

**STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

**Docket DG 08-009**

<b>ORIGINAL</b>	
P.U.C. Case No.	<i>PG 08-009</i>
Exhibit No.	<i># 34</i>
Witness	
DO NOT REMOVE FROM FILE	

**EnergyNorth Natural Gas, Inc.  
d/b/a  
National Grid NH**

**Rebuttal Testimony  
of  
Paul M. Normand**

**December 15, 2008**

1 **Q. Are you the same Paul M. Normand who has previously filed direct testimony in**  
2 **this proceeding?**

3 A. Yes, I am.

4 **Q. What is the purpose of your rebuttal testimony?**

5 A. I am responding to the recommendations of Staff Witness James J. Cunningham, Jr.,  
6 made in his Direct Testimony dated October 31, 2008, in this proceeding.

7 **Q. What specific points in Mr. Cunningham's testimony are you addressing in this**  
8 **rebuttal testimony?**

9 A. 1) Net salvage rates

10 2) Depreciation reserve variance

11 3) Amortization of reserve variance

12 **NET SALVAGE**

13 **Q. Do you agree with Mr. Cunningham's recommendation with respect to his**  
14 **proposing no change to the Company's existing approved Net Salvage (NS)**  
15 **levels for Mains (-10%) and Services (-60%)?**

16 A. No, I do not. The Company's last depreciation study supporting these results was  
17 prepared in 1989 using plant data in service as of 9/30/88. The length of time since  
18 the last study alone would dictate that these currently approved NS levels are  
19 inadequate given that the largest component of cost of removal (COR) is labor which  
20 has increased considerably over the last 20 years. I also reviewed industry ranges as  
21 part of the overall analysis of each account to ensure that the recommendations  
22 proposed are reasonable. PMN-3, which is attached to this testimony, presents AGA  
23 industry data for gas utilities showing the Net Salvage (NS) ranges generally

1 experienced in the gas industry, and supports my proposed NS levels. PMN-4  
2 presents more recent industry trends and ranges for major gas distribution accounts.  
3 A review of this data also for Accounts 376, Mains, and 380, Services, shows that the  
4 NS proposed is reasonable.

5 **Q. Do you agree that having more Cost of Removal (COR) and salvage data**  
6 **available would improve the estimation of any proposed NS levels included in**  
7 **your proposed depreciation accrual rates?**

8 A. In general, having available additional data and analyses is always better as it  
9 certainly adds support to the proposed level of recovery. In this case, however, it is  
10 very unlikely that additional data would have changed our proposed  
11 recommendations whatsoever.

12 **Q. Why is that the case?**

13 A. The net salvage data provided by the Company was for a period from 2000 through  
14 2006 for Mains and Services (see response to Staff Data Request 2-70, attached as  
15 Attachment PMN-5). In that response, the results are net salvage levels of  
16 approximately -70% for Mains and -175% for Services. The current approved levels  
17 of net salvage are -10% and -60%, respectively. In recognizing the time lapse since  
18 the last study, coupled with increasing labor costs being the primary component of  
19 removal costs and the actual realized COR mentioned above, the proposed COR  
20 values included in the proposed accrual rate calculations are very reasonable. The  
21 following table reflects how conservative the Company's proposed changes to COR  
22 are:

23

**Table 1  
Cost of Removal**

	Existing	Proposed	Realized	Proposed to Realized Percent
Mains	-10%	-15%	-69.56%	21.6%
Services	-60%	-70%	-175.42%	39.9%

1 The Company's realized (experienced) net salvage levels of -69.56% for Mains and -  
 2 175.42% for Services is well above the proposed level as shown above of using only  
 3 -15% or 21.6% of what the Company realized for Mains and -70% or 39.9% for  
 4 Services. These proposed NS levels are reasonable and reflect levels that are  
 5 consistent with industry results as demonstrated on PMN-3 and PMN-4.

6 **Q. Since your recommended levels of COR are very conservative, when would**  
 7 **additional data as suggested by Mr. Cunningham be more crucial to any**  
 8 **proposed level of COR?**

9 A. Any COR proposal which would attempt to include levels of COR approaching 100%  
 10 of calculated levels should be supported by as much data as possible. Our experience,  
 11 along with industry data, have shown that the results calculated in this case are  
 12 reasonable for the industry. More importantly, the levels proposed are but a fraction  
 13 of the realized values.

14 **Q. Do you agree with Mr. Cunningham's characterization that removal costs and**  
 15 **installation costs are essentially offsetting?**

16 A. No, I do not. Mr. Cunningham assumes that the effort and process to retire an asset is  
 17 identical to the effort and process of installing an asset. That assumption is simply  
 18 incorrect and misleading. It is not appropriate to compare the labor cost to retire an

1 asset to the current cost of installing the asset. The appropriate comparison is of the  
2 labor costs to retire an asset to the asset's original cost. That is the only relevant  
3 relationship that is appropriate in establishing reasonable COR levels of recovery.

4 **Q. Do you have any additional comments with respect to Mr. Cunningham's**  
5 **depreciation calculations as presented on his Schedule JJC-9?**

6 A. Yes. Mr. Cunningham's calculations incorrectly included a reserve variance for a  
7 fully depreciated Account 376 (Laboratory Equipment), thereby further overstating  
8 his results by \$157,480.

9 **DEPRECIATION RESERVE VARIANCE**

10 **Q. Do you agree with Mr. Cunningham's depiction on page 19, beginning at line 1,**  
11 **of the depreciation study results showing that a surplus or excess has been**  
12 **accumulated by the Company?**

13 A. No, I do not. The calculation of the reserve variance is a result of considering two  
14 separate components. First, the Company's book depreciation reserve is one  
15 component which includes all accounting factors (accruals, retirements, gross  
16 salvage, cost of removal, and adjustments). The second component required to derive  
17 the variance is the calculated theoretical reserve with net salvage which is the sum of  
18 the future depreciation accruals using the new proposed depreciation parameters  
19 (average service lives, net salvage, and Iowa curves). The difference between these  
20 two values is the reserve variance.

