

Roll-In Analysis
Wisconsin '97
Exhibit No. ANR-101

Cost of Service Calculation ¹

	<u>Amount</u>
1) Return ²	\$ 1,276,803
2) O M & A	\$ 802,989
3) Depreciation ³	\$ 1,192,636
4) Income Taxes ⁴	\$ 598,245
5) Other Taxes	\$ 166,036

Project Rate (Before Discount Adjustments)

6) Cost of Service	\$ 4,036,708
7) Directly Assigned Contracts (Dth)	10,341,667
8) Allocated Billing Determinants (Dth) ⁵	32,421,733
9) Total Billing Determinants (Dth)	42,763,400
10) Initial Rate	\$ 0.0944

Project Rate (After Discount Adjustment)⁶

11) Directly Assigned Discounted Billing Determinants (Dth)	-
12) Allocated Discounted Billing Determinants (Dth)	18,710,456
13) Max Rate Equivalents Determinants ⁷	41,063,836
14) Discount-Adjusted Rate	\$ 0.0983

Roll-In Comparison

15) Project Rate	\$ 0.0983
16) Applicable Mainline Rate (Zn7)	\$ 0.2742
17) Difference in Rates (Line 16 - Line 17)	\$ (0.1759)

¹ Uses Wisconsin '97 gross plant balances from schedule C-1.

² Derived using ANR's proposed WACC from schedule F-2.

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

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

⁵ Remaining capacity after directly assigned contracts are removed from original capacity. Wisconsin contracts are allocated based on the ratio of this amount to the total billings determinants within the state. This ratio is applied to each contract to determine the discount adjustment.

⁶ Uses the iterative discount adjustment method.

⁷ 46 of the 60 allocated discounted contracts are at rates above the calculated project rate. Therefore, only 14 of the contracts were involved in the discount adjustment.

Workpapers
Wisconsin '97
 Exhibit No. ANR-101

COS \$ 4,036,708
Variable Costs \$ -
Fixed Costs \$ 4,036,708

Original Capacity 42,763,400
Commodity Volumes 16,231,664

Initial Rate
 Reservation \$ 0.0944
 Commodity \$ -
 Total \$ 0.0944

Final Rate	
Reservation	\$ 0.0983
Commodity	\$ -
Total	\$ 0.0983

Known Contracts 10,341,667
Needs Allocation 32,421,733

Total UnAlloc WI 444,244,169
Alloc Percentage 7.30%

Step 1

M/D/N	Contract	Rate	Volumes	Reduction	Disc Adj Vol
DISC	800	\$0.0806	230,426	14.57%	33,567
DISC	820	\$0.0731	215,928	22.55%	48,691
DISC	840	\$0.1467	89,904	0.00%	-
DISC	850	\$0.1531	497,016	0.00%	-
DISC	850	\$0.1597	202,893	0.00%	-
DISC	104845	\$0.0806	79,183	14.57%	11,535
DISC	107877	\$0.1597	300,714	0.00%	-
DISC	107879	\$0.1597	338,316	0.00%	-
DISC	107897	\$0.1597	681,276	0.00%	-
DISC	107899	\$0.1597	194,720	0.00%	-
DISC	108268	\$0.0806	266,384	14.57%	38,805
DISC	109218	\$0.1597	482,820	0.00%	-
DISC	109222	\$0.1597	538,317	0.00%	-
DISC	109854	\$0.1597	534,987	0.00%	-
DISC	110903	\$0.1467	65,930	0.00%	-
DISC	110903	\$0.1597	133,853	0.00%	-
DISC	110904	\$0.1467	110,993	0.00%	-
DISC	110904	\$0.1597	155,390	0.00%	-
DISC	110905	\$0.1467	437,029	0.00%	-
DISC	112612	\$0.1467	375,441	0.00%	-
DISC	113237	\$0.0731	5,550	22.55%	1,251
DISC	113239	\$0.1467	44,397	0.00%	-
DISC	113239	\$0.1597	20,372	0.00%	-
DISC	113240	\$0.1467	119,873	0.00%	-
DISC	115270	\$0.0314	1,331,918	66.72%	888,695
DISC	115272	\$0.0432	554,966	54.21%	300,831
DISC	115957	\$0.1597	99,894	0.00%	-
DISC	117331	\$0.0806	287,934	14.57%	41,944
DISC	117332	\$0.0653	299,681	30.87%	92,499
DISC	117334	\$0.0805	119,972	14.77%	17,716
DISC	117335	\$0.1597	1,236,381	0.00%	-
DISC	117358	\$0.1597	349,340	0.00%	-
DISC	118787	\$0.1597	110,882	0.00%	-
DISC	118789	\$0.1597	45,219	0.00%	-
DISC	118793	\$0.1597	144,291	0.00%	-
DISC	118794	\$0.1597	58,862	0.00%	-
DISC	117336	\$0.1397	359,618	0.00%	-
DISC	117349	\$0.1397	110,993	0.00%	-
DISC	117354	\$0.1397	88,795	0.00%	-
DISC	120571	\$0.1320	780,060	0.00%	-
DISC	126253	\$0.0934	58,724	1.10%	647
DISC	126325	\$0.1072	5,550	0.00%	-
DISC	126686	\$0.0017	717	98.25%	704
DISC	126687	\$0.0017	344	98.25%	338
DISC	108179	\$0.1397	479,490	0.00%	-
DISC	108179	\$0.1398	399,575	0.00%	-
DISC	112565	\$0.1397	732,555	0.00%	-
DISC	112565	\$0.1398	610,462	0.00%	-
NEG	1600	\$0.1597	1,886,104	0.00%	-
NEG	5450	\$0.0806	800,949	14.57%	116,675
NEG	5500	\$0.1597	441,453	0.00%	-
NEG	106322	\$0.1597	213,926	0.00%	-
NEG	107784	\$0.1597	155,390	0.00%	-
NEG	107896	\$0.1597	144,291	0.00%	-
NEG	108014	\$0.1597	205,337	0.00%	-
NEG	124961	\$0.1597	49,947	0.00%	-
NEG	12000	\$0.1397	86,153	0.00%	-
NEG	109610	\$0.1397	5,994	0.00%	-
NEG	113479	\$0.1397	199,788	0.00%	-
NEG	113479	\$0.1398	133,191	0.00%	-

