

**Roll-In Analysis**  
*Northeast Project*  
*Exhibit No. ANR-099*

<b>Cost of Service Calculation <sup>1</sup></b>	<u>Amount</u>
1) Return <sup>2</sup>	\$ 7,642,710
2) O M & A	\$ 9,505,521
3) Depreciation <sup>3</sup>	\$ 9,731,208
4) Income Taxes <sup>4</sup>	\$ 3,580,984
5) Other Taxes	\$ 1,355,264
<b>Project Rate (Before Discount Adjustments)</b>	
<i>Zone 3</i>	
6) Dth-Mi Allocation Units	1,399,567,334
7) Allocated Costs	\$ 12,536,153
8) Billing Determinants (Dth)	215,165,540
9) Initial Rate	<u>\$ 0.0583</u>
<i>Zone 5</i>	
10) Dth-Mi Allocation Units	303,613,065
11) Allocated Costs	\$ 2,719,512
12) Billing Determinants (Dth)	30,899,231
13) Initial Rate	<u>\$ 0.0880</u>
<i>Zone 6</i>	
14) Dth-Mi Allocation Units	354,584,833
15) Allocated Costs	\$ 3,176,074
16) Billing Determinants (Dth)	31,176,501
17) Initial Rate	<u>\$ 0.1019</u>
<i>Zone 7</i>	
18) Dth-Mi Allocation Units	1,330,826,177
19) Allocated Costs	\$ 11,920,427
20) Billing Determinants (Dth)	174,084,255
21) Initial Rate	<u>\$ 0.0685</u>
<i>Total</i>	
22) Dth-Mi Allocation Units	3,388,591,409
23) Allocated Costs	\$ 30,352,166
24) Billing Determinants (Dth)	451,325,527
25) Initial Rate	<u>\$ 0.3166</u>

<sup>1</sup> Uses Northeast Project gross plant balances from schedule C-1.

<sup>2</sup> Derived using ANR's proposed WACC from schedule F-2.

<sup>3</sup> Derived using ANR's proposed depreciation and negative salvage rates from schedule D-1.

<sup>4</sup> Derived using ANR's state and federal tax rates from schedule H-3.

**Project Rate (After Discount Adjustment)<sup>5</sup>**

*Zone 3*

1) Max Rate Equivalent Dth-Mi Allocation Units	1,355,955,821
2) Allocated Costs	\$ 13,048,360
3) Max Rate Equivalent Determinants (Dth) <sup>6</sup>	<u>208,736,957</u>
4) Discount-Adjusted Rate	\$ 0.0692

*Zone 5*

5) Max Rate Equivalent Dth-Mi Allocation Units	239,681,743
6) Allocated Costs	\$ 2,306,457
7) Max Rate Equivalent Determinants (Dth) <sup>6</sup>	<u>24,395,627</u>
8) Discount-Adjusted Rate	\$ 0.1045

*Zone 6*

9) Max Rate Equivalent Dth-Mi Allocation Units	279,449,493
10) Allocated Costs	\$ 2,689,142
11) Max Rate Equivalent Determinants (Dth) <sup>6</sup>	<u>24,672,897</u>
12) Discount-Adjusted Rate	\$ 0.1206

*Zone 7*

13) Max Rate Equivalent Dth-Mi Allocation Units	1,279,040,764
14) Allocated Costs	\$ 12,308,207
15) Max Rate Equivalent Determinants (Dth) <sup>6</sup>	<u>167,580,651</u>
16) Discount-Adjusted Rate	\$ 0.0810

*Total*

17) Max Rate Equivalent Dth-Mi Allocation Units	3,154,127,821
18) Allocated Costs	\$ 30,352,166
19) Max Rate Equivalent Determinants (Dth) <sup>6</sup>	<u>425,386,131</u>
20) Discount-Adjusted Rate	\$ 0.3752

