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PROPOSAL FOR COMPLETION

OF THE

ELECTRIFIED RAILWAY OPERATION

OF THE

CHICAGO, MILWAUKEE, ST. PAUL

AND

PACIFIC RAILROAD COMPANY

LOCOMOTIVE PRODUCTS DEPARTMENT

TRANSPORTATION SYSTEMS BUSINESS DIVISION

GENERAL ELECTRIC COMPANY

ERIE, PENNSYLVANIA

March 20, 1972

GEORGE FRAZIER

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A. AFTER TAXES

B. BEFORE TAXES

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TABLE I (A)

ANNUAL CASH SAVINGS

THROUGH ELECTRIFICATION

Year	ANNUAL CASH SAVINGS AFTER TAXES (NOT CUMULATIVE) 2.7% Growth Rate	5% Growth Rate
1974	$ 0.05 Million	$ 0.05 Million
1975	0.09	0.12
1976	0.19	0.22
1977	0.29	0.39
1978	0.33	0.49
1979	0.36	0.52
1980	0.47	0.69
1981	0.55	0.87
1982	0.69	1.09
1983	0.82	1.34
1984	0.32	0.99
1985	0.51	1.26
1986	0.69 4.67	1.60 8.03
1987	0.88	1.99
1988	1.12	2.36
1989	2.70	4.17
1990	3.00	4.76
1991	3.38	5.45
1992	3.69	6.19
1993	4.14	6.98
1994	5.61	8.98
1995	6.25	10.14
1996	6.86	11.42
1997	7.54	12.88
1998	8.33	14.47
1999	9.06	16.34
2000	9.99	18.31
2001	11.00	20.45
2002	12.09	22.99
2003	13.17	25.56
TOTAL	$ 114.17 Million	$ 203.07 Million
BEFORE TAXES	221.59	402.66

Approx 9% conventional financing

CHANGE IN PURCHASE OF 14 ELECTRICS

TABLE I (B)

ANNUAL CASH SAVINGS

THROUGH ELECTRIFICATION

Year	ANNUAL CASH SAVINGS BEFORE TAXES (NOT CUMULATIVE) 2.7% Growth Rate	5% Growth Rate
1974	$ 0.03 Million	$ 0.03 Million
1975	0.13	0.19
1976	0.32	0.41
1977	0.53	0.75
1978	0.62	0.95
1979	0.68	1.05
1980	0.89	1.38
1981	1.07	1.76
1982	1.32	2.17
1983	1.60	2.69
1984	0.64	2.02
1985	1.03	2.57
1986	1.38 8.80	3.25 15.97
1987	1.76	4.01
1988	2.26	4.76
1989	6.21	9.15
1990	6.73	10.29
1991	7.46	11.68
1992	7.98	13.16
1993	8.82	14.69
1994	11.50	18.53
1995	12.58	20.67
1996	13.59	23.00
1997	14.67	25.67
1998	15.96	28.60
1999	17.15	31.99
2000	18.70	35.50
2001	20.29	39.36
2002	22.00	43.92
2003	23.69	48.46
TOTAL	$ 221.59 Million	$ 402.66 Million

From Ray Herbert by Phone 4-3-72

Catenary & Sub Improvements (No copper Signal → Aluminum Replacement) — $24 454 471 − 30 yrs
− 3 540 000
$ 20, 884, 471

Engines (469 000/unit) — 20 240 000 − 20 yrs.

41, 124, 471

Catenary & Sub—

$ 24 454 471
7 204 237 Idaho Cat.
17,250,234

2 900 000 Idaho Subs
14,350, 234

1 100 000 Idaho Signals-Bonding
13 250 234

3 500 000 2 Coast + 5 RM Subs (7 Total)
9 750 234
420 000 Coast - Move 4 MG's and Automize
9 330 234
630 000 RM - Move 6 MG's, No Bldg. Chg. & Automize (10 Subs)
9 700 234
400 000 RM - Add 4 MG's - Automize & Extend Bldg. - Concrete Foundation & Feeders
9 300 234

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ECONOMETRIC COMPUTER PROGRAM

INPUT DATA SUMMARY

Following is a summary of the input data used in the General Electric econometric computer program. These inputs, which are explained in more detail in Tab 3, resulted in the annual cash savings shown in Table I. All inputs are projected to January 1974.

1.	Initial Year of Total Electric Operation	1974
2.	Traffic Volume - 1974 (MGTM)	6,875,000
3.	Projected Annual Traffic Growth Rate	2.7%/5%
4.	Electric Energy Consumption (kwh/year)	259,625,000
5.	Electric Energy Rate (mills/kwh)	7.75
6.	Electric Energy Inflation Rate	1%
7.	Number - Electric Locomotives (Including Little Joes)	*
8.	Price - Electric Locomotives 469 000	-In Lease Charge-
9.	Lease Charges: Catenary & Substations - 1974 thru 2003	$ 1 550 000/yr.
	Electric Locomotives - 1974 thru 1993	$ 1 800 000/yr.
10.	Maintenance - Electric Locomotives (¢/MGTM)	11.2
11.	Catenary and Substation Maintenance and Operation	$ 1 390 300/yr.
12.	Signal System and Track Bonding Changes	$ 1 000 000
13.	Transmission Line Value	$ 3 540 000
14.	Diesel Fuel Consumption (gal/year)	14,869,432
15.	Diesel Fuel Rate (¢/gal)	12.4
16.	Lube Oil Expense (% of Diesel Fuel Expense)	10%
17.	Diesel Fuel Inflation Rate	3.5%
18.	Number - Diesel-Electric Locomotives	90 65
19.	Price - Diesel-Electric Locomotives	$ 298 000
20.	Lease Charge: Diesel-Electric Locos - 1974 thru 1988	$ 2 800 000/yr.
21.	Maintenance - Diesel-Electric Locomotives (¢/MGTM)	34.8
22.	Diesel Fuel Supply Inventory Expense	~~$ 18 254/yr.~~
23.	Lube Oil Analysis - Annual Expense	~~$ 395/loco.~~
24.	Diesel-Electric Locomotive Spare Parts Inventory-(Electric Spare Parts)	~~$ 1 000/loco.~~
25.	ICC Annual Inspection Charges - Electric	~~$ 590/loco.~~
	- Diesel-Electric	~~$ 820/loco.~~
26.	Projected Annual Interest Rate	9%
27.	Projected Annual Inflation Rate	5%
28.	Taxes: Federal Income	48%
	Property	1%
29.	Number of Years Between Locomotive Investments	1 year
30.	Physical Life: Catenary and Substations	50 years
	Signals	50 years
	Electric Locomotives	30 years
	Diesel-Electric Locomotives	15 years
31.	Depreciated Life: Signals	35 years
	Electric Locomotives	30 years
	Diesel-Electric Locomotives	15 years