Total 1,593,897

Disc Adj Volumes 41,169,503

Rate \$ 0.0981
 Change \$ 0.0037

Step 2

M/D/N	Contract	Rate	Volumes	Reduction	Disc Adj Vol
DISC	800	\$0.0806	230,426	17.75%	40,904
DISC	820	\$0.0731	215,928	25.44%	54,924
DISC	840	\$0.1467	89,904	0.00%	-
DISC	850	\$0.1531	497,016	0.00%	-
DISC	850	\$0.1597	202,893	0.00%	-
DISC	104845	\$0.0806	79,183	17.75%	14,056
DISC	107877	\$0.1597	300,714	0.00%	-
DISC	107879	\$0.1597	338,316	0.00%	-
DISC	107897	\$0.1597	681,276	0.00%	-
DISC	107899	\$0.1597	194,720	0.00%	-
DISC	108268	\$0.0806	266,384	17.75%	47,287
DISC	109218	\$0.1597	482,820	0.00%	-
DISC	109222	\$0.1597	538,317	0.00%	-
DISC	109854	\$0.1597	534,987	0.00%	-
DISC	110903	\$0.1467	65,930	0.00%	-
DISC	110903	\$0.1597	133,853	0.00%	-
DISC	110904	\$0.1467	110,993	0.00%	-
DISC	110904	\$0.1597	155,390	0.00%	-
DISC	110905	\$0.1467	437,029	0.00%	-
DISC	112612	\$0.1467	375,441	0.00%	-
DISC	113237	\$0.0731	5,550	25.44%	1,412
DISC	113239	\$0.1467	44,397	0.00%	-
DISC	113239	\$0.1597	20,372	0.00%	-
DISC	113240	\$0.1467	119,873	0.00%	-
DISC	115270	\$0.0314	1,331,918	67.96%	905,215
DISC	115272	\$0.0432	554,966	55.91%	310,303
DISC	115957	\$0.1597	99,894	0.00%	-
DISC	117331	\$0.0806	287,934	17.75%	51,112
DISC	117332	\$0.0653	299,681	33.44%	100,221
DISC	117334	\$0.0805	119,972	17.94%	21,527
DISC	117335	\$0.1597	1,236,381	0.00%	-
DISC	117358	\$0.1597	349,340	0.00%	-
DISC	118787	\$0.1597	110,882	0.00%	-
DISC	118789	\$0.1597	45,219	0.00%	-
DISC	118793	\$0.1597	144,291	0.00%	-
DISC	118794	\$0.1597	58,862	0.00%	-
DISC	117336	\$0.1397	359,618	0.00%	-
DISC	117349	\$0.1397	110,993	0.00%	-
DISC	117354	\$0.1397	88,795	0.00%	-
DISC	120571	\$0.1320	780,060	0.00%	-
DISC	126253	\$0.0934	58,724	4.79%	2,812
DISC	126325	\$0.1072	5,550	0.00%	-
DISC	126686	\$0.0017	717	98.31%	705
DISC	126687	\$0.0017	344	98.31%	338
DISC	108179	\$0.1397	479,490	0.00%	-
DISC	108179	\$0.1398	399,575	0.00%	-
DISC	112565	\$0.1397	732,555	0.00%	-
DISC	112565	\$0.1398	610,462	0.00%	-
NEG	1600	\$0.1597	1,886,104	0.00%	-
NEG	5450	\$0.0806	800,949	17.75%	142,180
NEG	5500	\$0.1597	441,453	0.00%	-
NEG	106322	\$0.1597	213,926	0.00%	-
NEG	107784	\$0.1597	155,390	0.00%	-
NEG	107896	\$0.1597	144,291	0.00%	-
NEG	108014	\$0.1597	205,337	0.00%	-
NEG	124961	\$0.1597	49,947	0.00%	-
NEG	12000	\$0.1397	86,153	0.00%	-
NEG	109610	\$0.1397	5,994	0.00%	-
NEG	113479	\$0.1397	199,788	0.00%	-
NEG	113479	\$0.1398	133,191	0.00%	-

