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N.H.P.U.C. Case No.	DE 12-055
Exhibit No.	#2
Witness	Pangl'
DO NOT REMOVE FROM FILE	

April 11, 2012

BY E-MAIL

Suzanne Amidon, Staff Attorney
New Hampshire Public Utilities Commission
21 S. Fruit Street, Suite 10
Concord, NH 03301-2429

**RE: Responses to Staff Tech Session Data Requests
Docket No. DE 12-055**

Dear Attorney Amidon:

On behalf of Unitil Energy Systems, Inc. ("UES"), enclosed are the Company's responses to the New Hampshire Public Utilities Commission Staff's tech session data requests in the above-referenced docket.

Please do not hesitate to contact me if you have any questions concerning these responses. Thank you for your attention to this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Epler", written in a cursive style.

Gary Epler
Attorney for Unitil Energy Systems, Inc.

Enclosures

cc: Steve Mullen (via email)
Michael D. Cannata (via email)

Gary Epler
Chief Regulatory Counsel
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Unitil Energy Systems, Inc.
Docket No. DE 12-055
Technical Session Data Requests – Set 1

Received: April 4, 2012
Request No. Staff 1-1

Date of Response: April 11, 2012
Witness: Kevin Sprague

Request Staff 1-1:

Please provide a list of all 2011 REP projects that were not completed by the end of 2011 and will carry over into 2012.

Response:

There were 5 projects identified in the budget as REP projects which were started in 2011 but will not be finished until 2012. A description of the projects is shown below.

<u>Project</u>	<u>Amount Spent</u>	<u>Authorized Amount</u>
Replace 1H3 Breaker (Capital) – Replace the 1H3 breaker at Bridge Street substation, repair/replace its concrete pad and re-establish SCADA control to the control for the recloser that was installed as the 1H3 replacement. – Asset Replacement	\$18,700	\$53,300
Replace 13X4 Recloser (Capital) – Replace the 13X4 breaker at Boscawen substation and re-establish SCADA control to the replacement recloser. – Asset Replacement	\$25,100	\$68,400
Replace 7X2 Recloser (Seacoast) - Replace the 7X2 circuit recloser with a three phase electronically controlled recloser with single phase tripping and lockout capabilities and re-establish SCADA control. – Reliability Improvement	\$82,500	\$100,000
Exeter Substation Replace LTC Control (Seacoast) - Replace the LTC controls at Exeter Substation with new electronic controls. – Asset Replacement	\$39,400	\$58,600
Replace 13X3 Recloser – Replace the existing 13X3 solid dielectric recloser due to tracking concerns identified during substation inspection and re-establish SCADA control. – Asset Replacement	\$47,400	\$70,000
Totals	\$213,100	\$350,300

Unitil Energy Systems, Inc.
Docket No. DE 12-055
Technical Session Data Requests – Set 1

Received: April 4, 2012
Request No. Staff 1-2

Date of Response: April 11, 2012
Witness: Sara Sankowich

Request Staff 1-1:

Please provide a description of what Unitil means by the term "Enhanced Tree Trimming" with respect to the filing.

Response:

In this filing, "Enhanced Tree Trimming" refers to reliability driven tree pruning and removal beyond normal maintenance work, such as aggressive pruning or expanded hazard tree removal, as stated on Page 12 of the filing, copied below.

As described in Mr. Meissner's Direct Testimony in Docket DE 10-05511, the REP covers capital and O&M activities and projects intended to maintain or improve the reliability of the electric system including: (1) system hardening measures, i.e., equipment upgrades; installation of additional fuses, sectionalizers and reclosers; SCADA and automation projects; improvements to lightning protection; installation of animal guards; and other activities to mitigate the specific causes of outages; (2) enhanced tree trimming, i.e., aggressive trimming and clearing involving an expanded trim zone or more aggressive removal beyond what is normally included in maintenance trimming, typically in localized areas of poor reliability;...

Unitil Energy Systems, Inc.
Docket No. DE 12-055
Technical Session Data Requests – Set 1

Received: April 4, 2012
Request No. Staff 1-3

Date of Response: April 11, 2012
Witness: Kevin Sprague

Request Staff 1-3:

Reference Figure 2 on page 22 of 24 of the filing. Please provide similar graphs showing UES Capital and UES Seacoast separately.