$\frac{14\,869\,432 \text{ GAL}}{259\,625\,000 \text{ KWH}} = 17.4 \text{ KWH/GAL}$

DID NOT INCLUDE ENGINE WT.

32.	Loan/Lease Periods:	Catenary and Substations	30 years
		Signals	20 years
		Electric Locomotives	20 years
		Diesel-Electric Locomotives	15 years
33.	Depreciation Method - Straight Line - 10% Salvage		
34.	Loan Payments - Level Payments		
35.	Cash Savings - Both Before Taxes (Table I (B))and After Taxes (Table I (A))		
36.	Severence Cost - Catenary and Substation Maintenance Employees		$1,000,000
37.	Signal Pole Replacement Cost - Years 1974 through 1988	? ?	$ 140,000/Year

CHANGE OVER 5 YEARS

Note: Quantity of electric units, including the 12 existing Little Joe locomotives, will equal or exceed the total capability of the 90 diesel-electric locomotives in both horsepower and tractive effort.

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COMPUTER PROGRAM - INPUT DATA

1. Initial Year of Total Electric Operation - 1974

The computer program assumes that the total system will begin operation on January 1, 1974. This may or may not be factual, since the date on which the program is approved and completion activities begin will obviously have a definite bearing on the system start-up date. For purposes of this study however, 1974 is considered the initial year of electric operation.

2. Traffic Volume - 1974 - 6,875,000 MGTM

This figure is based on actual 1971 traffic volume furnished by the railroad as follows:

Coast Division	1,269,748
Othello - Avery	1,547,250
Mountain Division	3,530,980
	6,347,978

Using a 2.7% per year traffic growth rate (one-half the Milwaukee's 1961-1970 growth rate), 1974 traffic is projected to 6,875,000 MGTM.

Note: This traffic volume is actually a trailing ton-mile figure, and does not include locomotive weight.

3. Projected Annual Traffic Growth Rate

The 1971 traffic volume of 6,347,978 MGTM is up 4.9% from the 1970 level, considerably above the "1/2 historical growth rate" of 2.7% and actually closer to the 1961-1970 actual growth rate of approximately 5.4%. The ASTRO Report projects a national rail growth rate in total net ton miles of 3.5% per year through 1980. Two growth rates were therefore used in this study, one at the 1/2-historical growth rate (2.7%) and the other at 5%. which shows the effect of continued growth at the 1971 pace.

4. Electric Energy Consumption - 259,625,000-KWH/Year

Based on the traffic volume in item #2, and on kwh/MGTM data supplied the Railroad, total 1974 electric energy consumption is computed as follows:

Area	KWH/MGTM	MGTM/Year	KWH/Year
Coast Division	41	1,375,000	56,375,000
Othello - Avery	30	1,675,000	50,250,000
Mountain Division	40	3,825,000	153,000,000
Total		6,875,000	259,625,000

4. Electric Energy Consumption (continued)

Note: These kwh values are as measured at the power company metering point, and include locomotive idling and working locally. Although the MGTM data is actually a trailing ton-mile figure, the kwh/MGTM data given above includes the power required to move the locomotive.

5. Electric Energy Rate (Mills/Kwh) - 7.75

The latest utility proposal for electric energy charges is as follows:

Coast Division	7.5 - 8.0
Othello - Avery	7.0
Mountain Division	8.0

These rates are based upon receipt of Milwaukee agreement to sell the approximately 500-mile, 115-kv transmission line to the utilities for $3,540,000. Based on the above proposed rates, and based on the kwh usage projected for each division, a 7.75 mill average or composite rate was determined as follows:

Area	KWH/Year	$/KWH	$/Year
Coast Division	56,375,000	$ 0.00775	$ 436,906
Othello - Avery	50,250,000	0.007	351,750
Mountain Division	153,000,000	0.008	1,224,000
	259,625,000		$ 2,012,656

$$\frac{\$2,012,656}{259,625,000 \text{ kwh}} = \$\ 0.00775 = 7.75 \text{ Mills}$$

6. Electric Energy Inflation Rate - 1%

Historically, electrical energy rates have not followed general inflationary trends but have actually decreased over the years. There is reason to believe that continued decreases will not be likely in the future however. For this reason this analysis has been based on a 1% inflation of electric energy rate, rather than a level or decreasing rate as has taken place over the years.

7. Number - Electric Locomotives

The electric locomotive annual lease charge (reference item #9) is based on a quantity of 44 electric units which, when combined with the Little Joes now in service, will equal or exceed 90 diesel-electric locomotives in both horsepower and tractive effort.

7. Number - Electric Locomotives (continued)

Locomotive requirements for handling a given annual tonnage must be based on a specified peak month in the annual traffic pattern and not on an average uniform flow of traffic. In the electrification territory, historically and recently, the peak month traffic exceeds the average uniform traffic flow by only 10%. The dollar revenue impact of peak traffic is emphasized by the three peak months usually occurring consecutively.

