THE STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE 2007 STRANDED COST RECOVERY AND ENERGY SERVICE RECONCILIATION

Docket No. DE 08-066

Stipulation and Settlement Agreement

This Stipulation and Settlement Agreement is entered into as of the date appearing below between Public Service Company of New Hampshire ("PSNH" or "the Company"), and the Staff of the Public Utilities Commission ("Staff"). PSNH and Staff intend this Stipulation and Settlement, if approved in its entirety by the Commission, to resolve all outstanding issues in this docket unless otherwise noted. The Office of Consumer Advocate ("OCA") participated in the proceeding and does not oppose the Agreement.

I. Background

On May 1, 2008, PSNH filed testimony and exhibits with the Commission with respect to PSNH's proposed reconciliation of stranded costs and energy service costs incurred during calendar year 2007 with the revenues collected in 2007 through the Stranded Cost Recovery Charge ("SCRC") and Default Energy Service ("Energy Service") rate. PSNH made the filing pursuant to Order No. 24,125 (February 14, 2003), which required, in part, that PSNH submit, on or before May 1 of each year, its proposed reconciliation of the previous calendar year's SCRC and Transition Energy and Default Energy Service revenues and costs.

II. PSNH's Filing

PSNH reported in its filing that during 2007 its Energy Service revenues exceeded its cost of providing Energy Service by approximately \$1.4 million. PSNH also reported that it received \$109 million in SCRC revenues during 2007. This amount allowed for the full recovery of Part 1 and Part 2 stranded costs for 2007, plus an additional \$6.8 million was available to reduce the under-recovery of 2006 SCRC costs of approximately \$10 million. During the reporting period, the total accumulated balance of Part 1 and 2 costs was reduced by \$61 million (from \$355 million at the end of 2006 to \$294 million at the end of 2007).

III. Commission Proceedings

The Commission conducted a Pre-Hearing Conference on June 26, 2008. The Parties and Staff convened a Technical Session following the Pre-Hearing Conference during which they agreed upon a procedural schedule. PSNH responded to discovery from Michael D. Cannata, Jr., P. E., Senior Consultant, The Liberty Consulting Group, and from Staff. The schedule approved by the Commission was later revised so that Staff testimony from Mr. Cannata was filed on October 24, 2008. Mr. Cannata subsequently responded to discovery from the OCA. A Technical Session and Settlement Conference was held on November 14, 2008.

IV. Settlement Terms

a. Power Supply

Staff, through its consultant, Michael D. Cannata, Jr., reviewed (1) the market-based capacity/energy planning performed by PSNH during 2007 that augmented its own generation to supply Default Energy Service to PSNH's customers, and (2) the operation of PSNH's generating plants and entitlements. Mr. Cannata reviewed the Outage and Power Reduction reports submitted by PSNH in its filing. In addition, he reviewed all of the other maintenance and forced outages and power reductions which occurred at PSNH generating stations during 2007 as well as certain 2006 generation outages resulting from events occurring on PSNH's transmission and distribution systems. As part of his review, he interviewed PSNH's Generation staff and Wholesale Marketing staff. Mr. Cannata submitted his testimony and related attachments on October 24, 2008 and provided responses to data requests posed by OCA.

In light of Mr. Cannata's investigation, PSNH and Staff agree: (1) that PSNH's filing accurately represents the capacity and energy purchasing process that took place in 2007; (2) that PSNH made sound management decisions with regard to its capacity and energy purchases in a market environment; and (3) that the capacity factor projections used for 2007 market purchases were reasonable.

b. Unit Outages

Mr. Cannata concluded that PSNH's base load units ran well in 2007 and, in fact, performed as well as or better than forecasted, setting new performance records. Except for some minor outages described below, Liberty found the outages to be reasonable and not unexpected for each particular unit and its vintage, or that each outage was necessary for proper operation of the unit. Mr. Cannata also concluded that PSNH conducted proper planning and management oversight regarding these planned and forced unit outages.

Mr. Cannata recommended disallowance of the replacement power cost for the following unit outages:

1. Ayers Island Outage I-E on October 7, 2007. This outage occurred because the operator added oil in the lower guide bearing without checking the oil

reservoir in the sump as required by procedure. There is no replacement power cost associated with this event. There was insufficient river flow at the time of the event to produce additional megawatt-hours from the station.

- 2. Schiller combustion turbine Outage A on February 7, 2007. The unit tripped due to loss of gas supply. Investigation found that the main gas valve had been left in the closed position during the installation of the gas supply for the new wood boiler and not returned to its open position when the job was completed. There is no replacement power cost associated with this event because the unit was not dispatched to serve PSNH's energy requirement.
- 3. Schiller combustion turbine Outage H on December 12, 2007. (7.9 MWHs of lost generation, 140.6 MWH of "failure to reserve" penalty) The combustion turbine's primary air feed compressor used for start up was out of service; however, the unit can be started with a back-up air feed from Schiller Station. When called to start, the unit failed to do so. The Schiller Station air pressure had been set to 500 lbs. in the past, but in order to increase efficiencies and reduce losses at the main plant, that pressure had been reduced to 250 lbs. which is too low to start the combustion turbine unit from Schiller, but is adequate for the rest of Schiller Station. The outage resulted in a net replacement power cost of \$521 (\$2,504 spot purchase expense minus \$1,983 avoided fuel expense) for energy. The unavailability of the combustion turbine resulted in a "failure to reserve" penalty from the ISO Forward Capacity Market adding an additional \$6,591 for reserves. The total cost is \$7,112.
- 4. Wyman-4 Outage I on December 18, 2007. (46.64 MWH) The feed water heater became vapor locked during start-up. Investigation found that the water level in the feed water heater was high prior to start up due to a blockage in the drain and the operator was inattentive to the condition of the feed water heaters. The operator went forward with start up and loading the unit resulting in the trip of the feed water pumps on low suction pressure. The total replacement power cost was \$1,033 (\$5,648 spot purchase expense minus \$4,615 avoided fuel expense).
- 5. Eastman Falls Outage 1L on August 22, 2006 (Certain hydro plant outages were carried over from the review of 2006 outages in Docket No. DE 07-057). The unit tripped due to low voltage at the Webster substation. Testing was performed on the transformer LTC at Webster and when the controls were tested, the test switch was left in the test position. The switch was moved into the operate position and the unit was returned to service. There is no replacement power cost associated with this event. There was insufficient river flow at the time of the event to produce additional megawatt-hours from the station.