21 **Q. Do you agree with Mr. Cunningham's recommendation with respect to a much**  
22 **shorter period over which the surplus reserves should be amortized?**

1 A. No I do not. On page 19 and 20 of his testimony, Mr. Cunningham recommends a  
 2 much shorter period of 7 years for the amortization of the depreciation reserves  
 3 which, for a surplus reserve of \$10,004,279, is equivalent to \$1,429,183 being  
 4 returned to customers annually. Following this same premise, if the next depreciation  
 5 study results in COR at 75% of the realized levels as listed in the table below, the  
 6 reserve deficiency would be \$12,253,599. Utilizing Mr. Cunningham’s 7 year  
 7 amortization proposal in such a case would result in \$1,750,514 being charged to  
 8 customers annually or a \$3,179,697 increase in depreciation rates from what Mr.  
 9 Cunningham proposes in this case (see Table 2). It is quite evident that amortizing  
 10 the surplus reserve over a shorter period of time as recommended by Mr.  
 11 Cunningham would only lead to very large swings in rates. Mr. O’Shaughnessy  
 12 addresses this point further in his rebuttal testimony.

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**Table 2**  
**Cost of Removal**

	COR Existing	COR Proposed	COR Realized	New COR 50%	New COR 75%	Proposed to Realized Percent
Mains	-10%	-15%	-69.56%	-35%	-52%	21.60%
Services	-60%	-70%	-	-88%	-132%	39.90%
Reserve Variance	(\$10,004,279)			(\$1,447,651)	\$12,253,599	
Amortization over plant life	(\$386,927)			(\$156,926)	\$261,002	
Amortized over 7yrs	(\$1,429,183)			(\$206,807)	\$1,750,514	
Revenue Requirement Impact					\$3,179,697	

1 **Q. Is there always a difference or variance between the booked and theoretical**  
2 **reserve?**

3 A. There will, generally speaking, always be a difference between these two values.  
4 Most of this difference can generally be attributable to changes over time in curves,  
5 lives, and net salvage values.

6 **Q. How would this variance be most appropriately amortized going forward for**  
7 **depreciation accrual purposes?**

8 A. The most appropriate method of amortizing these amounts is to consider the  
9 remaining life associated with each account in order to properly match these  
10 adjustments to the expenses to be borne by future customers.

### 11 **AMORTIZATION OF RESERVE VARIANCE**

12 **Q. Does Mr. Cunningham's proposal of amortizing this variance over seven years**  
13 **appear to be reasonable?**

14 A. No, it does not. Since the vast majority of this variance is due primarily to a change  
15 in parameters (average service life, Iowa curves and net salvage) which materially  
16 impact the theoretical reserve results, amortizing these differences over a very short  
17 period of time will only add instability to future accrual rate proposals and may, in  
18 fact, reverse itself in the next study as more data becomes available.

19 **Q. You mentioned that Mr. Cunningham's proposed amortization of the calculated**  
20 **\$10 million variance would potentially add instability to the Company's**  
21 **proposed accrual rates and resulting expense. Could you please explain?**

22 A. The result producing this \$10 million variance is simply the difference between the  
23 Company's booked depreciation reserve and the theoretical reserve with net salvage

1 using updated parameters. The sensitivity of this variance to the updated parameters  
2 is significant.

3 **Q. Could you please show this sensitivity of the reserve variance to the updated**  
4 **parameters you discussed earlier?**

5 A. Expanding Table 1 above, I now include only a change in the COR from the filed  
6 proposed levels to new levels of approximately 50% and 75% of realized values (see  
7 PMN-5) as follows:

**Table 3**  
**Cost of Removal (Adjusted)**

	Proposed		Calculated	New Proposed (50%)		New Proposed (75%)	
Mains	-15	(21.6%)	-69.56	-35	(50.3%)	-52	(74.8%)
Services	-70	(39.9%)	-175.42	-88	(50.2%)	-132	(75.2%)

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9 **Q. Having adjusted only the COR component and not adjusted any average service**  
10 **lives (ASL) or Iowa curves in your sensitivity analysis, please summarize your**  
11 **results and show the change in reserve variance.**

12 A. Schedules A-50% and A-75%, which are attached as PMN-6, provide the detailed  
13 back-up, arriving at the following results:

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**Table 4**

	Reserve Variance	Reserve Variance	COR (NS)	
			<u>Mains</u>	<u>Services</u>
Original Filing	- \$10,004,279	Over-recovery	-10	-60
Adjusted Filing (COR @ 50%)	- \$1,447,651	Over-recovery	-35	-88
Adjusted Filing (COR @ 75%)	+\$12,253,599	Under-recovery	-52	-132

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As can be readily noted in the Reserve Variance shown from Table 4 above, leaving all other proposed Iowa curves and ASL unchanged, a change in NS recovery to a 50% and 75% level of the Company's realized levels results in a shift from over-recovery to under-recovery. An over-recovery of \$10 million in the initial filing results in an under-recovery of \$12.3 million at a 75% COR level. Based on experience and industry trends, future studies with additional NS data will undoubtedly support a much greater level of COR recovery than we have proposed and which will indicate an under-recovery condition.

10 **Q.**

**Based on your results and a careful review of the data, do you have any additional comments with respect to your depreciation study and proposed accrual rates?**

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13 **A.**

The depreciation study reviewed all aspects of the Company's available data and proposed a reasonable and very conservative level of accrual rates for each account which would achieve a fair, stable, and reasonable recovery of depreciation expenses until the Company's next depreciation study and rate filing. Presenting a very conservative approach to each relevant component of depreciation along with a well-recognized remaining life technique assures the Commission that the recommended

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1           accrual rates would emphasize stability and gradualism in minimizing unnecessary  
2           fluctuation (instability) that may well occur if Mr. Cunningham's proposal is adopted.

