

**PUC Docket No. DE 10-261
TransCanada Responses to
PSNH Data Requests**

Date of Request: August 15, 2011

Date of Response:

ORIGINAL	
N.H.P.U.C. Case No.	DE 10-261
Exhibit No.	PSNH-14
Date	August 29, 2011
Witness	M. Hachey
REMOVED FROM FILE	

Q-PSNH-3. Referencing page 3, line 64 through page 4, line 86, regarding benefits and costs for three analysis cases:

- a. Please provide all memoranda, workpapers, electronic spreadsheet files with formulas intact, and supporting studies that were relied on to project annual revenues and expenses for each of the three cases.
- b. Please identify the annual discount rate and the time period used to calculate the benefits and costs.

Witness: Michael E. Hachey

Response:

- a) See attached.
- b) Discount rate used was 7.5%. Time period extended through 2020.

	<u>Actual History</u>						<u>Levitan Projection - Expected</u>										
	2005	2006	2007	2008	2009	1st half 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Energy Revenue	\$88,828	\$21,304	\$27,013	\$14,854	\$13,591	\$22,829	\$20,987	\$20,366	\$22,190	\$26,135	\$29,886	\$30,223	\$31,053	\$30,887	\$32,727	\$34,929	
Fuel and Fuel Related Expense	\$88,344	\$22,492	\$36,384	\$15,784	\$16,808	\$19,787	\$16,145	\$15,692	\$17,095	\$20,134	\$23,027	\$23,490	\$24,160	\$23,878	\$25,084	\$26,858	
Emission Allowance Expense	\$1,497	\$464	\$315	\$1,713	\$2,158	\$1,968	\$356	\$313	\$321	\$377	\$434	\$456	\$466	\$445	\$469	\$513	
Net Energy Revenue	\$19,087	-\$1,652	-\$9,886	-\$2,843	-\$5,376	\$1,073	\$4,486	\$4,361	\$4,774	\$5,624	\$6,425	\$6,277	\$6,427	\$6,564	\$7,174	\$7,560	
2010 pv							\$4,173	\$3,774	\$3,843	\$4,211	\$4,475	\$4,067	\$3,874	\$3,680	\$3,742	\$3,668	\$39,508
Ancillary Revenue							\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	
PV Ancillary Revenue							\$186	\$173	\$161	\$150	\$139	\$130	\$121	\$112	\$104	\$97	\$1,373
Generation (GWh)	1160.7	268.9	304.2	104.4	169.7		585.9	517	534.8	594.1	582	580.7	593.2	627.3	647.3	631.4	
Margin over market \$/MWh	\$16.44	-\$6.14	-\$31.84	-\$27.23	-\$31.68		\$7.66	\$8.44	\$8.93	\$9.47	\$11.04	\$10.81	\$10.83	\$10.46	\$11.08	\$11.97	
Capacity Revenue							\$17,250	\$13,343	\$12,121	\$12,779	\$13,791	\$14,903	\$16,420	\$17,630	\$22,106	\$29,026	
\$/kw-yr							\$43.10	\$33.34	\$30.29	\$31.93	\$34.46	\$37.24	\$41.03	\$44.55	\$55.24	\$72.53	
PV Capacity Revenue							\$16,047	\$11,546	\$9,757	\$9,569	\$9,606	\$9,657	\$9,897	\$9,997	\$11,530	\$14,083	\$111,689