**Roll-In Comparison**

*Zone 3*

21) Project Rate	\$ 0.0692
22) Applicable Mainline Rate (Zn3)	\$ 0.2150
23) Difference in Rates (Line 46 - Line 47)	<u>\$ (0.1458)</u>

*Zone 5*

24) Project Rate	\$ 0.1045
25) Applicable Mainline Rate (Zn5)	\$ 0.3090
26) Difference in Rates (Line 49 - Line 50)	<u>\$ (0.2045)</u>

*Zone 6*

27) Project Rate	\$ 0.1206
28) Applicable Mainline Rate (Zn6)	\$ 0.3105
29) Difference in Rates (Line 52 - Line 53)	<u>\$ (0.1899)</u>

*Zone 7*

30) Project Rate	\$ 0.0810
31) Applicable Mainline Rate (Zn7)	\$ 0.2742
32) Difference in Rates (Line 55 - Line 56)	<u>\$ (0.1932)</u>

*Total*

33) Project Rate	\$ 0.3752
34) Applicable Mainline Rate (Zn5 to Zn3)	\$ 0.7888
35) Difference in Rates (Line 58 - Line 59)	<u>\$ (0.4136)</u>

**Negotiated Rates Revenue/Cost Analysis**

36) Negotiated Rate Billing Determinants	224,127,098
37) Total Revenue Associated with Project	<u>\$ 56,819,106</u>
38) Revenue Excess/Shortfall (Line 62 - Line 23)	\$ 26,466,939

<sup>5</sup> Uses the iterative discount adjustment method.

<sup>6</sup> 23 of the 30 allocated discounted contracts are at rates above the calculated project rate. Therefore, only 7 of the contracts were involved in the discount adjustment.



