

1 require use of the difficult mathematical technique of dynamic stochastic
2 optimization, rather than using perfect foresight to guide future decisions in
3 each scenario. It is incorrect to simply take the probability-weighted average
4 of the net revenues for multiple scenarios because that technique implies a
5 "now-or-never" decision rather than the option to retire the asset at a
6 sequence of future decision dates.

7
8 On a related matter, the two studies that Mr. Traum cited (in footnotes 2 and
9 3) that discuss future environmental regulations were published six and ten
10 months after the CUO study was filed (March 30, 2011 and July 2011).
11

12 **V. Relevance of Newington Station Results in CRA Study of NPT**

13
14 **Q. Mr. Hachey's supplemental testimony contrasts the expected energy**
15 **net revenue for Newington Station in your CUO study of about \$40**
16 **million to his extrapolation of CRA Study results for 2015, 2016, and**
17 **2018 of \$1.3 million without NPT and \$0.5 million with NPT. Is this a**
18 **fair comparison?**

19
20 **A. No, it is not a fair comparison for several reasons. First, and most**
21 **importantly, the CRA Study only simulated a single deterministic scenario**
22 **with expected (average) fuel prices, loads, and hydro and wind energy**
23 **availability. As a unit serving peaking energy needs, much of Newington**
24 **Station's energy is produced when spark spreads are higher than average, as**
25 **a result of weather, fuel price, and system unit availability fluctuations. The**
26 **CRA results only show a handful of starts per year, which is unrealistically**
27 **low. This is not a deficiency of the CRA analysis since its objective was to**
28 **value NPT, backed by a fixed availability of zero or low marginal cost hydro**
29 **energy.**

30
31 Second, the December 7, 2010 CRA Study had assumed that NPT would be
32 operational by the beginning of 2016. The August 3, 2011 announcement
33 that the expected operational date is now a year later means that the case
34 with NPT should not base 2016 energy net revenue on the model results for
35 that year.

36
37 Third, the publicly-available data contained in the GE MAPS database as of
38 late 2010 when the study was conducted would most likely not have
39 characterized recent improvements in Newington Station's operational
40 characteristics, including cold and hot start times, minimum run time, start
41 costs, and heat rates. Our CUO analysis reflected those recent improvements
42 based on data supplied by PSNH.
43

1 Fourth, while the GE MAPS model and database may be unbiased and
2 accurately simulate LMPs given loads, fuel prices, and interface transfers, as
3 a regional system fundamental model with the objective of minimizing
4 system production costs, it does not have as much accuracy in the simulation
5 of individual generation units. The purpose of a regional model is to focus on
6 system efficiency rather than the performance of any one individual
7 generation unit among the hundreds modeled.
8

9 **Q. Does this conclude your testimony?**

10
11 **A. Yes, it does.**

Public Service Company of New
Hampshire
Docket No. DE 10-261

Data Request TC-04

Dated: 12/16/2011

Q-TC-017

Page 1 of 1

Witness: **No Witness**
Request from: **TransCanada**

Question:

With respect to Mr. Levitan's joint testimony dated October 26, 2011 on Page 28,
lines 20 – 42 and Page 29, lines 1 – 7,

- i) did Mr. Levitan read the report titled "LMP and Congestion impacts of Northern Pass Transmission Project" by Charles River Associates in its entirety prior to filing his rebuttal testimony?;
- ii) is it Mr. Levitan's view that the modeling approach used by CRA did not account for "weather, fuel price, and system unit availability fluctuations"?
- iii) Mr. Levitan states the CRA study used "expected (average) fuel prices". Please state what fuel price average was taken in the CRA modeling assumptions, and the basis for his statement;
- iv) to the extent Mr. Levitan believes the CRA study used average loads in their modeling, state what loads were averaged in their modeling, and the basis for his claim;
- v) is it Mr. Levitan's view that the modeling approach used by CRA does not accurately reflect competitive market outcomes?
- vi) please provide all documents, including transmittal letters, provided to Mr. Levitan by PSNH, NU, or CRA related to the Northern Pass study;
- vii) regarding Mr. Levitan's statement that the CRA study showed "a handful of starts per year, which is unrealistically low":
 - a. please provide all Newington start data from the CRA study (this should have been provided in vi), above);
 - b. what is Mr. Levitan's basis for the statement the number of starts is "unrealistically low"?
 - c. what is Mr. Levitan's understanding of the number of times in each of the last 5 years Newington was dispatched by ISO-New England strictly for economic dispatch reasons (this value should exclude starts for PSNH self scheduling, reserves, first and second contingency protection, and testing);
- viii) is it Mr. Levitan's view that the facilities constructed by Hydro Quebec that would enable the Northern Pass exports into New England have a "fixed availability of zero or low marginal cost hydro energy"?
- ix) what is Mr. Levitan's understanding of the cost of power incurred by Hydro Quebec from its recently constructed or planned hydro facilities?
- x) what does Mr. Levitan actually know about the "operational characteristics, including cold and hot start times, minimum run time, start costs, and heat rates" for Newington that were modeled by CRA, including the specific parameters for Newington modeled by CRA?
- xi) what is the annual value to PSNH customers of the parameters Mr. Levitan purports were modeled by CRA versus those "based on data supplied by PSNH"? Please provide all documentation supporting this analysis.

Response:

(i) through (xi): PSNH objects to the request on the basis that it seeks information that is not reasonably calculated to lead to the discovery of information that would be admissible in this proceeding for the reasons stated in Mr. Levitan's October 26, 2011 testimony at pages 28-29.