Actual History

Levitan Projection - Expected

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Energy Revenue	\$88,928	\$21,304	\$27,013	\$14,654	\$13,591	\$22,829	\$45,636	\$41,347	\$42,894	\$47,691	\$45,326	\$43,934	\$44,399	\$46,564	\$48,563	\$47,313
Fuel and Fuel Related Expense	\$68,344	\$22,492	\$36,384	\$15,784	\$16,808	\$19,787	\$29,143	\$26,072	\$26,648	\$28,562	\$26,965	\$25,143	\$24,769	\$25,696	\$27,013	\$25,775
Emission Allowance Expense	\$1,497	\$464	\$315	\$1,713	\$2,159	\$1,969	\$737	\$649	\$700	\$804	\$796	\$801	\$837	\$910	\$979	\$965
Net Energy Revenue	\$19,087	-\$1,652	-\$9,686	-\$2,843	-\$5,376	\$1,073	\$15,756	\$14,626	\$15,546	\$18,325	\$17,565	\$17,990	\$18,793	\$19,958	\$20,571	\$20,573
2010 pv							\$14,667	\$12,656	\$12,514	\$13,722	\$12,235	\$11,657	\$11,328	\$11,190	\$10,729	\$9,982 \$120,870
Ancillary Revenue							\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200	\$200
PV Ancillary Revenue							\$186	\$173	\$161	\$150	\$139	\$130	\$121	\$112	\$104	\$97 \$1,373
Generation (GWh)	1160.7	268.9	304.2	104.4	169.7		585.9	517	534.8	594.1	582	580.7	593.2	627.3	647.3	631.4
Margin over market \$/MWh	\$16.44	-\$6.14	-\$31.84	-\$27.23	-\$31.68		\$26.89	\$28.29	\$29.07	\$30.84	\$30.18	\$30.98	\$31.68	\$31.82	\$31.78	\$32.58
Capacity Revenue							\$17,250	\$13,343	\$12,121	\$12,779	\$13,791	\$14,903	\$16,420	\$17,830	\$22,106	\$29,026
\$/kw-yr							\$43.10	\$33.34	\$30.29	\$31.93	\$34.46	\$37.24	\$41.03	\$44.55	\$55.24	\$72.53
PV Capacity Revenue							\$16,047	\$11,546	\$9,757	\$9,569	\$9,606	\$9,657	\$9,897	\$9,997	\$11,530	\$14,083 \$111,689

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	
Capacity Revenue	\$17,245	\$13,359	\$12,142	\$13,055	\$14,084	\$14,624	\$8,982	\$4,802	\$4,802	\$4,802	
\$/kw-yr	\$43.09	\$33.38	\$30.34	\$32.62	\$35.19	\$36.54	\$22.44	\$12.00	\$12.00	\$12.00	
PV Capacity Revenue	\$16,042	\$11,560	\$9,774	\$9,775	\$9,810	\$9,476	\$5,414	\$2,693	\$2,505	\$2,330	\$79,378
							Adjust for PER, unavail in short hrs - 5%				\$75,000
	\$3.59	\$2.78	\$2.53	\$2.72	\$2.93	\$3.05	\$1.87	\$1.00	\$1.00	\$1.00	

Capacity Price \$/KW-mo		\$3.59	\$2.78	\$2.53	\$2.72	\$2.98	\$3.10	\$1.91	\$1.00	\$1.00	\$1.00
Capacity Price \$/KW-mo		2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17			
Prorated		\$4.50	\$3.60	\$2.95	\$2.95	\$3.21	\$3.31	\$3.41	\$1.00	\$1.00	\$1.00
		\$4.25	\$3.12	\$2.54	\$2.52	\$2.86	\$2.98	\$3.18	\$1.00	\$1.00	\$1.00
Net after reconig.	\$1.50			\$1.00	\$1.00	\$1.35	\$1.50	\$1.70			
	\$1.00			\$1.50	\$1.50	\$1.85	\$2.00	\$2.20			
Calendar Yr	\$1.50		\$0.58	\$1.00	\$1.20	\$1.44	\$1.62	\$0.71			
	\$1.00		\$0.88	\$1.50	\$1.70	\$1.94	\$2.12	\$0.92			
Capacity Rev	\$1.50	0	0	\$4,802	\$5,783	\$6,903	\$7,764	\$3,402			
	\$1.00	0	0	\$7,204	\$8,184	\$9,305	\$10,165	\$4,402			
PV Capacity Rev	\$1.50	\$0	\$0	\$4,156	\$4,655	\$5,169	\$5,408	\$2,204	\$21,592		
	\$1.00	\$0	\$0	\$6,234	\$6,588	\$6,967	\$7,081	\$2,852	\$29,722		

http://www.iso-ne.com/nwsiss/pr/2011/fca5_initial_results_060811.pdf

http://www.iso-ne.com/regulatory/ferc/filings/2011/jun/er11-3891-000_06-27-11_fca_5_results_filing.pdf

Newington Station Continuing Unit Operations Study, including corrections

RPS Capacity

1% of NE energy

30% CF

15% S capacity credit