A recent 1972 day, tabulated below, was in a peak time and, according to the Railroad, apparently very few units were in the terminals:

Quantity	Type	Weight on Drivers
9	Little Joes	3,987,900
49	GP40's	13,117,300
7	SD45's	2,706,100
6	Electric Helpers	1,350,000
71		
Total		21,161,400#

To supply the required 21,161,400# weight on drivers a total of 58 straight electrics would be required. Actual weight on drivers from 58 straight electrics would be 58 X 390,000# = 22,620,000#. However, since electric units have a 95% availability rate, this quantity would provide the current requirements:

.95 (22,690,000#) = 21,489,000# (available)

Note: Since 12 Little Joes are expected to remain in service through 1983, they will provide (12) (.95) (443,100) = 5,051,340# weight on drivers. Thus only 21,161,400# -5,051,340# = 16,110,060# weight on drivers is required initially. This can be provided by a quantity of only 44 electric units, thus postponing the purchase of 14 straight electrics until after the Little Joes have been retired.

5,051,340# + (.95) (44) (390,000)
= 5,051,340# + 16,302,000# = 21,353,340# (available)

The basis and source of an "availability factor" should be defined for all concerned. The following statement is made in a report prepared for the DOT but not yet approved for release.

"The availability factor provides a means of evaluating the differences in locomotive fleets that arise from differences in the amount of time that locomotives must spend in activities other than hauling freight. The electric locomotive manufacturers have claimed that electric locomotives will spend only 5% of their lifetime in maintenance as compared with 11% of diesels and that they will lose no time in routine turnaround servicing (fueling, lubrication, watering, engine inspection) as compared with 5% for diesels. The electric availability under these assumptions would be 95% as compared with 84% for diesel."

8. Price - Electric Locomotives

Included in the electric locomotive lease charge.

9. Catenary, Substation and Locomotive Lease Charges

Catenary and Substations - $1,550,000/Year

The catenary and substation lease charge estimate includes the closing of the gap between Othello and Avery and updating existing substations in the two currently electrified zones. The scope of this effort is considered to be essentially as defined in the September 1971 "Proposal for Milwaukee Road Electrification" furnished by the Montana Power Company, the Puget Sound Power & Light Company and the Washington Water Power Company. This includes replacement of feeders, moving of existing motor-generator sets, and replacement of certain motor-generator sets with silicone rectifiers, as well as the installation of new catenary and substations required in the gap. It does not include the subsequent substation modifications required according to the utility proposal when the traffic increases by 1,500,000/ MGTM and again when traffic further increases by an additional 1,500,000/MGTM. Communication changes if required are also not included.

As mentioned in item #5, the utility energy rates are contingent upon sale of the Milwaukee 115-kv transmission line to the utilities for $3,540,000. It is further understood that these proceeds must be used in construction of the new catenary, substations, or substation modifications. The above lease charge takes this into account, by reducing the principal lease amount by the $3,540,000 sale price of the transmission line.

Exact terms of the lease are yet to be negotiated. The lease cost for this analysis is based on a true lease, payable over a thirty year period, with fair market value at the end of the thirty year period. At the end of the lease, Milwaukee would have the option of purchasing the system and locomotives at fair market value. Insurance and taxes are not included. The lease rate is based on the Milwaukee's long-term borrowing rate which, for this analysis, was assumed to be 9%. If the Milwaukee should qualify for a lower rate, the lease rate would also be lower. Thus financing of the electric locomotives versus diesel electrics, as compared in our computer program, will not show appreciably different cost differentials if the borrowing rate should vary somewhat from the 9% figure.

Electric Locomotives - $ 1,800,000/Year

Per item #7, a total of 44 electric units is required in addition to the existing Little Joe fleet to equal or exceed 90 diesel-electric locomotives in both horsepower and tractive effort. The above lease charge estimate is based on this quantity of new electric units, and would be similar to the lease for catenary and substations except that it would be of twenty-year duration.

10. Maintenance - Electric Locomotives - 11.2¢/MGTM

Per a December 13, 1971 Pan-Technology report "Cost Effectiveness Review of Railroad Electrification", maintenance of an electric locomotive has been found by European and South-African railroads to be one-half to one-third that required for a diesel-electric locomotive. The Pan-Tech report adopted a 1 to 2.5 or 40% ratio for this comparison on a per locomotive unit basis. For conservatism, this study used the maximum one-half or 50% comparison. Per items #7 and #18, a quantity of 90 diesel-electric locomotives is required versus only 58 electric units. Using the 50% ratio previously mentioned, the maintenance cost ratio on a ¢/MGTM basis is thus (100%) (90 diesel-electric locomotives) versus (50%) (58 electric units) or 90 versus 29 (approximately 3 to 1). Since diesel-electric maintenance cost is 34.8¢/MGTM per item #21, maintenance for an electric locomotive is then (34.8) (29/90) = 11.2¢/MGTM.

11. Catenary and Substation Maintenance and Operation - $1,390,300/Year

Latest Railroad estimate of projected annual catenary and substation maintenance expense, including labor and materials for pole replacement is $1,390,300.

12. Signal System and Track Bonding Changes - $1,000,000

The Railroad has previously estimated the cost of signal and track bonding changes as follows:

Signals	$ 750,000
Track Bonding	250,000
Total	$1,000,000

This is not included in the annual lease charge.

13. Transmission Line Value - $3,540,000

Latest utility energy rate proposal is understood to be contingent upon sale of the Milwaukee's 115-kv transmission line to the utilities at $3,540,000. Although this negotiation is between the Railroad and the utilities, it is assumed for purposes of this study that the transmission line will be sold at this figure and that the proceeds will be used to defray the cost of the new catenary, substations and substation improvements.

14. Diesel Fuel Consumption - 14,869,432 Gallons/Year

After conversion of the system the average transmission efficiency from kwh metering point to the traction motors will be approximately 63%, based on 70% efficiency from the metering point to the pantograph and 90% efficiency from the pantograph to the traction motors. This means that 63% of 259,625,000 kwhs, or 163,563,750 kwhs are seen at the rail. Using an agreed upon conversion factor of 11-kwhs per gallon of diesel fuel, the equivalent amount of diesel fuel is computed as 163,563,750/11 = 14,869,432 gallons/year.