3   **Q.   Mr. Normand, does this conclude your rebuttal testimony?**

4   A.   Yes.

**EEI/AGA DEPRECIATION STATISTICS  
GAS**

<i>Account</i>	<i>Avg. Service Life Range</i>	<i>Avg. Service Life Average</i>	<i>Accrual Rate Range</i>	<i>Accrual Rate Average</i>	<i>Net Salvage Rate Range</i>	<i>Net Salvage Rate Average</i>
<b>Mfg. Gas Production Plant</b>						
305	7 -56	34	1.32 – 5.82	3.462	-50.0 to -5.0	-14.9
306	20 - 30	23	3.33 – 5.53	4.703	-5.0 to -5.0	-5.0
307	19 - 39	26	2.92 – 6.19	4.726	-5.0 to -5.0	-5.0
311	7 – 52	30	0.401 – 6.381	3.41	-30.0 to 13.0	-7.8
315	20 – 20	20	5.53 – 5.53	5.53	-5.0 to -5.0	-5.0
316	20 – 20	20	5.25 – 5.25	5.25	-5.0 to -5.0	-5.0
318	20 – 20	20	5.25 – 5.25	5.25	-5.0 to -5.0	-5.0
319	20 – 20	20	5.25 – 5.25	5.25	-5.0 to -5.0	-5.0
320	4 – 42	24	2.38 – 5.36	4.067	-5.0 to 6.4	0.6
<b>Natural Gas Prod. &amp; Gathering Plant</b>						
325.20	56 – 56	56	1.17 – 1.17	1.169	-3.0 to 3.0	0
325.30	No Data	No Data	No Data	No Data	-3.0 to -3.0	-3.0
325.40	14 – 65	37	0.25 – 6.69	2.963	-15.8 to 3.0	-4.3
325.50	19 – 45	32	0.70 – 5.25	2.975	No Data	No Data
327	14 – 35	22	0.700 – 6.69	4.137	-9.4 to -0.2	-4.7
328	14 – 43	27	0.700 – 6.69	3.86	-0.2 to -0.2	-0.2
329	14 – 35	22	0.700 – 6.69	4.323	-3.0 to -0.2	-1.5
330	35 – 56	45	1.45 – 3.15	2.299	-3.0 to -3.0	-3.0
331	56 – 56	56	1.75 – 1.75	1.75	-3.0 to -3.0	-3.0
332	14 – 65	36	0.70 – 6.69	3.623	-3.0 to -0.2	-1.5
333	14 – 35	23	0.70 – 6.69	3.86	-0.2 to -0.2	-0.2
334	14 – 38	26	0.70 – 6.69	4.026	-3.0 to -0.2	-1.5
336	13 – 35	19	0.70 – 6.69	3.86	-3.0 to -0.2	-2.0
337	No Data	No Data	0.70 – 0.70	0.70	-3.0 to -3.0	-3.0
<b>Prod. Extract Plant</b>						
340	25 – 25	25	3.90 – 3.90	3.90	No Data	No Data
342	25 – 25	25	3.90 – 3.90	3.90	No Data	No Data

**EEI/AGA DEPRECIATION STATISTICS  
GAS**

<i>Account</i>	<i>Avg. Service Life Range</i>	<i>Avg. Service Life Average</i>	<i>Accrual Rate Range</i>	<i>Accrual Rate Average</i>	<i>Net Salvage Rate Range</i>	<i>Net Salvage Rate Average</i>
<b>Nat. Gas Storage Plant</b>						
350.10	55 – 55	55	1.61 – 1.80	1.704	No Data	No Data
350.20	30 – 55	41	1.69 – 3.84	2.452	No Data	No Data
350.30	40 – 40	40	1.43 – 1.43	1.43	No Data	No Data
350.40	35 – 75	50	1.361 – 3.16	2.485	No Data	No Data
351	8 – 55	34	1.02 – 4.925	3.082	-50 to -1	-24.5
352	8 – 56	38	1.71 – 5.527	2.830	-20 to 24	-6.3
353	15 – 58	38	1.80 – 6.10	3.315	-90 to -1	-27.6
354	14 – 55	34	1.80 – 4.58	3.244	-35 to -1	-14
355	10 – 55	30	1.80 – 4.83	3.571	-55 to -1	-19.3
356	13 – 55	30	1.80 – 5.984	3.861	-30 to -1	-12.7
357	15 – 55	31	1.80 – 8.477	3.738	-45 to -1	-23
<b>Other Storage Plant</b>						
360	No Data	No Data	4.00 – 4.00	4.00	No Data	No Data
361	9 – 70	34	1.42 – 6.34	3.435	-25 to -5	-14.5
362	9 – 76	36	1.32 – 5.83	3.237	-25 to 5	-12.6
363	2 – 35	23	1.63 – 6.49	4.047	-25 to 10	-8.2
<b>Transm. Plant</b>						
365.10	32 – 90	69	1.134 – 1.65	1.332	-10 to -10	-10
365.20	24-100	59	1.00 – 4.73	2.205	-13 to -0.2	-5.9
365.30	No Data	No Data	3.30 – 3.30	3.30	No Data	No Data
366	10 – 100	44	1.00 – 6.66	3.006	-50 to 2.9	-17.3
367	10 – 100	53	1.00 – 4.73	2.558	-90 to -0.2	-25.8
368	15 – 100	38	1.00 – 7.33	3.683	-35 to 20	-6
369	11 – 76	32	1.00 – 6.807	3.457	-30 to -0.2	-12.3
370	11 – 60	24	1.65 – 10.00	5.457	-13 to 5	-2.8
371	13 – 100	46	1.00 – 5.37	3.108	-25 to 5	-8.7