Step 2

	M/D/N	Contract	Rate	Original							Max Rate	Reduction	Disc Adj								
				Zn3 Dth	Zn5 Dth	Zn6 Dth	Zn7 Dth	Zn3 Dth-Mi	Zn5 Dth-Mi	Zn6 Dth-Mi			Zn7 Dth-Mi	Zn3 Dth	Zn5 Dth	Zn6 Dth	Zn7 Dth	Zn3 Dth-Mi	Zn5 Dth-Mi	Zn6 Dth-Mi	Zn7 Dth-Mi
Lebanon	DISC	110884	\$3.0417	298,800	298,800	298,800	298,800	61,821,720	89,341,200	104,998,320	72,279,720	\$10.3023	70.48%	210,581	210,581	210,581	210,581	43,569,116	62,963,585	73,998,006	50,939,436
	DISC	125852	\$5.3500	780,000	-	-	-	200,148,000	-	-	-	\$1.8969	0.00%	-	-	-	-	-	-	-	-
	NEG	114586	\$7.3383	230,750	-	-	-	73,193,900	-	-	-	\$1.8969	0.00%	-	-	-	-	-	-	-	-
	NEG	114588	\$5.7870	90,282	-	-	-	23,175,389	-	-	-	\$1.8969	0.00%	-	-	-	-	-	-	-	-
	NEG	114590	\$11.0000	126,900	126,900	126,900	126,900	26,255,610	37,943,100	44,592,660	30,697,110	\$10.3023	0.00%	-	-	-	-	-	-	-	-
	NEG	114591	\$11.0000	103,200	103,200	103,200	103,200	21,352,080	30,856,800	36,264,480	24,964,080	\$10.3023	0.00%	-	-	-	-	-	-	-	-
	NEG	114592	\$6.0000	105,750	-	-	105,750	21,879,675	-	-	29,451,375	\$4.1257	0.00%	-	-	-	-	-	-	-	-
	NEG	114593	\$6.0000	62,200	-	-	62,200	9,106,080	-	-	17,322,700	\$4.1257	0.00%	-	-	-	-	-	-	-	-
	NEG	114594	\$6.0000	25,615	-	-	25,615	5,299,744	-	-	7,133,778	\$4.1257	0.00%	-	-	-	-	-	-	-	-
SWML	DISC	800	\$9.8580	-	1,824	1,824	1,824	-	545,391	640,971	403,662	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	DISC	104845	\$9.8580	-	602	602	602	-	179,857	211,378	133,119	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	DISC	108268	\$9.8580	-	2,144	2,144	2,144	-	641,092	753,444	697,697	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	DISC	108304	\$9.8580	-	3,216	3,216	3,216	-	961,638	1,130,166	908,893	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	DISC	117331	\$9.8580	-	2,318	2,318	2,318	-	692,956	814,398	326,083	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	DISC	126500	\$6.1600	-	4,288	4,288	4,288	-	1,282,184	1,506,888	1,099,505	\$8.4054	26.71%	-	1,146	1,146	1,146	-	342,519	402,546	293,719
	DISC	126501	\$9.2500	-	1,686	1,686	1,686	-	504,226	592,592	469,824	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	DISC	126501	\$4.8500	-	2,602	2,602	2,602	-	777,958	914,296	724,880	\$8.4054	42.30%	-	1,101	1,101	1,101	-	329,068	386,738	306,617
	DISC	126508	\$7.6042	2,144	2,144	2,144	2,144	-	641,092	753,444	518,663	\$10.3023	26.19%	562	562	562	562	-	167,896	197,320	135,833
	DISC	126556	\$7.9080	-	3,276	3,276	3,276	-	979,396	1,151,036	916,505	\$8.4054	5.92%	-	194	194	194	-	57,956	68,113	54,235
	DISC	127009	\$6.8384	-	17,367	17,367	-	-	5,192,846	3,923,290	-	\$6.1766	0.00%	-	-	-	-	-	-	-	-
	DISC	126686	\$0.2130	-	6	6	6	-	1,795	2,109	204	\$8.4054	97.47%	-	6	6	6	-	1,749	2,056	199
	DISC	126687	\$0.2130	-	3	3	3	-	861	1,012	98	\$8.4054	97.47%	-	3	3	3	-	839	987	95
	NEG	104404	\$9.2500	-	5,990	5,990	5,990	-	1,791,054	2,104,937	1,668,855	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	NEG	106199	\$9.2500	-	518	518	518	-	154,953	182,108	144,381	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	NEG	114595	\$9.2500	-	1,824	1,824	1,824	-	545,310	640,876	508,105	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	NEG	5450	\$9.8580	-	6,124	6,124	6,124	-	1,831,185	2,152,102	1,616,832	\$8.4054	0.00%	-	-	-	-	-	-	-	-
Laona-Goodman	NEG	1600	\$4.8580	-	-	-	57,835	-	-	-	31,381,354	\$2.2288	0.00%	-	-	-	-	-	-	-	-
	NEG	5450	\$9.8580	-	26,313	26,313	26,313	-	7,867,506	9,246,293	6,946,560	\$8.4054	0.00%	-	-	-	-	-	-	-	-
	NEG	5500	\$4.8580	-	-	-	10,545	-	-	-	3,051,829	\$2.2288	0.00%	-	-	-	-	-	-	-	-
	NEG	106322	\$4.8580	-	-	-	50,368	-	-	-	27,329,833	\$2.2288	0.00%	-	-	-	-	-	-	-	-

