THE STATE OF NEW HAMPSHIRE BEFORE THE PUBLIC UTILITIES COMMISSION

Public Service Company of New Hampshire

RECONCILIATION OF STRANDED COSTS AND ENERGY SERVICE CHARGE FOR 2011

Docket No. DE 12-116

Stipulation and Settlement

This Stipulation and Settlement Agreement is entered into as of the date written below between Public Service Company of New Hampshire ("PSNH"), and the Staff of the Public Utilities Commission ("Staff") hereinafter "PSNH and Staff." This Stipulation and Settlement Agreement resolves, and represents a compromise of, all of the issues in this proceeding among PSNH and Staff, except as specifically noted herein.

I. Background

On May 1, 2012, PSNH filed testimony and exhibits with the New Hampshire Public Utilities Commission ("Commission") with respect to the reconciliation of stranded costs and energy service costs incurred in 2011 with revenues recovered in 2011 through the Stranded Cost Recovery Charge ("SCRC") and Default Energy Service ("Energy Service") rate.

The Office of Consumer Advocate ("OCA") filed its letter of participation on May 9, 2012. On May 31, 2012, TransCanada Power Marketing Ltd. ("TransCanada") filed a petition to intervene to which PSNH objected on June 5, 2012. Through a hearings examiner, the Commission conducted a prehearing conference on June 5, 2012, and a technical session was held immediately thereafter. On June 7, 2012, the hearings examiner's report was filed and recommended that TransCanada's motion to intervene be granted and that the Commission issue an order defining the scope of the proceeding. On June 18, 2012, the Commission issued Order No. 25,375. By that order the Commission set a procedural schedule for the docket and granted TransCanada's petition to intervene. In addition, the order clarified the scope of the proceeding. Discovery was conducted on PSNH's filing, and on October 25, 2012 Staff filed testimony in the docket.

II. Staff Testimony

Staff, through its consultant, Accion Group, Inc. ("Accion") filed testimony on PSNH's power procurement activities and the operation of its generating units. Mr. Michael D.

Cannata, Jr. of Accion conducted an investigation of PSNH's capacity and energy transactions in 2011 and the operation of its generating assets and unit entitlements.

In general, Mr. Cannata concluded that PSNH made sound and prudent management decisions with regard to its capacity and energy purchases consistent with its Least Cost Plan. Mr. Cannata concluded that PSNH made progress in making short-term sales of excess energy and capacity once that energy or capacity had been purchased. Mr. Cannata noted that PSNH used its recently modified energy procurement procedures to govern supplemental energy purchases and that PSNH was continuing to focus on the short-term as had been recommended in Docket No. DE 11-094. PSNH's efforts in focusing more on the short-term, as recommended, significantly reduced customer costs.

In addition, Mr. Cannata reviewed PSNH's capacity and energy transactions and concluded that PSNH's capacity factor projections used in 2011 were reasonable. Mr. Cannata also stated that he was satisfied with the manner in which PSNH modeled its reliability outages for 2011 and the impact of economic reserve status on its forecasts.

Mr. Cannata also reviewed PSNH's outage reports and conducted interviews with PSNH's employees regarding the operation and maintenance of its generating plants and entitlements. Accion found that PSNH's base load units generally performed well, with very high availability on the highest priced energy days during 2011.

Accion recommended that PSNH not recover from customers the cost of the replacement power related to outages at PSNH's units: Schiller Outage 6C on May 5, 2011; Ayers Island Outage 1B on February 3, 2011; Eastman Falls Outage 2M on November 28, 2011; Jackman Outage 1D on December 8, 2011 and Garvins Falls Outages 4F, 4G and 4H on May 29 and May 30, 2011. In addition, there were various outages in 2010, for which Accion recommended that PSNH defer recovery pending further review in this docket. Accion now recommends that PSNH not recover the costs of those outages from customers.

