized coal boilers, require more operational start-up involvement with operators and have a number of inherent start-up activities. These start-up activities proceeded extremely well after an almost three week shutdown including the necessary lengthy routine turbine heat soak, culminating in the Unit being phased online at 3:18 PM on

Sunday, September 25, 2011. This tie-in outage was very successful, with unit start-up occurring 5 days ahead of the outage window end date.

In parallel with these unit start-up activities, Scrubber operational preparedness was performed for over 24 hours such that when the unit went online, the Scrubber was in operation performing its desired functions of spraying limestone water into the absorber vessel with appropriate support systems and equipment in operating mode resulting in mercury and sulfur dioxide emission reductions. The unit achieved full load operation by 10:30 PM Sunday night and remained online many days demonstrating the reliable functionality of both the unit and the Scrubber. This was an exceptionally smooth start-up for the unit and a similarly exceptionally smooth start-up for the first time operation of the Clean Air Project. The tie-in outage for Merrimack Unit 2 began October 12.

Q. Please provide the basis of support for the Scrubber in-service date of September 28, 2011.

A. Merrimack Station has previously constructed and put in-service pollution control equipment as back-end technology such as SCRs for nitrous oxide emission reductions and supplemental precipitators for particulate emission reductions on both Unit 1 and Unit 2. Consistent with the treatment of other completed small or large capital projects, the pollution control equipment of the Scrubber is being operated as an integral part of station operations and as such typically goes into service when the equipment begins to function as designed. That is when the equipment becomes used and useful in the provision of service to customers. In this instance, due to the amount of new equipment associated with the Scrubber, a slightly longer than normal period of operation was

allowed to occur before an in-service declaration was confirmed on September 28, 2011, in order to confirm that the various Scrubber functions were all successfully operating and the Project was fulfilling its statutory purpose of reducing mercury, and also significantly reducing sulfur dioxide emissions,

Q. Does this conclude your testimony?

A. Yes, it does.