Total 1,692,996

Disc Adj Volumes 41,070,404

Rate \$ 0.0983
 Change \$ 0.0002

Step 3

M/D/N	Contract	Rate	Volumes	Reduction	Disc Adj Vol
DISC	800	\$0.0806	230,426	17.95%	41,360
DISC	820	\$0.0731	215,928	25.62%	55,312
DISC	840	\$0.1467	89,904	0.00%	-
DISC	850	\$0.1531	497,016	0.00%	-
DISC	850	\$0.1597	202,893	0.00%	-
DISC	104845	\$0.0806	79,183	17.95%	14,213
DISC	107877	\$0.1597	300,714	0.00%	-
DISC	107879	\$0.1597	338,316	0.00%	-
DISC	107897	\$0.1597	681,276	0.00%	-
DISC	107899	\$0.1597	194,720	0.00%	-
DISC	108268	\$0.0806	266,384	17.95%	47,814
DISC	109218	\$0.1597	482,820	0.00%	-
DISC	109222	\$0.1597	538,317	0.00%	-
DISC	109854	\$0.1597	534,987	0.00%	-
DISC	110903	\$0.1467	65,930	0.00%	-
DISC	110903	\$0.1597	133,853	0.00%	-
DISC	110904	\$0.1467	110,993	0.00%	-
DISC	110904	\$0.1597	155,390	0.00%	-
DISC	110905	\$0.1467	437,029	0.00%	-
DISC	112612	\$0.1467	375,441	0.00%	-
DISC	113237	\$0.0731	5,550	25.62%	1,422
DISC	113239	\$0.1467	44,397	0.00%	-
DISC	113239	\$0.1597	20,372	0.00%	-
DISC	113240	\$0.1467	119,873	0.00%	-
DISC	115270	\$0.0314	1,331,918	68.04%	906,242
DISC	115272	\$0.0432	554,966	56.02%	310,892
DISC	115957	\$0.1597	99,894	0.00%	-
DISC	117331	\$0.0806	287,934	17.95%	51,683
DISC	117332	\$0.0653	299,681	33.60%	100,701
DISC	117334	\$0.0805	119,972	18.14%	21,764
DISC	117335	\$0.1597	1,236,381	0.00%	-
DISC	117358	\$0.1597	349,340	0.00%	-
DISC	118787	\$0.1597	110,882	0.00%	-
DISC	118789	\$0.1597	45,219	0.00%	-
DISC	118793	\$0.1597	144,291	0.00%	-
DISC	118794	\$0.1597	58,862	0.00%	-
DISC	117336	\$0.1397	359,618	0.00%	-
DISC	117349	\$0.1397	110,993	0.00%	-
DISC	117354	\$0.1397	88,795	0.00%	-
DISC	120571	\$0.1320	780,060	0.00%	-
DISC	126253	\$0.0934	58,724	5.02%	2,946
DISC	126325	\$0.1072	5,550	0.00%	-
DISC	126686	\$0.0017	717	98.32%	705
DISC	126687	\$0.0017	344	98.32%	338
DISC	108179	\$0.1397	479,490	0.00%	-
DISC	108179	\$0.1398	399,575	0.00%	-
DISC	112565	\$0.1397	732,555	0.00%	-
DISC	112565	\$0.1398	610,462	0.00%	-
NEG	1600	\$0.1597	1,886,104	0.00%	-
NEG	5450	\$0.0806	800,949	17.95%	143,766
NEG	5500	\$0.1597	441,453	0.00%	-
NEG	106322	\$0.1597	213,926	0.00%	-
NEG	107784	\$0.1597	155,390	0.00%	-
NEG	107896	\$0.1597	144,291	0.00%	-
NEG	108014	\$0.1597	205,337	0.00%	-
NEG	124961	\$0.1597	49,947	0.00%	-
NEG	12000	\$0.1397	86,153	0.00%	-
NEG	109610	\$0.1397	5,994	0.00%	-
NEG	113479	\$0.1397	199,788	0.00%	-
NEG	113479	\$0.1398	133,191	0.00%	-