**EEI/AGA DEPRECIATION STATISTICS  
GAS**

<i>Account</i>	<i>Avg. Service Life Range</i>	<i>Avg. Service Life Average</i>	<i>Accrual Rate Range</i>	<i>Accrual Rate Average</i>	<i>Net Salvage Rate Range</i>	<i>Net Salvage Rate Average</i>
<b>Distr. Plant</b>						
374	45 – 100	69	1.00 – 2.84	1.737	No Data	No Data
375	7 – 66	43	0.71 – 5.01	2.731	-50 to 5	-13.3
376	26 – 80	55	0.042 – 7.56	2.782	-90 to 30	-35.6
377	9 – 35	27	2.575 – 6.11	3.498	-10 to -1	-6.2
378	11 – 55	33	1.54 – 6.807	3.665	-60 to 15	-19.6
379	20 – 53	32	0.347 – 7.509	3.729	-30 to 15	-11.1
380	24 – 63	40	1.182 – 12.02	4.641	-95 to -5	-53.3
381	5 – 60	9.3	0.010 – 6.807	3.131	-35 to 35	10.3
382	8 – 63	37	1.82 – 6.807	3.716	-95 to 1	-36.1
383	12 – 60	33	1.40 – 8.08	3.348	-32 to 40	1.6
384	8 – 55	36	1.92 – 7.83	3.406	-85 to -5	-32
385	8 – 50	30	1.91 – 16.85	4.384	-30 to 30	-1.5
386	3 – 52	18	1.283 – 20.0	9.065	3 to 45	14.8
387	5 – 39	18	1.04 – 20.0	7.501	-50 to 2	-22.0
<b>General Plant</b>						
389	30 – 44	36	0.95 – 5.14	3.356	No Data	No Data
390	1 – 76	35	1.30 – 5.69	2.986	-20 to 25	-2.1
391	3 – 50	14	1.286 – 24.04	8.825	0.5 to 20	6.5
392	3 – 25	9	0.080 – 26.5	9.605	1.5 to 30	14.5
393	8 – 50	28	0.192 – 7.49	3.673	0.5 to 25	10.3
394	1 – 45	23	0.407 – 10.96	4.785	-5 to 25	7.2
395	5 – 52	25	0.422 – 10.02	4.546	0.5 to 20	7.5
396	2 – 20	12	2.13 – 15.28	7.466	5 to 34	15.9
397	5 – 35	16	0.908 – 15.070	6.156	-10 to 10	0.9
398	1 – 40	21	0.417 – 9.24	4.60	-10 to 20	6.0
399	24 – 40	31	1.99 – 1.99	1.99	20 to 20	20

TABLE 10-1  
Pacific Gas and Electric Company  
Test Year 2007 General Rate Case

SUMMARY OF ESTIMATED SURVIVOR CURVES AND NET SALVAGE PERCENTS

Asset Class	FERC Acct.	Description	SURVIVOR CURVE				NET SALVAGE PERCENT				
			STATISTICAL INDICATION	INDUSTRY LIFE	INDUSTRY RANGE	CURVE	ADOPTED ESTIMATE	RECOMMENDED ESTIMATE	STATISTICAL INDICATION	INDUSTRY RANGE	ADOPTED ESTIMATE
ELECTRIC TRANSMISSION PLANT											
ETP35201	352	Structures & Improvements	60-R3	40-60	R2,R3,R4	50-S6	60-R3	(5)-(22)	0-(30)	(10)	(20)
ETP35202	352	Structures & Improvements/Equip	None			50-S6	60-R3	None	-	(5)	(20)
ETP35301	353	Station Equipment	52-R1.5	35-50	R1,R2	40-S3	40-S1.5	(25)-(45)	5-(20)	0	(30)
ETP35400	354	Towers & Fixtures	71-S4	50-70	R3,R4,R5	70-S4	70-S4	(40)-(60)	(10)-(60)	(40)	(50)
ETP35500	355	Poles & Fixtures	46-R2.5	30-50	R1,R2,R3	42-R3	46-R2.5	(85)-(140)	(20)-(75)	(50)	(60)
ETP35600	356	OH Conductor/Devices - Twr/Pl Ln	55-S6	35-55	R2-R5	52-S6	55-S6	(50)-(140)	10-(60)	(31)	(60)
ETP35700	357	UG Conduit	70-R4	45-65	R3-R5,S6	60-R5	60-R5	0-(100)	10-(20)	0	0
ETP35800	358	UG Conductor/Devices	50-60	35-50	R3,R4,S3	50-R3	50-R3	(5)-(15)	19-(30)	0	0
ETP35900	359	Roads & Trails	60-70	50-75	SQ,R3,R5	60-R5	60-R5	(5)-(35)	0	0	0