15. Diesel Fuel Rate - 12.4¢/Gallon

Diesel fuel rate is best determined by examination of fuel rates previously experienced by the Milwaukee as follows:

1965	9.42¢/gallon
1966	9.57
1967	9.62
1968	9.95
1969	10.50
1970	10.80
1971	11.07
June 1971	10.94
July 1971	11.07
Aug. 1971	11.27
Sept 1971	11.12
Oct. 1971	11.42
Nov. 1971	11.56

Based on a 1971 year end fuel rate of 11.56¢/gallon, 1974 fuel rate is estimated to be 12.4¢/gallon, using a 3.5% annual escalation factor to account for diesel fuel cost inflation. DETERMINE BY STUDY

Note: The above fuel rates include tax, purchase expenses and storage expenses but do not include expenses required for transportation to the point of usage.

16. Lube Oil Expense - 10% (of diesel fuel expense)

For 1970 freight service, the Milwaukee used $936,000 in lubricating oil and $7,540,000 in diesel fuel. Percentage of lube oil cost to diesel fuel cost is approximately 12.4%. Use of 10% for this parameter is thus conservative and easily justified.

17. Diesel Fuel Inflation Rate - 3.5%/Year

This factor, a recognized unknown, is difficult to establish since even historical data, which may be too low, has had no consistent, long-term trend. Looking at the most recent available 4-year period (from 1967-1971), per gallon fuel costs have risen from 9.62 to 11.07, which represents an annual percentage increase of 3.4%. The latest available data for late 1971 indicates that fuel costs are now rising at an annual rate of over 14%. Even though this latest rise in over a very short time period, the 3.5% rate being used in this study is definitely a conservative one by comparison, and consistent with the past four years' experience.

GP-40 = 266,000
SD-45 = 390,000

18. Number of Diesel-Electric Locomotives

As previously mentioned in item #7, a total of 21,161,400# weight on drivers is required to equal the tabulated mixture of electric and diesel-electric locomotives in service on the day selected for comparison. If this weight on drivers is to be supplied by diesel-electric locomotives only, and assuming the same relative ratio of GP40-s to SD45's (7:1), a total of 79 GP40-type locomotives and 11 SD45-type locomotives would be required to give an equal amount of weight on drivers:

79	GP40's	21,148,300	= 54 SD45
11	SD45's	4,252,600	= 11 SD45
90		25,400,900	65 Total

Since diesel-electric locomotives have an 84% availability (again reference item #7) the 25,400,900# weight on drivers from these 90 units will yield (.84) (25,400,900#) = 21,336,756# (available).

19. Price - Diesel-Electric Locomotives - $298,000

Diesel-electric locomotive prices are based on estimates of 1972 GP40 and SD45 prices with standard Milwaukee modifications. Prices have been escalated at 5% per year to determine an estimated 1973 price for delivery compatible with initial operation in January 1974.

	1972	1973
SD45	345,000	362,250
GP40	275,000	288,750

Note: Assuming a 79 vs 11 mixture per item #18 above, an average diesel-electric locomotive price is approximately $298,000 per unit.

20. Diesel-Electric Locomotive Lease Charge - $2,800,000/Year

Same lease terms as for electric locomotives except lease period reduced to 15 years. These terms may not be available on a diesel-electric locomotive lease only. Terms were established for a total package consisting of catenary, substations, substation modifications and electric locomotives.

21. Maintenance - Diesel-Electric Locomotives - 34.8¢/MGTM

The Railroad has projected 1974 diesel-electric maintenance costs at 34.8¢/MGTM. This is based on the fact that, although 1970 diesel-electric maintenance cost was only 24.85¢/MGTM, the known electrical workers pay increase amounts to about 30% from August 1970 through April 1973. (The % increase depends upon comprehended hours.) The increase from April 1973 through to 1974 is unknown, but would not likely exceed 10%. Applying a 40% increase to the 1970 figure would give 34.8¢/MGTM in 1974.

1971 TRAILING G.M. GTM 37032 831 } = 35¢/MGTM
& 12938 213 } TAKE ELECTRIC OUT

22. Diesel Fuel Supply Inventory Expense - $18,254/Year

The Railroad has advised that fuel and lube oil inventory on hand at any given point in time is approximately equal to 10% of the annual amount of fuel and lube oil consumed. Based on a 1974 fuel cost of 12.4¢/gallon and a usage of 14,869,432 gallons (reference items #15 and #14) and a lube oil cost percentage of 10% (reference item #16), the value of this inventory is computed as follows:

1974 Fuel Cost = (.124) (14,869,432)	=	$ 1,843,810
1974 Lube Oil Cost = 10%	=	184,381
Total 1974 Cost		$ 2,028,191
10% Inventory On Hand		$ 202,819

Based on a 9% interest rate, this inventory will cost
(.09) ($202,819) = $ 18,254 to maintain in 1974.

23. Lube Oil Analysis - Annual Expanse - $395/Locomotive

Lube oil analysis expense information was previously supplied by the Railroad.

24. Diesel-Electric Locomotive Spare Parts Inventory - $1,000/Locomotive

Spare parts inventory information was previously supplied by the Railroad.

25. ICC Annual Inspection Charges - Electric - $ 590/Locomotive
Diesel-Electric - $ 820/Locomotive

ICC inspection charges are per information previously supplied by the Railroad.

26. Projected Annual Interest Rate - 9%

As previously mentioned in item 9, the assumed rate of interest will, of course, vary from year to year and quite possibly be more or less than 9% at the outset. Since the lease rate for catenary, substations and electric locomotives is also based on this long-term borrowing rate, fluctuations around this 9% will effect all lease costs and loan financing costs in similar manner, with a very minimal net effect on the annual cash savings shown in Table I.

27. Projected Annual Inflation Rate - 5%

Estimated to average 5% per year, governmental controls notwithstanding. Reference is made to the 42% increase over the next three years in the railroad industry's new labor contract. This is a 12.4% annual increase, which is a major contributor to any overall inflation rate projection.