Total 1,699,158

Disc Adj Volumes 41,064,242

Rate \$ 0.0983
 Change \$ 0.0000

Step 4

M/D/N	Contract	Rate	Volumes	Reduction	Disc Adj Vol
DISC	800	\$0.0806	230,426	17.96%	41,389
DISC	820	\$0.0731	215,928	25.63%	55,336
DISC	840	\$0.1467	89,904	0.00%	-
DISC	850	\$0.1531	497,016	0.00%	-
DISC	850	\$0.1597	202,893	0.00%	-
DISC	104845	\$0.0806	79,183	17.96%	14,223
DISC	107877	\$0.1597	300,714	0.00%	-
DISC	107879	\$0.1597	338,316	0.00%	-
DISC	107897	\$0.1597	681,276	0.00%	-
DISC	107899	\$0.1597	194,720	0.00%	-
DISC	108268	\$0.0806	266,384	17.96%	47,847
DISC	109218	\$0.1597	482,820	0.00%	-
DISC	109222	\$0.1597	538,317	0.00%	-
DISC	109854	\$0.1597	534,987	0.00%	-
DISC	110903	\$0.1467	65,930	0.00%	-
DISC	110903	\$0.1597	133,853	0.00%	-
DISC	110904	\$0.1467	110,993	0.00%	-
DISC	110904	\$0.1597	155,390	0.00%	-
DISC	110905	\$0.1467	437,029	0.00%	-
DISC	112612	\$0.1467	375,441	0.00%	-
DISC	113237	\$0.0731	5,550	25.63%	1,422
DISC	113239	\$0.1467	44,397	0.00%	-
DISC	113239	\$0.1597	20,372	0.00%	-
DISC	113240	\$0.1467	119,873	0.00%	-
DISC	115270	\$0.0314	1,331,918	68.05%	906,306
DISC	115272	\$0.0432	554,966	56.03%	310,928
DISC	115957	\$0.1597	99,894	0.00%	-
DISC	117331	\$0.0806	287,934	17.96%	51,718
DISC	117332	\$0.0653	299,681	33.61%	100,731
DISC	117334	\$0.0805	119,972	18.15%	21,779
DISC	117335	\$0.1597	1,236,381	0.00%	-
DISC	117358	\$0.1597	349,340	0.00%	-
DISC	118787	\$0.1597	110,882	0.00%	-
DISC	118789	\$0.1597	45,219	0.00%	-
DISC	118793	\$0.1597	144,291	0.00%	-
DISC	118794	\$0.1597	58,862	0.00%	-
DISC	117336	\$0.1397	359,618	0.00%	-
DISC	117349	\$0.1397	110,993	0.00%	-
DISC	117354	\$0.1397	88,795	0.00%	-
DISC	120571	\$0.1320	780,060	0.00%	-
DISC	126253	\$0.0934	58,724	5.03%	2,955
DISC	126325	\$0.1072	5,550	0.00%	-
DISC	126686	\$0.0017	717	98.32%	705
DISC	126687	\$0.0017	344	98.32%	338
DISC	108179	\$0.1397	479,490	0.00%	-
DISC	108179	\$0.1398	399,575	0.00%	-
DISC	112565	\$0.1397	732,555	0.00%	-
DISC	112565	\$0.1398	610,462	0.00%	-
NEG	1600	\$0.1597	1,886,104	0.00%	-
NEG	5450	\$0.0806	800,949	17.96%	143,864
NEG	5500	\$0.1597	441,453	0.00%	-
NEG	106322	\$0.1597	213,926	0.00%	-
NEG	107784	\$0.1597	155,390	0.00%	-
NEG	107896	\$0.1597	144,291	0.00%	-
NEG	108014	\$0.1597	205,337	0.00%	-
NEG	124961	\$0.1597	49,947	0.00%	-
NEG	12000	\$0.1397	86,153	0.00%	-
NEG	109610	\$0.1397	5,994	0.00%	-
NEG	113479	\$0.1397	199,788	0.00%	-
NEG	113479	\$0.1398	133,191	0.00%	-