TABLE 10.1  
Pacific Gas and Electric Company  
Test Year 2007 General Rate Case

SUMMARY OF ESTIMATED SURVIVOR CURVES AND NET SALVAGE PERCENTS

Asset Class	FERC Acc't	Description	SURVIVOR CURVE				NET SALVAGE PERCENT						
			STATISTICAL	INDUSTRY	ADOPTED	RECOMMENDED	STATISTICAL	INDUSTRY	ADOPTED	RECOMMENDED			
			INDICATION	LIFE	CURVE	ESTIMATE	INDICATION	RANGE	ESTIMATE	ESTIMATE			
<b>ELECTRIC DISTRIBUTION PLANT</b>													
EDP36101	361	Structures & Improvements	55-L5	40-60	R3 R4	55-L5				(20)-(100)	(5)-(30)	(10)	(20)
EDP36102	361	Structures & Improvements - Equip	55-L5			55-L5						0	(20)
EDP36200	362	Station Equipment	43-R1	35-50	R2 R1 L0	39-R2				8-(20)	10-(25)	0	(30)
EDP36300	363	Storage Battery	40-L0 5			10						0	0
EDP36400	364	Poles, Towers & Fixtures	38-R1	30-50	R1 L0 L0	40-R1				(50)-(80)	(20)-(110)	(35)	(100)
EDP36500	365	OH Conductors & Devices	58-L3	40-70	R2 R3 L3	58-L3				(40)-(100)	10-(50)	(49)	(100)
EDP36600	366	Underground Conduit	31-R5	25-45	R2 R3 S2	31-R5				(40)-(130)	0-40	10	(50)
EDP36700	367	UG Conductors & Devices	31-S1	25-40	R0 5 S1 L0	31-S1				(10)-(50)	20-(30)	(19)	(40)
EDP36801	368	Line Transformers-Overhead	24-R5	25-40	R0 5 S1 L0	34-S1				2	(25)-15	10	(10)
EDP36902	369	Line Transformers-Underground	45-R2	30-45	R1-R3	45-R2				(50)-(80)	(5)-(60)	(60)	(100)
EDP36901	369	Services-Overhead	32-S6	30-45	R1-R3	43-R4				(20)-(35)	(5)-(60)	(40)	(60)
EDP37000	370	Services-Underground	32-R0 5	25-40	R2 R3 S2	27-R2				0	10-(20)	0	(5)
EDP37100	371	Meters	61-L3	10-40	L0 L1 01	36-S1				0-(200)	10-(40)	0	0
EDP37200	372	Installation on Customer Premises	28-R0 5	15-40	R1-R3	16-S1				60 90	30-(15)	75	0
EDP37301	373	Leased Property on Cust. Prem	24-S6	15-30	Low Mode	28-R0 5				(15)-(30)	15-(50)	(95)	(90)
EDP37302	373	Street Light-Overhead Conductors	20-L0	15-30	Low Mode	29-L2				15-(15)	15-(50)	(10)	(10)
EDP37303	373	Street Light-Conduit & Cables	19-S6	15-30	Low Mode	22-L0					15-(50)	(10)	0
EDP37304	373	Street Light-Lamps & Equipment			Low Mode	19-S6					15-(50)	(10)	0
EDP37304	373	Street Light-Electroliters			Low Mode						15-(50)	0	(10)
<b>GAS DISTRIBUTION PLANT</b>													
GDP37500	375	Structures & Improvements	60	35-60	R1-R4 S0	49-R2				(50)-(60)	(5)-(30)	(20)	(20)
GDP37601	376	Mans	41-S6	40-70	R S L2-3	54-S3				(50)-(100)	(5)-(100)	(45)	(50)
GDP37700	377	Compressor Station Equipment	15-30	15-35		24-R1 5				0-(20)	(5)-(10)	(10)	(10)
GDP37800	378	Odorizing/Meas & Reg Sta Equipment	53-L3	30-50	R S L0 1	37-R2 5				(50)-(100)	10-(50)	(55)	(55)
GDP38000	380	Services			R S L0-1	50-R3				(85)-(170)	(10)-(200)	(85)	(100)
GDP38100	381	Meters			R S L2-3	24-R1 5				0-4	35-(20)	0	0
GDP38300	383	House Regulators	34-R2	20-50		23-R1 5				0	25-(30)	0	0
GDP38500	385	Meas & Reg Sta Equip-Industrial	67 S1	10-35	S2	34-R2					20-(20)	(15)	(15)
GDP38600	386	Other Property on Customer Premises				35-R2					0-25	0	0
GDP38700	387	Other Equipment				28 S0				0	0-(50)	0	5
<b>COMMON PLANT</b>													
CMP39000	390	Structures and Improvements	43 R1 5	35-50	R2 R3	36-R3				0-(10)	0-(20)	(19)	(10)
CMP39202	392 02	Transp. Equip-Passenger Vehicles	7	5-7	Low Mode	6-S2				8-12	5-25	24	10
CMP39203	392 03	Transp. Equip-Light Truck-1/2 Ton	7 10	5-10	Low Mode	8				8-12	5-25	22	10
CMP39204	392 04	Transp. Equip-Light Truck-1/2 Ton	10 14	5-10	Low Mode	10				8-12	5-25	24	10
CMP39205	392 05	Transp. Equip-Heavy Truck-1 & 2 Ton	10 14	8-12	Mid Mode	13				8-12	5-25	17	10
CMP39206	392 06	Transp. Equip-Heavy Truck-1 & 2 Ton	10 14	8-12	Mid Mode	11				8-12	5-25	14	10
CMP39207	392 07	Transp. Equip-Heavy Truck-3 & 5 Ton	10 14	8-12	Mid Mode	13				8-12	5-25	14	10
CMP39208	392 08	Transp. Equip - Vessels Barge/Bat	11-15	10-15	High Mode	12 S4				8-12	5-25	0	10
CMP39209	392 09	Transp. Equip - Trailer	14-20	14-20	Low Mode	12 S4				8-12	5-25	0	10
CMP39600	396	Power Operated Equipment	14-L2	12-20	Low Mode	20				19	10-40	20	20

ENERGYNORTH NATURAL GAS, INC.  
D/B/A NATIONAL GRID NH  
DG 08-009

National Grid NH's Responses to  
Staff Set 2

Date Request Received: June 13, 2008  
Request No. Staff 2-70

Date of Response: July 11, 2008  
Witness: Paul Normand

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**REQUEST:** Testimony, page 12, line 14. The new study indicates that the proposed estimates for net salvage are very conservative representatives of *actual experience* (emphasis added)...” Please provide the documentation that supports the “actual experience” for Account 1356-Mains, Account 1359-Services and Account 1372.1-Office Equipment.

