

d. The ALJ

The ALJ recommended excluding the organizational dues and allowing only 50 percent (\$478,887) of the loan program expenditures. The ALJ found that the loan program was cost effective and should be allowed at 50 percent as a reasonable compromise, allowing the sharing of the cost equally between ratepayers and shareholders. On the other hand, organizational dues should be excluded altogether, according to the ALJ, because the record does not show that these dues have in any way benefitted the ratepayers.

e. Commission Action

Minn. Stat. § 216B.16, subd. 13 (1992) permits the Commission to allow a utility to recover from ratepayers the expenses incurred in economic and community development. In the Commission's view, demonstration of ratepayer benefit is a threshold consideration. Without such a showing, the Commission is not inclined to exercise its discretion to allow the Company to recover all or part of such expenses.

Applying that principle in this case means that MP's organization dues expense, for which no ratepayer benefit has been shown, will be excluded.

Regarding the loan program, MP argued that the Commission's decision in NSP's 1992 rate case indicated that if a program is shown to be cost effective it must be allowed at 100 percent. The Commission clarifies that this was not the intent of the Order. Cost-benefit analyses of economic development programs are useful in identifying ratepayer benefit but, once ratepayer benefit is identified, do not require that ratepayers should pay for such programs in full. From the beginning, the Commission's primary touchstone in this issue has been that if benefits from the economic development programs are shared by ratepayers and shareholders, the costs should also be shared. See the following discussion from the 1992 NSP rate case Order, the first Commission Order to apply the economic development statute:

[NSP] has stated that its programs will help the economy of the community, and a healthy economy will eventually increase NSP's sales. The economic development costs will thus benefit NSP shareholders through increased profits and will benefit NSP's ratepayers through additional future sales and delayed rate increases. It is logical that economic

development costs should be shared by the utility shareholders and ratepayers through a 50% recovery in rates.¹²

¹² In the Matter of the Application of Northern States Power Company for Authority to Increase its Rates for Electric Service in the State of Minnesota, Docket No. E-002/GR-91-001, FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER (November 27, 1991),

The logic of sharing costs in such a situation, cited by the Commission in its initial Order regarding the economic development, continues to persuade the Commission. In this case, therefore, since both ratepayers and shareholders will benefit from MP's loan program, ratepayers will be required to pay half (and no more than half) of these economic development costs. The Commission's adjustments increase net income \$320,299.

8. SFAS 106

The Financial Accounting Standards Board (FASB) adopted Statement of Financial Accounting Standards 106 (SFAS 106) in 1990. This standard required the change, for financial reporting purposes, from the cash basis of accounting to the accrual basis of accounting for recording post-retirement benefits other than pensions (PBOPs). The costs affected primarily include health and life insurance.

SFAS 106 requires the recognition of costs at the time the benefit is earned by the employee instead of the time that the benefit is actually paid resulting in the recognition of potentially higher current costs. Additionally, there is a transition obligation incurred as a result of changing from the cash basis to accrual basis of accounting.

In the generic proceeding, Docket No. U-999/CI-92-96, the Commission generally determined that the new method was acceptable for rate purposes, subject to review in rate cases. However, the Commission excluded the increase in costs calculated under SFAS 106 over the old method from interim rates. Instead, the Commission authorized a deferral of the increased cost beginning January 1, 1993 until recognized in a general rate proceeding commenced within three years.

a. Minnesota Power's SFAS 106 Proposal

MP adopted SFAS 106 accounting on January 1, 1993. In its original filing, MP included \$8,262,892 as test year expense for SFAS 106 costs. The Company reduced this amount by \$37,372 as a result of an updated actuarial study.

The Company indicated that \$5,850,403 of the increased test year cost results from higher annual service cost, the interest component of SFAS 106, and the 20-year amortization of the \$45,223,440 transition obligation.

The \$2,375,117 balance of the increased test year cost results from the Company's proposed five-year amortization of the \$11,875,636 in costs deferred for the years 1993 and 1994.

The Company also proposed to continue to defer the increased costs resulting from SFAS 106 from January 1, 1995 until final rates become effective in this proceeding. Recovery of the additional amount deferred would be sought in a future rate case.

MP proposed to externally fund the SFAS 106 obligation. The Company chose funding vehicles which would maximize the current tax deductibility of the contributions. All contributions to a Voluntary Employee Benefit Association (VEBA) established for the union employees will be tax deductible. The Company will contribute to another VEBA established for the non-union employees to the maximum tax deductible amount. The balance will be placed in a grantor trust which can only make distributions to the VEBA's or similar retirement plans.