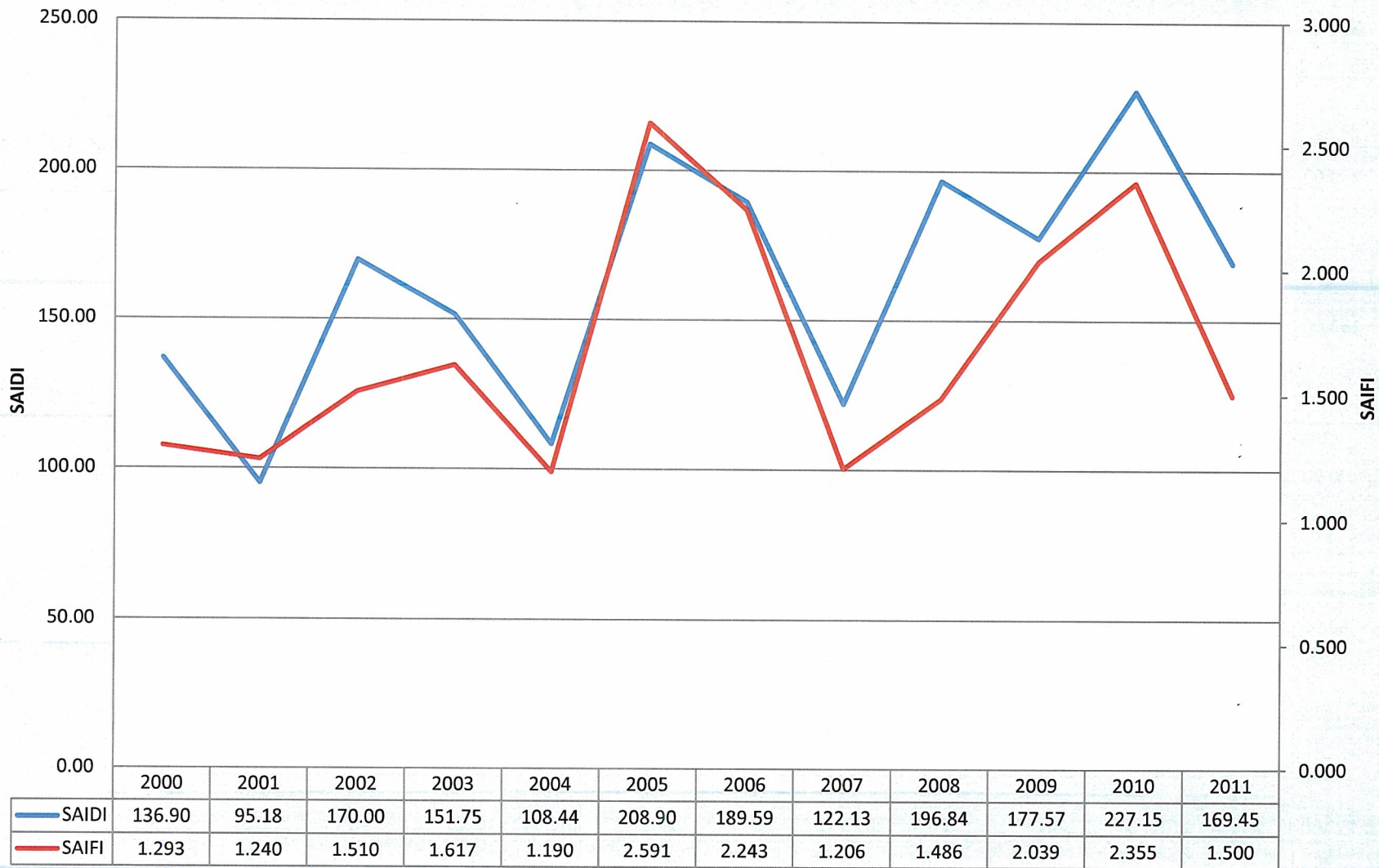
Response:

The graphs showing the individual historical reliability performance for UES Capital and UES Seacoast for the years 2000 – 2011 are attached. The same exclusionary criteria were applied for these charts as in Figure 2 of the original filing.