28. Taxes

Property tax rate of 1% estimated by the Railroad. Find source.

29. Number of Years Between Locomotive Investments - 1 Year

Typical railroad purchasing schedule.

30.-
32. Time Parameters

All listed time parameters are based on previous input from the Railroad.

33. Depreciation Method

Based on Railroad financial policy - assumed to be straight line - 10% salvage in this analysis.

34. Loan Payments

Level payments for both principal and interest used in this analysis.

35. Cash Savings

Both "Before Tax" and "After Tax" cash savings shown in Table I, per request of the Railroad.

36. Severence Cost - Catenary and Substation Maintenance Employees

According to previous input from the Railroad, an expense of one million dollars to retire electrical operation personnel is to be charged to diesel operation over the first five years of the study.

37. Signal Pole Replacement Cost

According to previous input from the railroad, if abandonment of electrification were contemplated, $140,000 a year (inflated) for 15 years for signal pole replacement would be required and should be charged against diesel operation.

A

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INCOME STATEMENT

YEAR 1974

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 010	-
Energy - Fuel and Lube Oil	-	2 050
Catenary Maintenance	1 050	-
Locomotive Maintenance	770	2 430
ICC Inspection	30	70
Total Variable Costs	3 860	4 550
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	-	-
Locomotive Interest	-	-
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	10	-
Total Fixed Costs	3 480	2 800
Total -- Variable and Fixed Costs	7 340	7 350
Federal Tax Shield	3 523	3 528
Net Cost After Tax	3 817	3 822
Difference	5	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1975

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 090	-
Energy - Fuel and Lube Oil	-	2 180
Catenary Maintenance	1 110	-
Locomotive Maintenance	830	2 630
ICC Inspection	40	80
Total Variable Costs	4 070	4 890
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	30	40
Locomotive Interest	90	60
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	20	10
Total Fixed Costs	3 610	2 910
Total -- Variable and Fixed Costs	7 680	7 800
Federal Tax Shield	3 686	3 744
Net Cost After Tax	3 994	4 056
Difference	62	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1976

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 160	-
Energy - Fuel and Lube Oil	-	2 310
Catenary Maintenance	1 180	-
Locomotive Maintenance	900	2 830
ICC Inspection	40	90
Total Variable Costs	4 280	5 230
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	50	100
Locomotive Interest	130	140
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	20	10
Total Fixed Costs	3 670	3 050
Total -- Variable and Fixed Costs	7 950	8 280
Federal Tax Shield	3 816	3 974
Net Cost After Tax	4 134	4 306
Difference	172	

Growth Rate 2.7%

INCOME STATEMENT

YEAR 1977

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 250	-
Energy - Fuel and Lube Oil	-	2 460
Catenary Maintenance	1 250	-
Locomotive Maintenance	970	3 050
ICC Inspection	40	90
Total Variable Costs	4 510	5 600
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	80	140
Locomotive Interest	230	200
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	30	20
Total Fixed Costs	3 810	3 160
Total -- Variable and Fixed Costs	8 320	8 760
Federal Tax Shield	3 994	4 205
Net Cost After Tax	4 326	4 555
Difference	229	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1978

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 330	-
Energy - Fuel and Lube Oil	-	2 610
Catenary Maintenance	1 320	-
Locomotive Maintenance	1 040	3 300
ICC Inspection	50	100
Total Variable Costs	4 740	6 010
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	110	200
Locomotive Interest	330	290
Signal Depreciation	30	-
Signal Interest	80	-
Property Tax	40	30
Total Fixed Costs	3 940	3 320
Total -- Variable and Fixed Costs	8 680	9 330
Federal Tax Shield	4 166	4 478
Net Cost After Tax	4 514	4 852
Difference	338	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1983

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 800	-
Energy - Fuel and Lube Oil	-	3 540
Catenary Maintenance	1 940	-
Locomotive Maintenance	1 520	4 810
ICC Inspection	70	150
Total Variable Costs	6 330	8 500
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	290	560
Locomotive Interest	800	710
Signal Depreciation	30	-
Signal Interest	70	-
Property Tax	90	70
Total Fixed Costs	4 630	4 140
Total -- Variable and Fixed Costs	10 960	12 640
Federal Tax Shield	5 261	6 067
Net Cost After Tax	5 699	6 573
Difference	874	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1988

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	3 360	-
Energy - Fuel and Lube Oil	-	4 810
Catenary Maintenance	2 470	-
Locomotive Maintenance	2 210	7 010
ICC Inspection	100	210
Total Variable Costs	8 140	12 030
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	890	1 110
Locomotive Interest	2 330	1 240
Signal Depreciation	30	-
Signal Interest	40	-
Property Tax	250	120
Total Fixed Costs	6 890	5 270
Total -- Variable and Fixed Costs	15 030	17 300
Federal Tax Shield	7 214	8 304
Net Cost After Tax	7 816	8 996
Difference	1180	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1993

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	4 030	-
Energy - Fuel and Lube Oil	-	6 530
Catenary Maintenance	3 510	-
Locomotive Maintenance	3 230	10 210
ICC Inspection	140	310
Total Variable Costs	10 910	17 050
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	-
Locomotive Depreciation	1 280	5 410
Locomotive Interest	2 950	6 380
Signal Depreciation	30	-
Signal Interest	10	-
Property Tax	320	620
Total Fixed Costs	7 940	12 410
Total -- Variable and Fixed Costs	18 850	29 460
Federal Tax Shield	9 048	14 141
Net Cost After Tax	9 802	15 319
Difference	5 517	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1998

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	4 840	-
Energy - Fuel and Lube Oil	-	8 840
Catenary Maintenance	4 480	-
Locomotive Maintenance	4 710	14 890
ICC Inspection	210	450
Total Variable Costs	14 240	24 180
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	-	-
Locomotive Depreciation	1 860	6 950
Locomotive Interest	3 750	6 720
Signal Depreciation	30	-
Signal Interest	-	-
Property Tax	430	610
Total Fixed Costs	7 620	14 280
Total -- Variable and Fixed Costs	21 860	38 460
Federal Tax Shield	10 493	18 461
Net Cost After Tax	11 367	19 999
Difference	8 632	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 2003