The Company also recognized that because the increased SFAS 106 costs are deferred during the test year by the Commission's Order in U-999/CI-92-96, it will be necessary to adjust the Commission's finally determined revenue requirement for the test year to exclude the SFAS 106 effects for calculating any refund of interim rates.

b. The Department

The Department recommended MP's proposal for treatment of the SFAS 106 costs in its entirety, including the \$37,372 reduction in originally filed test year expense.

c. Seniors

The Seniors originally recommended that the \$11,875,636 amount deferred for the years 1993 and 1994 be deferred over 20 years instead of five years, but did not take exception to the ALJ's recommendation.

d. LPI

The LPI recommended that the amount deferred for the years 1993 and 1994 be amortized over 18 years instead of five years. The LPI argued that the longer amortization period would more effectively spread the burden to ratepayers, is permitted by accounting principles, and is reasonable because MP will not have a cash expense for these costs for many years.

e. The ALJ

The ALJ recommended the Company's proposal in its entirety, including the \$37,372 adjustment, finding the benefit programs reasonable and prudent, the external funding mechanism reasonable and prudent, and the five-year amortization reasonable.

The ALJ found the five-year amortization reasonable because it is consistent with the Commission's decision in NSP's 1992 electric rate case (Docket No. E-002/GR-92-1185)

where a three-year amortization was permitted. The costs relate to 1993 and 1994; a five-year amortization makes it more likely that customers receiving the benefit will be the customers paying for it. Further, the amounts at issue are considerably less than the transition obligation where the 20-year amortization is appropriate.

f. Commission Action

The Commission adopts the recommendation of the ALJ. No party raised objection to the level of affected benefits provided by the Company, the application and calculation of the amounts under SFAS 106, or the external funding.

The proposal to incorporate SFAS 106 costs in this rate proceeding are consistent with prior rate decisions regarding SFAS 106 costs. The proposal regarding the external funding assures maximum tax deductibility, while also preserving greater security of the funds when compared to alternative funding methods.

The Commission accepts the five-year amortization of the costs incurred for 1993 and 1994. The deferral mechanism was adopted by the Commission in the generic SFAS 106 proceeding, U-999/C1-92-96, for the purpose of reducing the need for utilities to file rate cases by January 1, 1993 to recover the increased costs resulting from SFAS 106. The deferral was not intended as a vehicle to postpone recovery of the costs.

The five-year amortization proposed by the Company will better relate the costs to those customers receiving service in 1993 and 1994, while substantially reducing the rate effect from what it would be with a shorter recovery period.

The Commission will allow MP to continue deferring the increased cost resulting from SFAS 106 until final rates are effective in this proceeding, for consideration in a future rate case. This will allow MP to potentially recover its costs while facilitating this proceeding. At the time this Order is prepared, it is not possible to estimate when final rates will be effective due to the potential for further legal process following the issuance of this Order.

The Commission will accept the adjustment to test year expense for the updated actuarial study. This reflects better information and reduces test year expense by \$37,372.

9. SFAS 109

FASB issued Statement of Financial Accounting Standard 109 (SFAS 109) in early 1992. This statement addresses the presentation of deferred taxes in financial statements. For regulated utilities, the statement is generally revenue neutral for rate purposes.

a. Minnesota Power's Proposal

MP indicated that although SFAS 109 is generally neutral for rates, SFAS 109 does adjust the deferred tax balance for changes in tax rates. Because federal income tax rates changed

from 34% to 35% in 1993, MP proposed to increase deferred taxes by \$376,954 for the test year in its original filing. This represents a two-year amortization of the total amount of change in deferred tax resulting from the changed tax rates. The Company cited its most recent rate case (Docket No. E-015/GR-87-223) where certain excess deferred taxes resulting from a decrease in tax rates were returned in rates over a two-year period.

b. The Department

The Department indicated that the Company's proposal was reasonable and consistent with Commission precedent regarding the treatment of deferred taxes and changes brought about by changes in tax rates.

c. LPI

LPI did not object to the change to deferred taxes, but did recommend that the amount be amortized over 35 years instead of 2 years. LPI cited section 203(e) of the 1986 Tax Reform Act which protected the majority of deferred taxes, preventing excess deferred taxes from being returned to ratepayers more rapidly than over the remaining life of the underlying asset. Therefore, LPI argued that precedent supported a longer amortization period.

d. The ALJ

The ALJ recommended that the Company's proposal be adopted, citing Commission precedent in the prior MP rate case.

e. Commission Action

The Commission accepts the recommendation of the ALJ and will make no adjustment to the original filing.