The replacement power costs for each of these outages was approximately as follows:

	Replacement
Outage	Power Cost
2011 – Outages	
Schiller Outage 6C	\$0
Ayers Island Outage 1B	\$31
Eastman Fall Outage 2M	\$35
Jackman Outage 1D	\$545
Garvins Falls Outages	\$219
4F, 4G and 4H	
2010 – Outages	
Canaan C,D,E,F,G,K and	\$548
M	
Garvins M-A	\$38
Hooksett A,B and C	\$787
Total	\$2,203

Mr. Cannata conducted a review of PSNH's efforts to address the recommendations contained in the stipulations in the previous reconciliation proceedings, Docket Nos. DE 09-091, DE 10-121, and DE 11-094, and made additional recommendations pursuant to his review of PSNH's capacity and energy transactions and unit outages.

III. Settlement Terms

A. Power Supply and Procurement

PSNH and Staff agree that PSNH's filing contains an accurate representation of the capacity and energy purchases in 2011. PSNH and Staff agree that PSNH made sound management decisions with regard to such purchases, and that capacity factor projections used for 2011 market purchases were reasonable.

B. Recommendations Regarding Capacity and Energy Transactions

As stated above, Accion recognized that PSNH's efforts in focusing more on the short-term transactions have significantly reduced customer costs. PSNH will continue to focus on the short-term market in the near future as market prices remain depressed due to low economic activity, load growth, and fuel prices.

C. Unit Outages

PSNH agrees that it will not seek recovery of \$2,203 of replacement power costs associated with the outages identified in the table above. PSNH's agreement to forego recovery of such replacement power costs is not an admission of imprudence for any of the outages and is done in an effort to reach settlement of these issues.

D. Recommendations Regarding Potential Improvement in Unit Operation

In Docket Nos. DE 09-091, DE 10-121, DE 11-094, and DE 12-116, Mr. Cannata made numerous recommendations regarding operation and maintenance of PSNH's generating units. PSNH and Staff agree that the recommendations described below incorporate all pending recommendations from these dockets, and that the below list supersedes all prior recommendations. PSNH and Staff further agree that PSNH shall not be required to track or report on any prior recommendations, except as may be described herein. PSNH agrees to provide updates on the below recommendations, and PSNH's implementation of them, at the time of its May 2013 reconciliation filing.

1. **2012-1** Re: Scrubber installation at Merrimack. In Docket No. DE 12-116, Accion recommended that due to the installation of the Scrubber there are now situations that may exist that could result in failures in both Merrimack units. Accion therefore recommended that, if it has not already done so, PSNH should review the interaction of the Scrubber with both units to identify possible failure conditions and determine the need for spare parts or additional redundancy to maximize operational efficiency. (Accion Testimony, page 13, lines 3-8 and page 63)

PSNH agrees to continue its review of the new scrubber installation and assess potential failure modes to determine the necessity for spare parts or additional redundancy.

2. **2012-2** Re: Planned Outages. In Docket No. DE 12-116, Accion noted that during planned outages decisions are made about assumptions used to develop an outage schedule, but that during a planned outage at Merrimack, certain assumptions required refinement during the outage which resulted in planning changes. Accion recommended that PSNH review all planned outage schedules prior to the outage to detect any assumptions that need to be verified. (Accion Testimony, page 13, lines 9-18 and page 63)

PSNH agrees to review planned outage schedules to detect assumptions that need to be verified.

3. **2012-3** Re: Schiller Outages 4E and 4F. In Docket No. DE 12-116, Accion stated its belief that PSNH will be using increased amounts of used or refurbished equipment as its unit fleet ages and recommended that PSNH add the testing performed on such equipment to the history documentation of the equipment. Accion recommended

that this be implemented at all stations including the hydro units and that expectations about testing and documentation be made clear to vendors. (Accion Testimony, page 13, line 19 through page 14, line 7 and page 73-74)

PSNH agrees to add the testing performed on used or refurbished parts to the part's history documentation. This will be implemented at each station including the hydro units and testing expectations will be made clear to vendors.