Unitil Energy Systems - Capital SAIDI & SAIFI 2000-2011



Unitil Energy Systems - Seacoast SAIDI & SAIFI 2000-2011



Unitil Energy Systems, Inc.
Docket No. DE 12-055
Technical Session Data Requests – Set 1

Received: April 4, 2012
Request No. Staff 1-4

Date of Response: April 11, 2012
Witness: Kevin Sprague

Request Staff 1-4:

Reference Table 18 on page 24 of 24 of the filing. Please provide a similar table showing UES Capital and UES Seacoast separately.

Response:

Please refer to attachment labeled Staff 1-4 Attachment 1 for the Reliability Statistics by cause for UES Capital and UES Seacoast individually.

Reliability Statistics by Trouble Cause

UES - Capital

Cause	No of Troubles	Customer Hours	Customer Interruptions	SAIDI	% of Total	SAIFI	% of Total
Broken Tree/Limb	202	35,988.24	28,461	72.41	34%	0.954	40%
Equipment Failure - Company	65	22,127.50	16,155	44.41	21%	0.541	23%
Other	3	14,119.70	3,198	28.52	13%	0.108	5%
Squirrel	122	13,660.85	8,482	27.49	13%	0.284	12%
Tree/Limb Contact - Growth into Line	72	10,469.75	6,244	21.07	10%	0.209	9%
Patrolled, Nothing Found	44	2,888.61	2,474	5.81	3%	0.083	3%
Equipment Failure – Customer	2	2,609.68	1,024	5.25	2%	0.034	1%
Vehicle Accident	17	1,944.40	1,174	3.91	2%	0.039	2%
Loose/Failed Connection	10	1,079.24	1,573	2.17	1%	0.053	2%
Bird	11	747.88	2,049	1.50	1%	0.069	3%
Lightning Strike	8	213.47	142	0.43	0%	0.005	0%
Action by Others	7	156.46	135	0.31	0%	0.005	0%
Overload	5	43.42	24	0.09	0%	0.001	0%
Civil Emergency (fire, etc.)	2	21.75	7	0.04	0%	0.000	0%
Animal – Other	1	1.25	1	0.00	0%	0.000	0%
Corrosion/Contamination/Decay	1	0.50	1	0.00	0%	0.000	0%
Improper Installation	0	-	-	-	0%	0.000	0%
Totals	572	106,072.67	71,144	213.42	100%	2.386	100%

Reliability Statistics by Trouble Cause

UES - Seacoast

Cause	No of Troubles	Customer Hours	Customer Interruptions	SAIDI	% of Total	SAIFI	% of Total
Broken Tree/Limb	158	59,734.32	27,753	79.33	47%	0.614	41%
Equipment Failure - Company	68	27,558.25	15,511	36.60	22%	0.343	23%
Vehicle Accident	22	13,509.18	5,636	17.94	11%	0.125	8%
Tree/Limb Contact - Growth into Line	58	6,490.79	3,140	8.62	5%	0.069	5%
Other	19	4,355.80	6,136	5.78	3%	0.136	9%
Lightning Strike	30	4,105.44	2,175	5.45	3%	0.048	3%
Patrolled, Nothing Found	44	4,056.04	2,929	5.39	3%	0.065	4%
Loose/Failed Connection	12	2,900.40	1,639	3.85	2%	0.036	2%
Squirrel	27	2,315.95	1,373	3.08	2%	0.030	2%
Action by Others	15	1,698.52	986	2.26	1%	0.022	1%
Bird	18	414.63	215	0.55	0%	0.005	0%
Overload	15	400.68	237	0.53	0%	0.005	0%
Animal - Other	1	26.25	21	0.03	0%	0.000	0%
Civil Emergency (fire, etc.)	2	20.75	15	0.03	0%	0.000	0%
Corrosion/Contamination/Decay	2	6.08	6	0.01	0%	0.000	0%
Equipment Failure - Customer	2	3.27	6	0.00	0%	0.000	0%
Improper Installation	1	2.00	12	0.00	0%	0.000	0%
Totals	494	127,598.36	67,790	169.45	100%	1.500	100%