

Exhibit No.	27
Witness	Panel 1
DOCKET	
Technical Session	TECH-01
	FILE

Public Service Company of New Hampshire
 Docket No. DE 10-121

Dated: 09/09/2010
 Q-TS-006
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Witness: David A. Errichetti
Request from: New Hampshire Public Utilities Commission Staff

Question:
 Re: STAFF-02, Q-STAFF-010, please describe PSNH's decision making regarding its purchasing strategy. Describe PSNH's general purchasing strategy, the factors PSNH considered when purchases were made, and actions PSNH took in 2009 with respect to purchases that it made earlier.

Response:
 The following three pages of tables provide a chronological summary of supplemental ES bilateral energy strip purchase activity for 2009 along with how the needs assessment changed. The chronology starts with the needs assessment and purchase plan released around April 1, 2008 that was approved by the president - PSNH and then in turn shows what was purchased prior to the next assessment and what that next assessment showed. The tables conclude with the assessment as it stood at the final ES rate setting filing and what the total set of bilateral energy strip purchases were as reflected in the final ES rate setting filing. The notes at the end of the tables provide some observations on the final assessment.

Over time PSNH has developed a general ES rate setting principal that over / under recoveries should be minimized as much as possible in order to provide for rate certainty for customers. To this end, over the years, the supplemental energy requirement purchase strategy evolved to the point where prior to submitting the final ES rate filing, the vast majority of forecasted supplemental energy requirements were covered either through unit contingent purchases, bilateral energy strips or options. While PSNH maintained flexibility to address changing circumstances, as discussed in its 2007 Least Cost Integrated Resource Plan (LCIRP) as filed and supplemented in March 2008, the objective was to cover most of the forecasted need. This ES rate setting principal was built on the premise that: 1) PSNH's sales forecast was reasonably accurate; and 2) migration was relatively low and seasonal in nature such that the volume of ES supplemental energy requirements was known with a high degree of certainty.

Data Request Staff-01, Q-Staff-009 and Staff-01, Q-Staff-009 SP01 compares 2009's ES supplemental energy purchase activity with the 2007 ES supplemental energy purchase narrative in the March 2008 Supplemental LCIRP filing. However, it bears repeating that both the original LCIRP and the Supplemental filing stress that PSNH continually reviews its approach to managing the ES supplemental energy requirements and that the 2007 ES supplemental energy requirement purchase narrative was not prescriptive but rather illustrative of how one year was managed. This same prescriptive versus illustrative concern was part of the 2010 ES rate setting docket.

Supplemental ES Energy Strip Requirements at Start of Bilateral Strip Purchasing Effort (April 1, 2008)

	Underlying ES Load GWh	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW
Jan-09	787,455	154,165	51,478	28,726	234,368	459	322	116
Feb-09	717,893	149,047	40,560	25,485	215,092	466	317	114
Mar-09	741,987	101,221	20,789	14,097	136,107	288	144	57
Apr-09	681,398	191,281	43,449	64,946	299,676	543	339	271
May-09	676,991	87,168	31,377	32,751	151,296	272	178	132
Jun-09	708,012	130,167	21,879	(25,374)	126,673	370	171	(106)
Jul-09	798,497	191,782	26,836	(10,677)	207,941	521	210	(43)
Aug-09	813,461	161,299	55,404	8,369	225,072	480	346	34
Sep-09	731,316	161,109	30,884	(3,848)	188,146	479	214	(16)
Oct-09	738,251	112,687	29,647	37,332	179,666	320	206	151
Nov-09	727,239	103,762	32,166	32,627	168,555	324	201	136
Dec-09	775,311	121,809	28,468	22,579	172,856	346	198	91
Grand Total	8,897,811	1,665,497	412,937	227,013	2,305,447			

Loads tie to preliminary 2009 business plan (AKA 2008 Budget)
 Reflects zero migration, needs reduced by Bethlehem, Tamworth, Lempster and HQ Call Option in Mar-Dec

Bilateral Energy Strip Transactions Made Between 1st Assessment and 2nd Assessment (early July)