4. **2012-4** Re: Schiller Outage 6H. In Docket No. DE 12-116, Accion recommended that in satisfying the needs of the New England Power Pool, PSNH make clear to ISO-NE and all unit operators that all requested unit starts that are shorter than committed start-up times will be on a best efforts basis and that PSNH is not responsible if the start-up time requested is less than the committed start-up time requirement. (Accion testimony, page 13, lines 8-18, and page 101)

PSNH agrees to make clear to the ISO-NE that all requested unit starts that are shorter than committed start-up times are made on a best efforts basis only and that it is not responsible if the startup time requested is less than the committed startup time.

5. Re: Over trips on lower voltage system. In Docket No. DE 12-116, Accion noted that PSNH is conducting coordination studies that also require a transient stability analysis. Accion recommended that if the over trip outages are found to be systemic upon conclusion of PSNH's analysis, the system reliability design incorporate the unit over trips into system design criteria on a local basis, only if other economic remedies are not available. (Accion testimony, page 14, line 19 through page 15, line 4)

See **2012-10** below

6. **2012-5** Re: Smith Outage 1C. In Docket No. DE 12-116, Accion noted that in making repairs for this outage, PSNH was installing a breaker where there had not been one before. Accion recommended that PSNH review all generation tie-in configurations to assess the risk of possible failures similar to the one at Smith and address any risks that are discovered. (Accion Testimony, page 15, lines 5-15 and 4, lines 16-20 and page 114)

PSNH agrees to review its generation tie-in configurations, assess the risk of similar failures, and, as appropriate and economical, address the risks found.

7. **2012-6** Re: Various outages at hydro units. In Docket No. DE 12-116, Accion recommended that to avoid unit interruptions caused by outdated Mercoid switches, PSNH develop a program to replace those switches within a finite time at the hydro,

and all other, generating facilities. (Accion Testimony, page 15, line 16 through page 16, line 3 and page 114)

PSNH agrees to develop a time bounded program approach for replacement of Mercoid switches at its hydro stations and other generating facilities with identified opportunities and will submit the switch replacement schedule with its May 2013 ES/SCRC reconciliation filing.

8. **2012-7** Re: Garvins Falls Outage 4D. In Docket No. DE 12-116, Accion recommended that PSNH review and modify the time of year it changes its hydro stations to summer temperature settings to account for early or late season weather events, or that PSNH eliminate the winter temperature period altogether. (Accion Testimony, page 16, lines 4-11, and page 115)

PSNH agrees to review the time of year it changes temperature settings to address early or late season temperature changes.

9. **2012-8** Re: White Lake, Outage CT-1F. In Docket No. DE 12-116, Accion recommended that when PSNH is replacing equipment with new equipment that is not "in-kind", a hold should be placed on the replacement until the new equipment is well understood. (Accion Testimony, page 16, lines 12-18, and page 124)

PSNH agrees to reinforce to employees (e.g., engineers, operators, mechanics) the importance of understanding and confirming the appropriateness of a replacement that is not in-kind.

10. **2012-9** Re: Merrimack Outage CT-1C. In Docket No. DE 12-116, Accion recommended that PSNH review changes in the compatibility of materials used in interface connections and strengthen training for proper installation of various interface sealing mechanism at all stations, including hydro operations. (Accion Testimony page 16, line 19 through page 17, line 6 and page 124)

PSNH agrees to review changes in the compatibility of materials used in interface connections and to strengthen its training of proper installation of the various interface sealing mechanisms at all of its stations.

11. **2012-10** (<u>From recommendation 2009-5</u>) – Re: Interconnection of PSNH Generating Units to the distribution System -- PSNH agreed to perform coordination studies. PSNH agreed to report on this issue as part of its filing for the 2011 ES/SCRC review in May 2012 (DE 11-094 Stipulation Section IV.E) and PSNH filed that progress report with the Commission on May 2, 2012 as part of its 2011 ES/SCRC review. PSNH has completed under-voltage and over-speed studies at each of its hydro units. Recommendations from these studies have been completed.