PSNH does not agree that operator error, in and of itself, warrants a cost disallowance. Moreover, PSNH and Staff agree that operator error does not automatically lead to a finding of imprudence. Finally, PSNH maintains that its small ownership in Wyman Unit 4 does not enable the Company to exercise any meaningful control over the operation of that unit, and PSNH does not concede that outages at Wyman Unit 4 can be reasonably prevented by PSNH management's actions. While Staff acknowledges PSNH's minority ownership status in Wyman Unit 4, Staff believes that PSNH should do what it can to get the majority owners to address the issues surrounding such forced outages. Notwithstanding these disagreements, PSNH has agreed to forego recovery of the replacement cost associated with the outages described above. PSNH agrees that it will not seek recovery of the net replacement power costs associated with these outages, totaling \$8,145. PSNH will credit its current Energy Service costs by \$8,145 upon the acceptance by the Commission of this Stipulation and Settlement Agreement.

c. Additional Recommendations from Mr. Cannata

Mr. Cannata made several recommendations in his testimony regarding PSNH's operations¹:

- 1. PSNH should review the foreign matter exclusion procedure and modify it to include a check for foreign materials at the end of each shift as well as the current end of job inspection. He further recommends that when a unit is opened for maintenance, the senior crew person be required to sign off that all foreign materials have been removed prior to closing the unit.
- 2. PSNH should evaluate the use of a roving practices and procedure person during an outage to ensure that practices, procedures, and safety requirements are being followed per PSNH instructions. This practice should be implemented at all plants and is applicable for all outages.
- 3. PSNH should evaluate original equipment that does not have an inspection schedule and determine if and when such a schedule should be established. He recommended that PSNH should also evaluate equipment that does currently have an established inspection schedule and determine if that schedule should change with the aging of components. These recommendations apply to all major units.
- 4. PSNH should not rely exclusively on aerial patrols for inspections of lines in rights-of-way and that all lines in a right-of-way be inspected from the ground.
- 5. PSNH should consider a) moving check valves that show a propensity for sticking so that those valves may be unstuck without disturbing other systems and b) exercise care in the placement of check valves. Mr. Cannata further

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¹ In addition to the listed recommendations, Liberty has concerns about PSNH's use of 50/50 load forecasts based on 30 years of weather history in its energy and capacity planning processes. Cannata Testimony at 6. This issue needs further discussion and analysis and will continue to be examined.

recommended that PSNH conduct an informal survey to identify other areas that exhibit the potential for similar problems.

- 6. An outage occurred at Schiller Station when the wrong switch was activated by an operator. In the main control panel the switches are located in one configuration while the remote control panel located at the combustion turbine the switches are in an opposite or different configuration. Mr. Cannata recommended that PSNH identify potential problems with switching locations at its generating stations where there are two systems with different configurations, thereby preventing similar operator errors in the future.
- 7. PSNH should check the lightning protection in the area of the Canaan hydro unit to assure that its lightning protection practices will not result in lightning damage to the unit.
- 8. PSNH should set distribution system protective settings in the future such that local generation is not impacted. In addition, Mr. Cannata recommended that PSNH review existing distribution system settings and do whatever is possible to minimize impacts to local generation.

PSNH accepts Mr. Cannata's recommendations and, with respect to recommendations 1 through 7, will develop actions or policies to implement them, or will take steps to improve its practices with respect to each recommendation. PSNH will work with Staff and Liberty Consulting to more clearly define Recommendation 8 and what steps PSNH may take to address Mr. Cannata's concerns.

d. Miscellaneous

PSNH and Staff acknowledge that the provisions of this Stipulation and Settlement Agreement are interdependent and non-severable and shall not be binding upon, nor deemed to represent the positions of, PSNH and Staff if they are not approved in full without modification or condition by the Commission. PSNH and Staff further acknowledge that this Stipulation and Settlement Agreement is the product of settlement negotiations, that the content of such negotiations shall be deemed to be privileged and that all offers of settlement shall be without prejudice to the position of PSNH or Staff. The Commission's acceptance of this Stipulation and Settlement shall not constitute precedent or admission by any party in any future proceeding. PSNH and Staff agree to support this Stipulation and Settlement Agreement before the Commission and to take all reasonable actions to implement the terms described herein.

Dated this \alpha \tau \day of November, 2008.

Respectfully submitted,

Staff of the Public Utilities Commission

Date: 4/01/9,2008

y: Buzanne Amilpon

Public Service Company of New Hampshire

Date: November (9200 8

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