(Dollars in Thousands)

	ETectric	Diesel
Variable Cost		
Energy - KWH	5 810	-
Energy - Fuel and Lube Oil	-	12 020
Catenary Maintenance	5 720	-
Locomotive Maintenance	6 860	21 710
ICC Inspection	310	660
Total Variable Costs	18 700	34 390
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	-	-
Locomotive Depreciation	2 700	9 160
Locomotive Interest	4 900	6 820
Signal Depreciation	30	-
Signal Interest	-	-
Property Tax	600	650
Total Fixed Costs	9 780	16 630
Total -- Variable and Fixed Costs	28 480	51 020
Federal Tax Shield	13 670	24 490
Net Cost After Tax	14 810	26 530
Difference	11 720	

Growth Rate 2.7%

INCOME STATEMENT

YEAR 1974

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 010	-
Energy - Fuel and Lube Oil	-	2 050
Catenary Maintenance	1 050	-
Locomotive Maintenance	770	2 430
ICC Inspection	30	70
Total Variable Costs	3 860	4 550
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	-	-
Locomotive Interest	-	-
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	10	-
Total Fixed Costs	3 480	2 800
Total -- Variable and Fixed Costs	7 340	7 350
Federal Tax Shield	3 523	3 528
Net Cost After Tax	3 817	3 822
Difference	5	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1976

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 260	-
Energy - Fuel and Lube Oil	-	2 420
Catenary Maintenance	1 180	-
Locomotive Maintenance	940	2 960
ICC Inspection	40	90
Total Variable Costs	4 420	5 470
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	90	170
Locomotive Interest	270	260
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	40	30
Total Fixed Costs	3 870	3 260
Total -- Variable and Fixed Costs	8 290	8 730
Federal Tax Shield	3 979	4 190
Net Cost After Tax	4 311	4 540
Difference	229	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1977

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 400	-
Energy - Fuel and Lube Oil	-	2 620
Catenary Maintenance	1 250	-
Locomotive Maintenance	1 030	3 270
ICC Inspection	50	100
Total Variable Costs	4 730	5 990
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	140	280
Locomotive Interest	410	400
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	50	40
Total Fixed Costs	4 070	3 520
Total -- Variable and Fixed Costs	8 800	9 510
Federal Tax Shield	4 224	4 565
Net Cost After Tax	4 576	4 945
Difference	369	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1978

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 550	-
Energy - Fuel and Lube Oil	-	2 860
Catenary Maintenance	1 320	-
Locomotive Maintenance	1 140	3 590
ICC Inspection	50	110
Total Variable Costs	5 060	6 560
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	190	390
Locomotive Interest	560	550
Signal Depreciation	30	-
Signal Interest	80	-
Property Tax	70	60
Total Fixed Costs	4 280	3 800
Total -- Variable and Fixed Costs	9 340	10 360
Federal Tax Shield	4 483	4 973
Net Cost After Tax	4 857	5 387
Difference	500	

Growth Rate 5%

INCOME STATEMENT

YEAR 1983

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	3 410	-
Energy - Fuel and Lube Oil	-	4 330
Catenary Maintenance	1 940	-
Locomotive Maintenance	1 850	5 870
ICC Inspection	80	180
Total Variable Costs	7 280	10 380
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	590	1 170
Locomotive Interest	1 620	1 510
Signal Depreciation	30	-
Signal Interest	70	-
Property Tax	180	140
Total Fixed Costs	5 840	5 620
Total -- Variable and Fixed Costs	13 120	16 000
Federal Tax Shield	6 298	7 680
Net Cost After Tax	6 822	8 320
Difference	1 498	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1988

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	4 580	-
Energy - Fuel and Lube Oil	-	6 560
Catenary Maintenance	2 470	-
Locomotive Maintenance	3 020	9 550
ICC Inspection	130	290
Total Variable Costs	10 200	16 400
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	1 570	2 400
Locomotive Interest	4 120	2 740
Signal Depreciation	30	-
Signal Interest	40	-
Property Tax	440	260
Total Fixed Costs	9 550	8 200
Total -- Variable and Fixed Costs	19 750	24 600
Federal Tax Shield	9 480	11 808
Net Cost After Tax	10 270	12 792
Difference	2 522	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1993

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	6 140	-
Energy - Fuel and Lube Oil	-	9 940
Catenary Maintenance	3 510	-
Locomotive Maintenance	4 920	15 560
ICC Inspection	220	470
Total Variable Costs	14 790	25 970
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	-
Locomotive Depreciation	2 610	8 180
Locomotive Interest	6 250	9 600
Signal Depreciation	30	-
Signal Interest	10	-
Property Tax	670	920
Total Fixed Costs	12 920	18 700
Total -- Variable and Fixed Costs	27 710	44 670
Federal Tax Shield	13 301	21 442
Net Cost After Tax	14 409	23 228
Difference	8 819	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1998

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	8 240	-
Energy - Fuel and Lube Oil	-	15 070
Catenary Maintenance	4 480	-
Locomotive Maintenance	8 010	25 340
ICC Inspection	360	770
Total Variable Costs	21 090	41 180
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	-	-
Locomotive Depreciation	4 270	12 340
Locomotive Interest	9 370	12 980
Signal Depreciation	30	-
Signal Interest	-	-
Property Tax	1 050	1 210
Total Fixed Costs	16 270	26 530
Total -- Variable and Fixed Costs	37 360	67 710
Federal Tax Shield	17 933	32 501
Net Cost After Tax	19 427	35 209
Difference	15 782	