	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW
Jan-09	67,200	16,000	0	83,200	200	100	0
Feb-09	64,000	12,800	0	76,800	200	100	0
Mar-09	70,400	14,400	0	84,800	200	100	0
Apr-09	70,400	12,800	0	83,200	200	100	0
May-09	64,000	17,600	0	81,600	200	100	0
Jun-09	70,400	12,800	0	83,200	200	100	0
Jul-09	73,600	12,800	0	86,400	200	100	0
Aug-09	67,200	16,000	0	83,200	200	100	0
Sep-09	67,200	14,400	0	81,600	200	100	0
Oct-09	70,400	14,400	0	84,800	200	100	0
Nov-09	64,000	16,000	0	80,000	200	100	0
Dec-09	70,400	14,400	0	84,800	200	100	0
Grand Total	819,200	174,400	0	993,600			

Remaining Supplemental ES Bilateral Energy Strip Requirements at 2nd Assessment (early July)

	ES Load GWh	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW	Peak 5 x 16 % met	Weekend 2 x 16 % met	Offpeak 7 x 8 % met
Jan-09	787,455	86,965	35,478	28,726	151,168	259	222	116			
Feb-09	717,893	85,047	27,760	25,485	138,292	266	217	114			
Mar-09	741,987	30,821	6,389	14,097	51,307	88	44	57			
Apr-09	681,398	120,881	30,649	64,946	216,476	343	239	271			
May-09	676,991	23,168	13,777	32,751	69,696	72	78	132			
Jun-09	708,012	59,767	9,079	(25,374)	43,473	170	71	(106)			
Jul-09	798,497	118,182	14,036	(10,677)	121,541	321	110	(43)			
Aug-09	813,461	94,099	39,404	8,369	141,872	280	246	34			
Sep-09	731,316	93,909	16,484	(3,848)	106,546	279	114	(16)			
Oct-09	738,251	42,287	15,247	37,332	94,866	120	106	151			
Nov-09	727,239	39,762	16,166	32,627	88,555	124	101	136			
Dec-09	775,311	51,409	14,068	22,579	88,056	146	98	91			
Grand Total	8,897,811	846,297	238,537	227,013	1,311,847				49	42	0

Loads tie to preliminary 2009 business plan (AKA 2008 Budget)
 Reflects zero migration, requirement reduced by Bilateral Energy Purchases, Bethlehem, Tamworth, Lempster, HQ Call Option in Mar-Dec

Bilateral Energy Strip Transactions Made Between 2st Assessment and 3rd Assessment (late July)

	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW
Jan-09	50,400	16,000	24,800	91,200	150	100	100
Feb-09	48,000	12,800	22,400	83,200	150	100	100
Mar-09	17,600	7,200	12,400	37,200	50	50	50
Apr-09	17,600	6,400	12,000	36,000	50	50	50
May-09	16,000	8,800	12,400	37,200	50	50	50
Jun-09	52,800	6,400	12,000	71,200	150	50	50
Jul-09	18,400	6,400	12,400	37,200	50	50	50
Aug-09	16,800	8,000	12,400	37,200	50	50	50
Sep-09	50,400	7,200	12,000	69,600	150	50	50
Oct-09	17,600	7,200	12,400	37,200	50	50	50
Nov-09	16,000	8,000	12,000	36,000	50	50	50
Dec-09	17,600	7,200	12,400	37,200	50	50	50
Grand Total	339,200	101,600	169,600	610,400			

Remaining Supplemental ES Energy Strip Requirements at 3rd Assessment (late July)

