STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

DOCKET NO. 2015-06

JOINT APPLICATION OF NORTHERN PASS TRANSMISSION, LLC AND PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE D/B/A EVERSOURCE ENERGY FOR A CERTIFICATE OF SITE AND FACILITY

PREFILED SUPPLEMENTAL TESTIMONY OF

SAMUEL NEWELL AND JÜRGEN WEISS

ON BEHALF OF
COUNSEL FOR THE PUBLIC

April 17, 2017

Samuel Newell

Q. Please state your name, position and your employer.

A. My name is Sam Newell. I am a Principal at The Brattle Group.

Q. Have you previously testified in this docket?

A. Yes.

Jürgen Weiss

Q. Have you testified previously before the New Hampshire Site Evaluation Committee or other regulatory bodies?

A. My name is Jürgen Weiss. I am a Principal at The Brattle Group.

Q. **Have you previously testified in this docket?**

A. Yes.

Panel Testimony

Q. What is the purpose of your testimony?

A. The purpose of our testimony is to supplement our electricity markets analysis filed on December 30, 2016, on behalf the Counsel for the Public. In addition to updating our analysis, we were asked to address two issues that were not covered in our original report: (a) whether the Northern Pass Transmission Project (the "Project") enabled capacity will qualify for ISO-NE's Forward Capacity Market ("FCM") and (b) whether Project-enabled capacity will clear in the FCM. Our supplemental report is attached to this testimony as Exhibit A.

Q. Why did you perform an update of your original report?

A. On February 15, 2017, the Applicants' economic analyst, London Economics International ("LEI"), submitted an report (the "Updated Report") updating an analysis it had originally performed and submitted to the Site Evaluation Committee ("SEC") on October 19, 2015. The Updated Report introduced new information that was relevant to our analysis and impacted the results of that analysis. In addition, we learned through the technical sessions in this docket that LEI was intending to supplement its Updated Report by addressing whether Project-enabled capacity could qualify and clear in the FCM. We also decided with would be prudent to include the results from ISO-NE's Forward

Capacity Auction 11, which were made available in February. These results are an important piece of data for our analysis of the impacts to New England electricity markets.

Q. Can you please summarize the conclusions of your supplemental report?

A. We continue to find that LEI's updated analysis of NPT's overstate the certainty and magnitude of electricity market benefit customers can expect to enjoy if NPT is constructed. LEI's capacity market benefit estimate does not accounting for major uncertainties that have more downside than upside, and it incorporates an error that exaggerates benefits.

Our own updated analysis is not fundamentally different from our original. We find that NPT may not provide any electricity market benefits to New Hampshire customers if it displaces a similar competing project—a meaningful possibility given the Applicant's recent statements that proceeding with NPT depends on winning a competitive solicitation for clean energy. We also find that, even if NPT does provide incremental clean energy, it may or may not qualify and clear as capacity in ISO New England's capacity market (quite unlikely if providing capacity depends on building new dams; possible if it is based on existing capacity and agreements with third parties to provide low-cost winter capacity). In that case, NPT would provide energy market benefits but no capacity market benefits. In the event that NPT does qualify and clear incremental capacity, energy and capacity market prices would decrease, and the amount would depend on market conditions.

Overall, we find that New Hampshire customers could enjoy retail rate savings between 0 and 0.28 ¢/kWh (in constant 2020 dollar terms) on average from 2020 to 2032. These savings are in relation to 2016 baseline retail rates of roughly 18 ¢/kWh. Per household, expected annual bill savings could be as little as zero or as great as $21. Aggregating over all electricity customers in New Hampshire, expected annual bill savings could be between zero and $34 million. Over the 13 years analyzed, these savings are worth between zero and $307 million at a 7% discount rate. Under the most extreme alternative

assumption we analyzed regarding market conditions, benefits could increase to as much as 0.5 ¢/kWh, $37 per year per household, $66 million per year statewide, with a $572 million net present value.

Given the uncertainties, it is challenging for New Hampshire to know how much electricity market benefit customers can expect to enjoy if NPT is constructed. We can only say that it could be a range, from zero to a quarter-cent, or even a half-cent per kWh retail rate savings at the outer edge—which would be a meaningful reduction, but not enough to fundamentally change electric rates in New Hampshire. To count on anything at the higher end of the range would require ascribing a minimal probability to Scenarios 3 and 4 (where NPT does not qualify and clear and where NPT displaces a similar competing project, respectively) and assuming market conditions that place NPT's impact at the higher end.

Q. Does this conclude your testimony?

A. Yes.

EXHIBITS

A. Electricity Market Impacts of the Proposed Northern Pass Transmission Project, Supplemental Report