<u>From recommendation 2011-6</u> – Re: PSNH In-House Transient Stability Analysis-PSNH agreed to acquire the capability to perform in-house transient stability

analyses. PSNH responded to this item in its filing on May 2, 2012. PSNH is in the process of training in-house personnel. Currently, PSNH is gathering data to construct models to analyze the Canaan and Jackman hydro areas.

PSNH agrees to complete transient stability analyses at Canaan and Jackman hydro areas first before proceeding to other generation locations. PSNH agrees that subsequent to the completion of these transient stability analyses, PSNH will identify the most cost-effective next steps. Relative to item 5 above, to the extent that systemic issues are identified as associated with over trip outages, PSNH will determine prudent action using good engineering judgment.

12. **2012-11** (<u>From recommendation 2011-3</u>) – Vegetation Outages along the 355 and 355X10 34.5 kV Circuits -- PSNH agreed to conduct a vegetation inspection of the 355 and 355X10 34.5 kV circuits connected to the Canaan Hydro Station, and;

From recommendation 2011-4 – Re: Vegetation Outages along the 335/332 34.5 kV Circuits -- PSNH agreed to conduct a vegetation inspection of the 335/332 34.5 kV circuits that are connected to the Hooksett and Garvins Hydro Stations.

As discussed in testimony in Docket No. DE 12-116, Accion recommended that PSNH initiate a 5-year program that continuously addresses danger trees (known as risk trees to PSNH) outside of the right-of-way as part of its regular vegetation T and D maintenance cycles. (Accion Testimony page 28, lines 13 through 18)

PSNH Transmission agrees to implement the recently developed plan to remove trees from outside the right-of-way when they pose a risk to the line and the easement allows for removal of such trees. As noted in Accion's testimony (page 28) funding to implement the program (\$800,000) has been proposed, but not yet approved. Completion of this plan is contingent upon funding and available easements. PSNH will notify the PUC of the final budgeted amount, the portion of the budgeted amount that is allocated to NH facilities, and the schedule of completion vs. the NH 5-year transmission vegetation maintenance schedule when the 2013 budget is finalized.

PSNH Distribution agrees to complete the circuit by circuit analysis and identify the rights-of-way that contain easements that allow PSNH to address risk trees outside the right-of-way.

PSNH agrees to continue its ROW full-width clearing program for the duration of the existing Reliability Enhancement Program. PSNH agrees to remove risk trees outside the easement area when they are identified and the easement allows for removal of such trees. If the easement does

not allow removal, a reasonable attempt will be made to contact the property owner for permission to remove the tree.

PSNH agrees to remove risk trees along roadways when they are identified and the easement language allows for removal of such trees. If the easement language does not allow removal or there is no easement, a reasonable attempt will be made to contact the property owner for permission to remove the tree.

Additionally, PSNH agrees to perform risk tree removal on the 355 line during the fourth quarter of 2012, to assure the line remains reliable until the scheduled full right-of-way maintenance is performed in 2013. An update on this status will be provided in PSNH's May 2013 reconciliation filing.

13. **2012-12** (<u>From recommendation 2010-1</u>) - Tracking Insurance payments from the 2008 MK-2 Turbine Outage -- Where litigation relating to this issue is still ongoing, Accion recommended that this issue remain open and further recommended that PSNH file an update of its progress as part of its 2012 ES/SCRC review filing in May 2013.

PSNH agrees to update the status of the ongoing litigation regarding the MK-2 Turbine Outage.

14. Closure of Previous Recommendations

PSNH and Staff agree that the following Recommendations should be closed:

- 2009-1 Property claim and Replacement Power Costs for the 2008 Merrimack turbine outage,
- 2009-2 Schiller warranty items,
- 2011-1 Prepare units for longer shut down times,
- 2011-2 Addressing potential gasket problems within the confines of the outage, and
- 2011-5 Emergent issues at small hydro stations

G. 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 positions of PSNH and 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.

IN WITNESS WHEREOF, PSNH and Staff have caused this Stipulation to be duly executed in their respective names by their agents, each being fully authorized to do so on behalf of their principal.

Date: December 36, 2012

Staff of the Public Utilities Commission

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Date: December 26, 2012

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