	ES Load	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW	Peak 5 x 16 % met of original need	Weekend 2 x 16 % met of original need	Offpeak 7 x 8 % met of original need	Peak 5 x 16 % met of revised need	Weekend 2 x 16 % met of revised need	Offpeak 7 x 8 % met of revised need
Jan-09		781,365	34,608	17,760	1,488	53,856	103	111	6					
Feb-09		699,365	25,280	11,648	(448)	36,480	79	91	(2)					
Mar-09		732,240	3,520	(2,304)	3,224	4,440	10	(16)	13					
Apr-09		670,810	96,448	22,528	51,120	170,096	274	176	213					
May-09		677,591	6,080	5,280	21,824	33,184	19	30	88					
Jun-09		709,898	5,984	3,072	(34,800)	(25,744)	17	24	(145)					
Jul-09		802,456	96,048	7,680	(15,376)	88,352	261	60	(62)					
Aug-09		796,044	69,216	28,160	(9,920)	87,456	206	176	(40)					
Sep-09		700,129	31,584	3,600	(29,520)	5,664	94	25	(123)					
Oct-09		715,610	13,728	3,456	17,856	35,040	39	24	72					
Nov-09		713,299	17,600	5,120	15,840	38,560	55	32	66					
Dec-09		766,202	26,048	5,760	9,920	41,728	74	40	40					
Grand Total	8,765,009	426,144	111,760	31,208	569,112				70	67	75	73	71	84

Loads tie to 2009 business plan

Reflects zero migration, requirement reduced by Bilateral Energy Purchases, Bethlehem, Tamworth, Lempster, HQ Call Option in Mar-Dec

Bilateral Energy Strip Transactions Made Between 3rd Assessment and Initial ES Filing (early September)

	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW
Jan-09	16,800	0	0	16,800	50	0	0
Feb-09	16,000	0	0	16,000	50	0	0
Mar-09	0	0	0	0	0	0	0
Apr-09	17,600	12,800	24,000	54,400	50	100	100
May-09	0	0	0	0	0	0	0
Jun-09	0	0	0	0	0	0	0
Jul-09	18,400	0	0	18,400	50	0	0
Aug-09	16,800	0	0	16,800	50	0	0
Sep-09	0	0	0	0	0	0	0
Oct-09	0	0	0	0	0	0	0
Nov-09	0	0	0	0	0	0	0
Dec-09	0	0	0	0	0	0	0
Grand Total	85,600	12,800	24,000	122,400			

Remaining Supplemental ES Energy Strip Requirements at Initial ES Rate Filing (early September)

	ES Load	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW	Peak 5 x 16 % met of original need	Weekend 2 x 16 % met of original need	Offpeak 7 x 8 % met of original need	Peak 5 x 16 % met of revised need	Weekend 2 x 16 % met of revised need	Offpeak 7 x 8 % met of revised need
Jan-09		769,256	759	17,364	354	18,476	2	109	1					
Feb-09		688,079	(3,791)	11,610	(975)	6,844	(12)	91	(4)					
Mar-09		719,954	34,461	11,003	1,057	46,521	98	76	4					
Apr-09		658,831	107,703	20,947	23,754	152,404	306	164	99					
May-09		664,966	33,406	21,607	19,370	74,383	104	123	78					
Jun-09		696,882	40,289	16,339	(34,337)	22,291	114	128	(143)					
Jul-09		788,668	85,051	21,975	(12,889)	94,137	231	172	(52)					
Aug-09		782,383	79,788	46,547	(6,643)	119,693	237	291	(27)					
Sep-09		687,197	55,405	15,409	(35,203)	35,612	165	107	(147)					
Oct-09		702,334	44,199	19,316	16,857	80,372	126	134	68					
Nov-09		700,859	47,204	20,794	14,956	82,953	148	130	62					
Dec-09		754,838	56,923	19,073	7,693	83,690	162	132	31					
Grand Total	8,614,247	581,397	241,984	(6,006)	817,376				75	70	85	68	54	103

loads tie to 2009 business plan

Reflects 22 MW of migration as measured at prior year peak, requirement reduced by Bilateral Energy Purchases, Bethlehem, Tanworth, Lempster, HQ Call Option dropped

Bilateral Energy Strip Transactions Made Between Initial and Final ES Rate Filings

	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW
Jan-09	(67,200)	0	0	(67,200)	(200)	0	0
Feb-09	(64,000)	0	0	(64,000)	(200)	0	0
Mar-09	0	0	0	0	0	0	0
Apr-09	35,200	0	0	35,200	100	0	0
May-09	0	0	0	0	0	0	0
Jun-09	0	0	0	0	0	0	0
Jul-09	0	0	0	0	0	0	0
Aug-09	0	0	0	0	0	0	0
Sep-09	0	0	0	0	0	0	0
Oct-09	0	0	0	0	0	0	0
Nov-09	0	0	0	0	0	0	0
Dec-09	0	0	0	0	0	0	0
Grand Total	(96,000)	0	0	(96,000)			