Total 1,699,541

Disc Adj Volumes 41,063,859

Rate \$ 0.0983
 Change \$ 0.0000

Step 5

M/D/N	Contract	Rate	Volumes	Reduction	Disc Adj Vol
DISC	800	\$0.0806	230,426	17.96%	41,390
DISC	820	\$0.0731	215,928	25.63%	55,337
DISC	840	\$0.1467	89,904	0.00%	-
DISC	850	\$0.1531	497,016	0.00%	-
DISC	850	\$0.1597	202,893	0.00%	-
DISC	104845	\$0.0806	79,183	17.96%	14,223
DISC	107877	\$0.1597	300,714	0.00%	-
DISC	107879	\$0.1597	338,316	0.00%	-
DISC	107897	\$0.1597	681,276	0.00%	-
DISC	107899	\$0.1597	194,720	0.00%	-
DISC	108268	\$0.0806	266,384	17.96%	47,849
DISC	109218	\$0.1597	482,820	0.00%	-
DISC	109222	\$0.1597	538,317	0.00%	-
DISC	109854	\$0.1597	534,987	0.00%	-
DISC	110903	\$0.1467	65,930	0.00%	-
DISC	110903	\$0.1597	133,853	0.00%	-
DISC	110904	\$0.1467	110,993	0.00%	-
DISC	110904	\$0.1597	155,390	0.00%	-
DISC	110905	\$0.1467	437,029	0.00%	-
DISC	112612	\$0.1467	375,441	0.00%	-
DISC	113237	\$0.0731	5,550	25.63%	1,422
DISC	113239	\$0.1467	44,397	0.00%	-
DISC	113239	\$0.1597	20,372	0.00%	-
DISC	113240	\$0.1467	119,873	0.00%	-
DISC	115270	\$0.0314	1,331,918	68.05%	906,310
DISC	115272	\$0.0432	554,966	56.03%	310,931
DISC	115957	\$0.1597	99,894	0.00%	-
DISC	117331	\$0.0806	287,934	17.96%	51,720
DISC	117332	\$0.0653	299,681	33.61%	100,733
DISC	117334	\$0.0805	119,972	18.15%	21,780
DISC	117335	\$0.1597	1,236,381	0.00%	-
DISC	117358	\$0.1597	349,340	0.00%	-
DISC	118787	\$0.1597	110,882	0.00%	-
DISC	118789	\$0.1597	45,219	0.00%	-
DISC	118793	\$0.1597	144,291	0.00%	-
DISC	118794	\$0.1597	58,862	0.00%	-
DISC	117336	\$0.1397	359,618	0.00%	-
DISC	117349	\$0.1397	110,993	0.00%	-
DISC	117354	\$0.1397	88,795	0.00%	-
DISC	120571	\$0.1320	780,060	0.00%	-
DISC	126253	\$0.0934	58,724	5.03%	2,955
DISC	126325	\$0.1072	5,550	0.00%	-
DISC	126686	\$0.0017	717	98.32%	705
DISC	126687	\$0.0017	344	98.32%	338
DISC	108179	\$0.1397	479,490	0.00%	-
DISC	108179	\$0.1398	399,575	0.00%	-
DISC	112565	\$0.1397	732,555	0.00%	-
DISC	112565	\$0.1398	610,462	0.00%	-
NEG	1600	\$0.1597	1,886,104	0.00%	-
NEG	5450	\$0.0806	800,949	17.96%	143,870
NEG	5500	\$0.1597	441,453	0.00%	-
NEG	106322	\$0.1597	213,926	0.00%	-
NEG	107784	\$0.1597	155,390	0.00%	-
NEG	107896	\$0.1597	144,291	0.00%	-
NEG	108014	\$0.1597	205,337	0.00%	-
NEG	124961	\$0.1597	49,947	0.00%	-
NEG	12000	\$0.1397	86,153	0.00%	-
NEG	109610	\$0.1397	5,994	0.00%	-
NEG	113479	\$0.1397	199,788	0.00%	-
NEG	113479	\$0.1398	133,191	0.00%	-

Total 1,699,564

Disc Adj Volumes 41,063,836

Rate \$ 0.0983
 Change \$ 0.0000