<b>Total</b>				211,142	213,591	213,591	213,591	43,569,116	63,863,613	75,055,765	51,730,133		
	Dth	Percentage	Dth-Mi	Percentage	Allocated Costs	Monthly Rate	Change	Zone 3	Zone 5	Zone 6	Zone 7	Total	
Zone 3	6,862,793	49.07%	1,355,998,217	42.99%	\$ 13,047,755	\$ 1.9012	\$ 0.0044	Monthly Rate	\$ 1.9012	\$ 2.8755	\$ 3.3149	\$ 2.2338	\$ 10.3255
Zone 5	802,274	5.74%	239,749,451	7.60%	\$ 2,306,929	\$ 2.8755	\$ 0.0067	Daily Rate	\$ 0.0625	\$ 0.0945	\$ 0.1090	\$ 0.0734	\$ 0.3395
Zone 6	811,390	5.80%	279,529,068	8.86%	\$ 2,689,699	\$ 3.3149	\$ 0.0071	Commodity Rate	\$ 0.0067	\$ 0.0100	\$ 0.0116	\$ 0.0075	\$ 0.0358
Zone 7	5,509,727	39.39%	1,279,096,045	40.55%	\$ 12,307,783	\$ 2.2338	\$ 0.0050	100% LF Rate	\$ 0.0692	\$ 0.1045	\$ 0.1205	\$ 0.0810	\$ 0.3752
Total	13,986,185	100.00%	3,154,372,781	100.00%	\$ 30,352,166								







**Step 6**

	M/D/N	Contract	Rate	Original							Max Rate	Reduction	Disc Adj								
				Zn3 Dth	Zn5 Dth	Zn6 Dth	Zn7 Dth	Zn3 Dth-Mi	Zn5 Dth-Mi	Zn6 Dth-Mi			Zn7 Dth-Mi	Zn3 Dth	Zn5 Dth	Zn6 Dth	Zn7 Dth	Zn3 Dth-Mi	Zn5 Dth-Mi	Zn6 Dth-Mi	Zn7 Dth-Mi
Lebanon	DISC	110884	\$3.0417	298,800	298,800	298,800	298,800	61,821,720	89,341,200	104,998,320	72,279,720	\$10.3262	70.54%	210,785	210,785	210,785	210,785	43,611,513	63,024,854	74,070,012	50,989,004
	DISC	125852	\$5.3500	780,000	-	-	-	200,148,000	-	-	-	\$1.9014	0.00%	-	-	-	-	-	-	-	-
	NEG	114586	\$7.3383	230,750	-	-	-	73,193,900	-	-	-	\$1.9014	0.00%	-	-	-	-	-	-	-	-
	NEG	114588	\$5.7870	90,282	-	-	-	23,175,389	-	-	-	\$1.9014	0.00%	-	-	-	-	-	-	-	-
	NEG	114590	\$11.0000	126,900	126,900	126,900	126,900	26,255,610	37,943,100	44,592,660	30,697,110	\$10.3262	0.00%	-	-	-	-	-	-	-	-
	NEG	114591	\$11.0000	103,200	103,200	103,200	103,200	21,352,080	30,856,800	36,264,480	24,964,080	\$10.3262	0.00%	-	-	-	-	-	-	-	-
	NEG	114592	\$6.0000	105,750	-	-	105,750	21,879,675	-	-	29,451,375	\$4.1354	0.00%	-	-	-	-	-	-	-	-
	NEG	114593	\$6.0000	62,200	-	-	62,200	9,106,080	-	-	17,322,700	\$4.1354	0.00%	-	-	-	-	-	-	-	-
	NEG	114594	\$6.0000	25,615	-	-	25,615	5,299,744	-	-	7,133,778	\$4.1354	0.00%	-	-	-	-	-	-	-	-
SWML	DISC	800	\$9.8580	-	1,824	1,824	1,824	-	545,391	640,971	403,662	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	DISC	104845	\$9.8580	-	602	602	602	-	179,857	211,378	133,119	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	DISC	108268	\$9.8580	-	2,144	2,144	2,144	-	641,092	753,444	697,697	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	DISC	108304	\$9.8580	-	3,216	3,216	3,216	-	961,638	1,130,166	908,893	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	DISC	117331	\$9.8580	-	2,318	2,318	2,318	-	692,956	814,398	326,083	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	DISC	126500	\$6.1600	-	4,288	4,288	4,288	-	1,282,184	1,506,888	1,099,505	\$8.4249	26.88%	-	1,153	1,153	1,153	-	344,692	405,099	295,582
	DISC	126501	\$9.2500	-	1,686	1,686	1,686	-	504,226	592,592	469,824	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	DISC	126501	\$4.8500	-	2,602	2,602	2,602	-	777,958	914,296	724,880	\$8.4249	42.43%	-	1,104	1,104	1,104	-	330,106	387,957	307,584
	DISC	126508	\$7.6042	2,144	2,144	2,144	2,144	-	641,092	753,444	518,663	\$10.3262	26.36%	565	565	565	565	-	168,995	198,611	136,722
	DISC	126556	\$7.9080	-	3,276	3,276	3,276	-	979,396	1,151,036	916,505	\$8.4249	6.14%	-	201	201	201	-	60,087	70,617	56,228
	DISC	127009	\$6.8384	-	17,367	17,367	-	-	5,192,846	3,923,290	-	\$6.1909	0.00%	-	-	-	-	-	-	-	-
	DISC	126686	\$0.2130	-	6	6	6	-	1,795	2,109	204	\$8.4249	97.47%	-	6	6	6	-	1,749	2,056	199
	DISC	126687	\$0.2130	-	3	3	3	-	861	1,012	98	\$8.4249	97.47%	-	3	3	3	-	840	987	95
	NEG	104404	\$9.2500	-	5,990	5,990	5,990	-	1,791,054	2,104,937	1,668,855	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	NEG	106199	\$9.2500	-	518	518	518	-	154,953	182,108	144,381	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	NEG	114595	\$9.2500	-	1,824	1,824	1,824	-	545,310	640,876	508,105	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	NEG	5450	\$9.8580	-	6,124	6,124	6,124	-	1,831,185	2,152,102	1,616,832	\$8.4249	0.00%	-	-	-	-	-	-	-	-
Laona-Goodman	NEG	1600	\$4.8580	-	-	-	57,835	-	-	-	31,381,354	\$2.2340	0.00%	-	-	-	-	-	-	-	-
	NEG	5450	\$9.8580	-	26,313	26,313	26,313	-	7,867,506	9,246,293	6,946,560	\$8.4249	0.00%	-	-	-	-	-	-	-	-
	NEG	5500	\$4.8580	-	-	-	10,545	-	-	-	3,051,829	\$2.2340	0.00%	-	-	-	-	-	-	-	-
	NEG	106322	\$4.8580	-	-	-	50,368	-	-	-	27,329,833	\$2.2340	0.00%	-	-	-	-	-	-	-	-