Growth Rate 5 %

INCOME STATEMENT

YEAR 2003

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	11 050	-
Energy - Fuel and Lube Oil	-	22 840
Catenary Maintenance	5 720	-
Locomotive Maintenance	13 050	41 280
ICC Inspection	580	1 250
Total Variable Costs	30 400	65 370
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	-	-
Locomotive Depreciation	7 020	20 640
Locomotive Interest	14 610	19 040
Signal Depreciation	30	-
Signal Interest	-	-
Property Tax	1 680	1 700
Total Fixed Costs	24 890	41 380
Total -- Variable and Fixed Costs	55 290	106 750
Federal Tax Shield	26 539	51 240
Net Cost After Tax	28 751	55 510
Difference	26 759	

Growth Rate 5 %

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The Milwaukee Road Collection
Milwaukee Public Library

INCOME STATEMENT

YEAR 1974

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 010	-
Energy - Fuel and Lube Oil	-	2 050
Catenary Maintenance	1 050	-
Locomotive Maintenance	770	2 430
ICC Inspection	30	70
Total Variable Costs	3 860	4 550
Fixed Cost		
Catenary and Substation Lease	1 550	
Locomotive Lease	1 800	2 800
Locomotive Depreciation	-	-
Locomotive Interest	-	-
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	-	-
Total Fixed Costs	3 470	2 800
Total -- Variable and Fixed Costs	7 330	7 350
Federal Tax Shield	-	-
Net Cost After Tax	7 330	7 350
Difference	20	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1975

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 090	-
Energy - Fuel and Lube Oil	-	2 180
Catenary Maintenance	1 110	-
Locomotive Maintenance	830	2 630
ICC Inspection	40	80
Total Variable Costs	4 070	4 890
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	30	40
Locomotive Interest	90	60
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	-	-
Total Fixed Costs	3 590	2 900
Total -- Variable and Fixed Costs	7 660	7 790
Federal Tax Shield	-	-
Net Cost After Tax	7 660	7 790
Difference	130	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1976

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 160	-
Energy - Fuel and Lube Oil	-	2 310
Catenary Maintenance	1 180	-
Locomotive Maintenance	900	2 830
ICC Inspection	40	90
Total Variable Costs	4 280	5 230
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	50	100
Locomotive Interest	130	140
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	-	-
Total Fixed Costs	3 650	3 040
Total -- Variable and Fixed Costs	7 930	8 270
Federal Tax Shield	-	-
Net Cost After Tax	7 930	8 270
Difference	340	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1977

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 250	-
Energy - Fuel and Lube Oil	-	2 460
Catenary Maintenance	1 250	-
Locomotive Maintenance	970	3 050
ICC Inspection	40	90
Total Variable Costs	4 510	5 600
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	80	140
Locomotive Interest	230	200
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	-	-
Total Fixed Costs	3 780	3 140
Total -- Variable and Fixed Costs	8 290	8 740
Federal Tax Shield	-	-
Net Cost After Tax	8 290	8 740
Difference	450	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1978

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 330	-
Energy - Fuel and Lube Oil	-	2 610
Catenary Maintenance	1 320	-
Locomotive Maintenance	1 040	3 300
ICC Inspection	50	100
Total Variable Costs	4 740	6 010
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	110	200
Locomotive Interest	330	290
Signal Depreciation	30	-
Signal Interest	80	-
Property Tax	-	-
Total Fixed Costs	3 900	3 290
Total -- Variable and Fixed Costs	8 640	9 300
Federal Tax Shield	-	-
Net Cost After Tax	8 640	9 300
Difference	660	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1983

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 800	-
Energy - Fuel and Lube Oil	-	3 540
Catenary Maintenance	1 940	-
Locomotive Maintenance	1 520	4 810
ICC Inspection	70	150
Total Variable Costs	6 330	8 500
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	290	560
Locomotive Interest	800	710
Signal Depreciation	30	-
Signal Interest	70	-
Property Tax	-	-
Total Fixed Costs	4 540	4 070
Total -- Variable and Fixed Costs	10 870	12 570
Federal Tax Shield	-	-
Net Cost After Tax	10 870	12 570
Difference	1 700	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1988

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	3 360	-
Energy - Fuel and Lube Oil	-	4 810
Catenary Maintenance	2 470	-
Locomotive Maintenance	2 210	7 010
ICC Inspection	100	210
Total Variable Costs	8 140	12 030
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	890	1 110
Locomotive Interest	2 330	1 240
Signal Depreciation	30	-
Signal Interest	40	-
Property Tax	-	-
Total Fixed Costs	6 640	5 150
Total -- Variable and Fixed Costs	14 780	17 180
Federal Tax Shield	-	-
Net Cost After Tax	14 780	17 180
Difference	2 400	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1993

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	4 030	-
Energy - Fuel and Lube Oil	-	6 530
Catenary Maintenance	3 510	-
Locomotive Maintenance	3 230	10 210
ICC Inspection	140	310
Total Variable Costs	10 910	17 050
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	-
Locomotive Depreciation	1 280	5 410
Locomotive Interest	2 950	6 380
Signal Depreciation	30	-
Signal Interest	10	-
Property Tax	-	-
Total Fixed Costs	7 620	11 790
Total -- Variable and Fixed Costs	18 530	28 840
Federal Tax Shield	-	-
Net Cost After Tax	18 530	28 840
Difference	10 310	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 2003

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	5 810	-
Energy - Fuel and Lube Oil	-	12 020
Catenary Maintenance	5 720	-
Locomotive Maintenance	6 860	21 710
ICC Inspection	310	660
Total Variable Costs	18 700	34 390
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	-	
Locomotive Depreciation	2 700	9 160
Locomotive Interest	4 900	6 820
Signal Depreciation	30	-
Signal Interest	-	-
Property Tax	-	-
Total Fixed Costs	9 180	15 980
Total -- Variable and Fixed Costs	27 880	50 370
Federal Tax Shield	-	-
Net Cost After Tax	27 880	50 370
Difference	22 490	