Between initial and final ES rate filings, oil was purchased for Newington at a price that allowed a portion of January and February energy purchases to be unwound

Remaining Supplemental ES Energy Strip Requirements at Final ES Rate Filing (early December)

	ES Load	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW	Peak 5 x 16 % met of original need	Weekend 2 x 16 % met of original need	Offpeak 7 x 8 % met of original need	Peak 5 x 16 % met of revised need	Weekend 2 x 16 % met of revised need	Offpeak 7 x 8 % met of revised need
Jan-09	721,251	(6,397)	7,873	(16,417)	(14,940)	(19)	49	(66)						
Feb-09	640,600	(9,192)	3,337	(17,765)	(23,620)	(29)	26	(79)						
Mar-09	662,767	7,365	821	(19,684)	(11,498)	21	6	(79)						
Apr-09	598,813	(46,561)	(19,882)	(57,372)	(123,815)	(132)	(155)	(239)						
May-09	601,433	(26,057)	(13,050)	(29,562)	(68,670)	(81)	(74)	(119)						
Jun-09	632,752	4,905	5,569	(53,013)	(42,539)	14	44	(221)						
Jul-09	723,126	3,862	11,805	(28,331)	(12,664)	10	92	(114)						
Aug-09	714,913	108,190	82,324	63,328	253,841	322	515	255						
Sep-09	623,976	130,092	49,562	22,620	202,275	387	344	94						
Oct-09	637,174	126,315	53,477	72,906	252,698	359	371	294						
Nov-09	639,652	122,978	58,972	69,558	251,507	384	369	290						
Dec-09	697,556	50,439	8,620	(2,576)	56,482	143	60	(10)						
Grand Total	7,894,012	465,939	249,427	3,691	719,057		60		69	70	85	71	54	98

Loads tie to October 22, 2008 2009 budget forecast

Reflects 102 MW of migration as measured at prior year peak, requirement reduced by Bilateral Energy Purchases, Bethlehem, Tanworth, and Lempster, HQ Option dropped and Newington runs in Jan - Feb with sales displacing purchases

Final Bilateral Purchases Modeled in ES Dec Update from above

	Peak 5 x 16 GWh	Weekend 2 x 16 GWh	Offpeak 7 x 8 GWh	All hours GWh	Peak 5 x 16 MW	Weekend 2 x 16 MW	Offpeak 7 x 8 MW
Jan-09	67,200	32,000	24,800	124,000	200	200	100
Feb-09	64,000	25,600	22,400	112,000	200	200	100
Mar-09	88,000	21,600	12,400	122,000	250	150	50
Apr-09	140,800	32,000	36,000	208,800	400	250	150
May-09	80,000	26,400	12,400	118,800	250	150	50
Jun-09	123,200	19,200	12,000	154,400	350	150	50
Jul-09	110,400	19,200	12,400	142,000	300	150	50
Aug-09	100,800	24,000	12,400	137,200	300	150	50
Sep-09	117,600	21,600	12,000	151,200	350	150	50
Oct-09	88,000	21,600	12,400	122,000	250	150	50
Nov-09	80,000	24,000	12,000	116,000	250	150	50
Dec-09	88,000	21,600	12,400	122,000	250	150	50
Grand Total	1,148,000	288,800	193,600	1,630,400			

Observations on final ES filing situation

- (1) Energy purchased as a percent of original purchase plan was 71%.
- (2) As sales forecast declined and migration at peak increased purchases as a % of revised need tentatively increased.
- (3) Merrimack 2 outage was not finally settled until around December 25, 2008, so April surplus and August through early December shortfalls were tentative in early December.
- (4) Putting Merrimack outage back in April would make energy purchases look more aligned but would not have captured latest thinking and would have understated second half ES costs.
- (5) Overall, taking into account weather uncertainty, potential forced outages and migration uncertainty at the time it was still considered likely that most purchases would go to serve load.