**RESPONSE:** Attached are copies of three pages of workpapers regarding EnergyNorth's cost of removal and gross salvage history. Such history was available only for the period 2000 to 2006 for the total company. By plant account, such history was available only for the mains and services accounts for the years 2000 to 2002 and 2004 to 2006. The third page is the “CALCULATION OF COR RATES,” the cost of removal component for those accounts for which negative net salvage was estimated, i.e., cost of removal (COR) exceeds gross salvage.

The two pages of history clearly show the estimates to be very conservative, e.g., the mains account history shows 69.56 negative net salvage versus the 15% estimated. The estimate for services is (70)% net salvage versus the realized (175.42)%.

At the total company level, the estimates composite to (35.5)% net salvage versus the 2000 to 2006 realized value of (47.41)%.

Note also that the total company net salvage is becoming more negative as time passes, i.e., 2003 is (86.13)% and 2006 is (190.29)% versus the 2000 value of (23.68)%. This has been a common occurrence with recent studies undertaken by MAC with other utilities.

COR/Salv by acct  
 EnergyNorth

MAINS				SVCS			
Year	Ret.	COR	% COR	Year	Ret.	COR	% COR
2000	8,964	76,555	854.03	2000	102,827	98,008	95.31
2001	47,296	518,865	1097.06	2001	106,200	528,971	498.09
2002	318,107	512,188	161.01	2002	328,166	203,631	62.05
2003	300,754			2003	692,250		
2004	971,856	287,615	29.59	2004	1,280,082	346,638	27.08
2005	643,547	256,235	39.82	2005	125,627	453,775	361.21
2006	428,303	30,506	7.12	2006	74,482	1,907,962	2561.64
	2,718,827	1,681,964	61.86		2,709,634	3,538,985	130.61
excl 2003	2,418,073	1,681,964	69.56		2,017,384	3,538,985	175.42

Prior study  
 (S&W@88)

10%

60%

Even tho incomplete, the 2000-2006 experience certainly shows COR to be much higher than existing estimates.

Revised COR est.  
 moderately

15%

NO SALV.

70%

NO SALV.

History also shows COR on Meter Install. (2005 & 2006), but w/o ref. Probably due to fact Meters & Install. were all one acct thru most of history.

TOTAL COMPANY

Per S&W Rpt	Plant		COR		Net Salv. \$		Net Salv. %		Account	Current % Estimated		Current \$ Estimated		2006 Bal.
	Balance \$k @EOY 1988	Balance \$k @EOY 2006	% Net Salvage	% Net Salvage	Net Salvage	Net Salvage	% Net Salvage	% Net Salvage		Net Salvage	Net Salvage	Net Salvage	Net Salvage	
Structures	1,940.2	0	0	0	34,091	218,654	-184,563	-23.68	1356	-15.0	-20,435	136231		
Prod. Equipment	5,345.4	0	0	0	0	684,382	-684,382	-23.00	1359	-70.0	-66,595	80850		
T& D Equipment	67,215.7	-16,069.7	-23.9	-35.5	0	656,634	-656,634	-37.90	1372.1	5.0	376	7525		
General Plant	2,073.8	38.4	1.9	-32.3	0	978,720	-978,720	-86.13		-34.1	-76,653	224606		
	76,575.1	-16,031.3	-20.9		34,091	6,669,057	-6,634,966	-47.41		-35.5	-77,030	217,081		

ALL SALVAGE

**ENERGY NORTH NATURAL GAS CORPORATION  
CALCULATION OF COR RATES**

- A. Proposed COR = x%
  - B. W.L. Rate w/o COR= 100/ASL
  - C. W.L. Rate w/ COR = w.l. Rate \* COR
  - D. COR Rate = W.L. Rate w/COR - W.L. Rate w/o COR
- Note: W.L. Rate = Whole Life Rate

**STRUCTURES**

ALL ACCOUNTS HAVE NO SALVAGE OR COST OF REMOVAL

**PRODUCTION EQUIPMENT**

1330 HAS NO SALVAGE OR COST OF REMOVAL

**DISTRIBUTION EQUIPMENT**

1356.00 ASL= 60 N.S.= -15

- A. Proposed COR 15
- B. W.L. Rate w/o COR 1.67
- C. W.L. Rate w/ COR 1.92
- D. COR Rate = 0.25

1358.00 ASL= 30 N.S.= 0

- A. Proposed COR 0
- B. W.L. Rate w/o COR 3.33
- C. W.L. Rate w/ COR 3.33
- D. COR Rate = 0.00

1359.00 ASL= 40 N.S.= -70

- A. Proposed COR 70
- B. W.L. Rate w/o COR 2.50
- C. W.L. Rate w/ COR 4.25
- D. COR Rate = 1.75

1360.00 ASL= 35 N.S.= 0

- A. Proposed COR 0
- B. W.L. Rate w/o COR 2.86
- C. W.L. Rate w/ COR 2.86
- D. COR Rate = 0.00