<b>Total</b>				211,351	213,817	213,817	213,817	43,611,513	63,931,322	75,135,340	51,785,414		
	Dth	Percentage	Dth-Mi	Percentage	Allocated Costs	Monthly Rate	Change	Zone 3	Zone 5	Zone 6	Zone 7	Total	
Zone 3	6,862,585	49.07%	1,355,955,821	42.99%	\$ 13,048,360	\$ 1.9014	\$ 0.0000	Monthly Rate	\$ 1.9014	\$ 2.8757	\$ 3.3152	\$ 2.2340	\$ 10.3262
Zone 5	802,048	5.73%	239,681,743	7.60%	\$ 2,306,457	\$ 2.8757	\$ 0.0000	Daily Rate	\$ 0.0625	\$ 0.0945	\$ 0.1090	\$ 0.0734	\$ 0.3395
Zone 6	811,164	5.80%	279,449,493	8.86%	\$ 2,689,142	\$ 3.3152	\$ 0.0000	Commodity Rate	\$ 0.0067	\$ 0.0100	\$ 0.0116	\$ 0.0075	\$ 0.0358
Zone 7	5,509,501	39.39%	1,279,040,764	40.55%	\$ 12,308,207	\$ 2.2340	\$ 0.0000	100% LF Rate	\$ 0.0692	\$ 0.1045	\$ 0.1206	\$ 0.0810	\$ 0.3752
Total	13,985,297	100.00%	3,154,127,821	100.00%	\$ 30,352,166								