Growth Rate 2.7 %

INCOME STATEMENT

YEAR 1974

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 010	-
Energy - Fuel and Lube Oil	-	2 050
Catenary Maintenance	1 050	-
Locomotive Maintenance	770	2 430
ICC Inspection	30	70
Total Variable Costs	3 860	4 550
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	-	-
Locomotive Interest	-	-
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	-	-
Total Fixed Costs	3 470	2 800
Total -- Variable and Fixed Costs	7 330	7 350
Federal Tax Shield	-	-
Net Cost After Tax	7 330	7 350
Difference	20	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1975

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 130	-
Energy - Fuel and Lube Oil	-	2 220
Catenary Maintenance	1 110	-
Locomotive Maintenance	850	2 690
ICC Inspection	40	80
Total Variable Costs	4 130	4 990
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	40	80
Locomotive Interest	130	110
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	-	-
Total Fixed Costs	3 640	2 990
Total -- Variable and Fixed Costs	7 770	7 980
Federal Tax Shield	-	-
Net Cost After Tax	7 770	7 980
Difference	210	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1976

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 260	-
Energy - Fuel and Lube Oil	-	2 420
Catenary Maintenance	1 160	-
Locomotive Maintenance	940	2 960
ICC Inspection	40	90
Total Variable Costs	4 420	5 470
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	90	170
Locomotive Interest	270	260
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	-	-
Total Fixed Costs	3 830	3 230
Total -- Variable and Fixed Costs	8 250	8 700
Federal Tax Shield	-	-
Net Cost After Tax	8 250	8 700
Difference	450	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1977

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 400	-
Energy - Fuel and Lube Oil	-	2 620
Catenary Maintenance	1 250	-
Locomotive Maintenance	1 030	3 270
ICC Inspection	50	100
Total Variable Costs	4 730	5 990
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	140	280
Locomotive Interest	410	400
Signal Depreciation	30	-
Signal Interest	90	-
Property Tax	-	-
Total Fixed Costs	4 020	3 480
Total -- Variable and Fixed Costs	8 750	9 470
Federal Tax Shield	-	-
Net Cost After Tax	8 750	9 470
Difference	720	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1978

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	2 550	-
Energy - Fuel and Lube Oil	-	2 860
Catenary Maintenance	1 320	-
Locomotive Maintenance	1 140	3 590
ICC Inspection	50	110
Total Variable Costs	5 060	6 560
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	190	390
Locomotive Interest	560	550
Signal Depreciation	30	-
Signal Interest	80	-
Property Tax	-	-
Total Fixed Costs	4 210	3 740
Total -- Variable and Fixed Costs	9 270	10 300
Federal Tax Shield	-	-
Net Cost After Tax	9 270	10 300
Difference	1 030	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1983

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	3 410	-
Energy - Fuel and Lube Oil	-	4 330
Catenary Maintenance	1 940	-
Locomotive Maintenance	1 850	5 870
ICC Inspection	80	180
Total Variable Costs	7 280	10 380
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	590	1 170
Locomotive Interest	1 620	1 510
Signal Depreciation	30	-
Signal Interest	70	-
Property Tax	-	-
Total Fixed Costs	5 660	5 480
Total -- Variable and Fixed Costs	12 940	15 860
Federal Tax Shield	-	-
Net Cost After Tax	12 940	15 860
Difference	2 920	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1988

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	4 580	-
Energy - Fuel and Lube Oil	-	6 560
Catenary Maintenance	2 470	-
Locomotive Maintenance	3 020	9 550
ICC Inspection	130	290
Total Variable Costs	10 200	16 400
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	2 800
Locomotive Depreciation	1 570	2 400
Locomotive Interest	4 120	2 740
Signal Depreciation	30	-
Signal Interest	40	-
Property Tax	-	-
Total Fixed Costs	9 110	7 940
Total -- Variable and Fixed Costs	19 310	24 340
Federal Tax Shield	-	-
Net Cost After Tax	19 310	24 340
Difference	5 030	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1993

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	6 140	-
Energy - Fuel and Lube Oil	-	9 940
Catenary Maintenance	3 510	-
Locomotive Maintenance	4 920	15 560
ICC Inspection	220	470
Total Variable Costs	14 790	25 970
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	1 800	-
Locomotive Depreciation	2 610	8 180
Locomotive Interest	6 250	9 600
Signal Depreciation	30	-
Signal Interest	10	-
Property Tax	-	-
Total Fixed Costs	12 250	17 780
Total -- Variable and Fixed Costs	27 040	43 750
Federal Tax Shield	-	-
Net Cost After Tax	27 040	43 750
Difference	16 710	

Growth Rate 5 %

INCOME STATEMENT

YEAR 1998

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	8 240	-
Energy - Fuel and Lube Oil	-	15 070
Catenary Maintenance	4 480	-
Locomotive Maintenance	8 010	25 340
ICC Inspection	360	770
Total Variable Costs	21 090	41 180
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	-	-
Locomotive Depreciation	4 270	12 340
Locomotive Interest	9 370	12 980
Signal Depreciation	30	-
Signal Interest	-	-
Property Tax	-	-
Total Fixed Costs	15 220	25 320
Total -- Variable and Fixed Costs	36 310	66 500
Federal Tax Shield	-	-
Net Cost After Tax	36 310	66 500
Difference	30 190	

Growth Rate 5 %

INCOME STATEMENT

YEAR 2003

(Dollars in Thousands)

	Electric	Diesel
Variable Cost		
Energy - KWH	11 050	-
Energy - Fuel and Lube Oil	-	22 840
Catenary Maintenance	5 720	-
Locomotive Maintenance	13 050	41 280
ICC Inspection	580	1 250
Total Variable Costs	30 400	65 370
Fixed Cost		
Catenary and Substation Lease	1 550	-
Locomotive Lease	-	-
Locomotive Depreciation	7 020	20 640
Locomotive Interest	14 610	19 040
Signal Depreciation	30	-
Signal Interest	-	-
Property Tax	-	-
Total Fixed Costs	23 210	39 680
Total -- Variable and Fixed Costs	53 610	105 050
Federal Tax Shield	-	-
Net Cost After Tax	53 610	105 050
Difference	51 440	

Growth Rate 5 %