**GENERAL EQUIPMENT**

ALL ACCOUNTS HAVE NO SALVAGE OR COST OF REMOVAL

ENERGY NORTH NATURAL GAS INC. D/B/A NATIONAL GRID NH  
SCHEDULE A-50%-REBUTTAL

SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/06  
WHOLE LIFE SCHEDULE WITH AMORTIZATION OF RESERVE VARIANCE

ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/06	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV. (4)	ACCRUAL WITHOUT NET SALV. (5)	NET SALV. % (6)	SALV FACTOR (7)	ACCRUAL RATE W/ NET SALV. (8)	ACCRUAL WITH NET SALV. (9)	THEO. RSV WITHOUT NET SALV. (10)	THEO. RSV WITH NET SALV. (11)	ALLOC. BOOK RSV @12/31/06 (12)	RESERVE VARIANCE (13)	ARL (14)	AMORT OF RESERVE VARIANCE (15)	ACCRUAL WITH AMORT. (16)	ACCRUAL RATE W/ AMORT. (17)	COR RATE (18)
<b>STRUCTURES</b>																			
1308.1	PRODUCTION PLANT STRUCTURES	1,195,433	R 1.0	30.0	3.33	39,808	0	1.00	3.33	39,808	570,236	570,236	998,174	-427,938	15.7	-27,257	12,551	1.05	0.00%
1308.6	DISTRIBUTION SYSTEM STRUCTURES	544,322	R 1.0	30.0	3.33	18,126	0	1.00	3.33	18,126	232,677	232,677	330,567	-97,880	17.2	-5,681	12,435	2.28	0.00%
1308.7	GENERAL AND MISCELLANEOUS STRUCTURES	1,553,420	R 1.0	30.0	3.33	51,729	0	1.00	3.33	51,729	667,464	667,464	1,328,897	-661,433	17.1	-38,690	13,049	0.84	0.00%
	<b>TOTAL DEPREC. STRUCTURES</b>	3,293,175		30.0	3.33	109,663			3.33	109,663	1,470,377	1,470,377	2,657,628	-1,187,251		-71,628	38,035	1.15	
<b>PRODUCTION EQUIPMENT</b>																			
1330	OTHER PRODUCTION EQUIPMENT	8,993,569	R 1.0	30.0	3.33	299,486	0	1.00	3.33	299,486	4,280,025	4,280,025	7,729,482	-3,449,437	15.7	-219,709	79,777	0.89	0.00%
<b>DISTRIBUTION EQUIPMENT</b>																			
1356	MAINS	136,231,396	R 1.0	60.0	1.67	2,275,064	-35	1.35	2.25	3,065,206	22,625,286	30,544,136	38,926,629	-8,382,493	50.0	-167,650	2,897,556	2.13	0.58%
1358	PUMPING AND REGULATING EQUIPMENT	2,473,039	S 0.0	30.0	3.33	82,352	0	1.00	3.33	82,352	519,452	519,452	643,785	-124,333	23.7	-5,246	77,106	3.12	0.00%
1359	SERVICES	80,850,399	R 4.0	40.0	2.50	2,021,260	-88	1.88	4.70	3,799,969	22,397,617	42,107,520	22,789,274	19,318,246	28.9	688,451	4,468,420	5.53	2.20%
1360	CUSTOMERS' METERS AND INSTALLATIONS	21,192,242	R 2.5	35.0	2.86	606,098	0	1.00	2.86	606,098	5,168,818	5,168,818	10,698,386	-5,529,568	26.5	-208,693	397,435	1.88	0.00%
	<b>TOTAL DEPREC. DISTRIBUTION EQUIPMENT</b>	240,747,076		48.3	2.07	4,984,775			3.14	7,553,625	50,711,173	78,339,926	73,058,074	-5,281,852		286,892	7,840,517	3.26	
<b>GENERAL EQUIPMENT</b>																			
1372.1	OFFICE EQUIPMENT	7,524,999	S 4.0	18.0	5.56	418,390	5	0.85	5.28	397,320	1,632,803	1,551,163	3,348,598	-1,797,435	14.1	-127,478	269,842	3.59	0.00%
1374	STORES EQUIPMENT	43,120	SQ	30.0	3.33	1,436	0	1.00	3.33	1,436	10,135	10,135	36,851	-26,716	22.9	-1,167	269	0.62	0.00%
1376	LABORATORY EQUIPMENT	368,637	S 5.0	16.0	6.25	23,040	0	1.00	6.25	23,040	211,157	211,157	368,637		<b>FULLY DEPRECIATED</b>				
1377	GENERAL TOOLS AND IMPLEMENTS	767,601	S 6.0	19.0	5.26	40,376	0	1.00	5.26	40,376	262,437	262,437	390,288	-127,851	12.5	-10,228	30,148	3.93	0.00%
1378	COMMUNICATION EQUIPMENT	364,639	R 3.0	15.0	6.67	24,321	0	1.00	6.67	24,321	81,319	81,319	171,101	-89,782	11.7	-7,674	16,647	4.57	0.00%
1379	MISCELLANEOUS GENERAL EQUIPMENT	107,360	S 5.0	15.0	6.67	7,161	0	1.00	6.67	7,161	45,922	45,922	96,953	-51,031	8.6	-5,934	1,227	1.14	0.00%
	<b>TOTAL DEPREC. GENERAL EQUIPMENT</b>	9,176,356		17.8	5.61	514,724			5.38	493,654	2,243,773	2,162,133	4,412,428	-2,092,815		-152,481	318,133	3.47	
	<b>TOTAL DEPREC. GAS PLANT</b>	262,210,176		44.4	2.25	5,908,647			3.23	8,456,428	58,705,348	86,252,461	87,857,592	-1,447,651		-156,926	8,276,462	3.16	
<b>LAND</b>																			
	OPI STRUCTURES RETAINED	608,402											105,109						
	TRANSPORTATION EQUIPMENT	587,017											698,424						
	UNFINISHED CONSTRUCTION	9,472,009											-694,277						
1080K	ARO												-2,511,368						
1113K													-105,109						
1220K													117,481						
1081K													469,391						
110AR													85,937,243						
	<b>TOTAL GAS PLANT IN SERVICE</b>	272,877,604																	

ENERGY NORTH NATURAL GAS INC. D/B/A NATIONAL GRID NH  
SCHEDULE A-75%-REBUTTAL

SCHEDULE OF DEPRECIATION ACCRUAL RATES @12/31/06  
WHOLE LIFE SCHEDULE WITH AMORTIZATION OF RESERVE VARIANCE

ACCOUNT NUMBER	DESCRIPTION	PLANT BALANCE @12/31/06	DISP TYPE	ASL	ACCRUAL RATE W/O NET SALV. (4)	ACCRUAL WITHOUT NET SALV. (5)	NET SALV. % (6)	SALV FACTOR (7)	ACCRUAL RATE W/ NET SALV. (8)	ACCRUAL WITH NET SALV. (9)	THEO. RSV WITHOUT NET SALV. (10)	THEO. RSV WITH NET SALV. (11)	ALLOC. BOOK RSV @12/31/06 (12)	RESERVE VARIANCE (13)	ARL (14)	AMORT OF RESERVE VARIANCE (15)	ACCRUAL WITH AMORT. (16)	ACCRUAL RATE W/ AMORT. (17)	COR RATE (18)
<b>STRUCTURES</b>																			
1308.1	PRODUCTION PLANT STRUCTURES	1,195,433	R 1.0	30.0	3.33	39,808	0	1.00	3.33	39,808	570,236	570,236	988,174	-427,838	15.7	-27,257	12,551	1.05	0.00%
1308.6	DISTRIBUTION SYSTEM STRUCTURES	544,322	R 1.0	30.0	3.33	18,126	0	1.00	3.33	18,126	232,677	232,677	330,567	-97,880	17.2	-5,681	12,435	2.28	0.00%
1308.7	GENERAL AND MISCELLANEOUS STRUCTURES	1,553,420	R 1.0	30.0	3.33	51,729	0	1.00	3.33	51,729	667,464	667,464	1,328,897	-661,433	17.1	-38,690	13,049	0.84	0.00%
	<b>TOTAL DEPREC. STRUCTURES</b>	3,293,175		30.0	3.33	109,663			3.33	109,663	1,470,377	1,470,377	2,657,628	-1,187,251		-71,628	38,035	1.15	
<b>PRODUCTION EQUIPMENT</b>																			
1330	OTHER PRODUCTION EQUIPMENT	8,993,569	R 1.0	30.0	3.33	299,486	0	1.00	3.33	299,486	4,280,025	4,280,025	7,729,482	-3,449,437	15.7	-219,709	79,777	0.89	0.00%
<b>DISTRIBUTION EQUIPMENT</b>																			
1356	MAINS	136,231,396	R 1.0	60.0	1.67	2,275,064	-52	1.62	2.54	3,460,277	22,625,286	34,390,435	38,926,629	-4,536,194	50.0	-90,724	3,369,553	2.47	0.87%
1358	PUMPING AND REGULATING EQUIPMENT	2,473,039	S 0.0	30.0	3.33	82,352	0	1.00	3.33	82,352	519,452	519,452	643,786	-124,333	23.7	-5,246	77,106	3.12	0.00%
1359	SERVICES	80,850,399	R 4.0	40.0	2.50	2,021,260	-132	2.32	5.80	4,689,323	22,397,617	51,962,471	22,789,274	29,173,197	28.9	1,009,453	5,698,776	7.05	3.30%
1360	CUSTOMERS' METERS AND INSTALLATIONS	21,192,242	R 2.5	35.0	2.86	606,098	0	1.00	2.86	606,098	5,168,818	5,168,818	10,698,386	-5,529,568	26.5	-208,663	397,435	1.88	0.00%
	<b>TOTAL DEPREC. DISTRIBUTION EQUIPMENT</b>	240,747,076		48.3	2.07	4,984,775			3.67	8,838,051	50,711,173	92,041,176	73,058,074	18,983,102		704,820	9,542,871	3.96	
<b>GENERAL EQUIPMENT</b>																			
1372.1	OFFICE EQUIPMENT	7,524,999	S 4.0	18.0	5.56	418,390	5	0.85	5.28	397,320	1,632,803	1,551,163	3,348,598	-1,797,435	14.1	-127,478	269,842	3.59	0.00%
1374	STORES EQUIPMENT	43,120	SQ	30.0	3.33	1,436	0	1.00	3.33	1,436	10,135	10,135	36,851	-26,716	22.9	-1,167	269	0.62	0.00%
1376	LABORATORY EQUIPMENT	368,637	S 5.0	16.0	6.25	23,040	0	1.00	6.25	23,040	211,157	211,157	368,637						
1377	GENERAL TOOLS AND IMPLEMENTS	767,601	S 6.0	19.0	5.26	40,376	0	1.00	5.26	40,376	262,437	262,437	390,288	-127,851	12.5	-10,228	30,148	3.93	0.00%
1378	COMMUNICATION EQUIPMENT	364,639	R 3.0	15.0	6.67	24,321	0	1.00	6.67	24,321	81,319	81,319	171,101	-89,782	11.7	-7,674	16,647	4.57	0.00%
1379	MISCELLANEOUS GENERAL EQUIPMENT	107,360	S 5.0	15.0	6.67	7,161	0	1.00	6.67	7,161	45,922	45,922	96,953	-51,031	8.6	-5,934	1,227	1.14	0.00%
	<b>TOTAL DEPREC. GENERAL EQUIPMENT</b>	9,176,356		17.8	5.61	514,724			5.38	493,654	2,243,773	2,162,133	4,412,428	-2,092,815		704,820	318,133	3.47	
	<b>TOTAL DEPREC. GAS PLANT</b>	262,210,176		44.4	2.25	5,908,647			3.71	9,740,853	58,705,348	99,953,711	87,857,592	12,253,599		261,002	9,978,815	3.81	
<b>LAND</b>																			
	OPI STRUCTURES RETAINED	608,402																	
	TRANSPORTATION EQUIPMENT	0																	
1373	UNFINISHED CONSTRUCTION	587,017																	
1395	UNFINISHED CONSTRUCTION	9,472,009																	
1080K	ARO																		
1113K																			
1220K																			
1081K																			
110AR																			
	<b>TOTAL GAS PLANT IN SERVICE</b>	272,877,604																	