The two-year amortization is consistent with the treatment of a decrease in the deferred tax resulting from the Tax Reform Act of 1986 as approved by the Commission in MP's 1987 rate case. There the decrease in deferred tax was amortized as a reduction in revenue requirement over two years. A two-year amortization will more likely collect from customers that are on the system at the time of the tax change, preventing intergenerational transfer. Arguments citing the protected status of some deferred taxes under section 203(e) of the 1986 Tax Reform Act are irrelevant here. The record indicates that the deferred amounts at issue here are not covered by section 203(e).

10. SFAS 112

FASB adopted Statement of Financial Accounting Standard 112 (SFAS 112) in 1992. SFAS 112 requires a change, for financial accounting, from the cash basis to the accrual basis for costs such as long-term disability and worker's compensation. Basically, prior accounting

recorded the costs related to such claims over the several years' duration of the claim. SFAS 112 accounting will require recording the estimated total cost of the claims in the year that the event leading to the claim occurred. As often occurs with a change from cash accounting to accrual accounting, there is a transition balance to address.

a. Minnesota Power's Proposal

MP adopted SFAS 112 accounting on January 1, 1994. There is a one-time transition amount of \$1,504,282 for the Minnesota jurisdiction. MP initially included the full amount in the test year without amortization. Later, MP agreed to a three-year amortization.

b. The Department

The Department did not oppose the change in accounting, but did recommend that the transition amount be amortized over three-years.

c. Seniors

The Seniors did not oppose the change in accounting. The Seniors originally proposed that the entire transition amount be excluded from the test year with consideration for some form of surcharge mechanism. However, the Seniors did not except to the recommendations of the ALJ.

d. LPI

LPI did not oppose the change in accounting, but did recommend that the transition amount be amortized over 20-years. LPI argued that there was no reason to compress the transition period and unnecessarily increase rates. Accounting does not require including the full amount of the transition amount in one year.

e. The ALJ

The ALJ recommended the adoption of the Company's proposal, with the modification to a three-year amortization period as recommended by the Department and agreed to by MP.

The ALJ found that it is reasonable to include the transition amount using a three-year amortization. There is no reason to further delay this matter because all relevant facts are known at this time. Deferring this matter to a future rate case does not facilitate a timely transition to accrual accounting, which reflects more accurate matching of benefits with costs.

The ALJ rejected a 20-year amortization finding that the claims will be incurred within four or five years. A three-year amortization mitigates the rate impact.

I. Commission Action

The Commission adopts the findings and recommendation of the ALJ. This increases net income \$588,178.

II. Rate Case Expense

a. Minnesota Power's Proposal

The Company estimated its rate case expenses at \$1,170,853 for this rate case.

The Company proposed a three-year amortization resulting in a test year expense of \$390,264. An unamortized balance of \$398,588 was included in rate base. MP agreed to the recommendation of the Department to allocate \$4,137 to non-utility activity.

b. The Department

The Department recommended that \$4,137 of test year expense be allocated to non-utility activities. The Department made this recommendation based on the significant amount of time spent verifying that the rate case was based on costs pertaining only to the Minnesota jurisdiction. The Department did not otherwise object to the level or amortization of the proposed expense.

c. The ALJ

The ALJ recommended the adoption of MP's proposal, as adjusted by the recommendation of the Department to allocate a portion to non-utility activities. The ALJ found the proposal reasonable.

d. Commission Action

The Commission will accept the Company's proposal as modified by the Department's proposal. It is appropriate that rate case expenses be allocated to the non-utility activities when those activities require additional review to assure that the rate proposals are properly based on the costs of providing utility service. The Commission will reduce test year expense by \$4,137.

The Commission continually seeks to keep rate case expenses as low as possible. Absent further challenge to MP's proposal, the Commission will accept the remainder of the costs and amortization proposal as reasonable for purposes of this proceeding.

12. Large Power Contract Payments

a. Minnesota Power's Proposal

In order to secure contract extensions from National, Hibbing Taconite, Inland, Eveleth Mines, and USX, MP made cash payments totalling \$12.58 million to the companies in exchange for contract amendments. MP indicated those payments helped assure fixed cost recovery of over \$173 million. These payments were largely made between 1988 and 1994, and generally followed approval of the contract amendments by the Commission. The Commission made no ratemaking commitment at the time the contracts were approved. MP is amortizing the payments over the lives of the contract extensions.

For the test year, MP included an unamortized balance of \$1,795,387 in rate base, and a revenue offset of \$574,359 for the test year amortization.

b. The Department

The Department reviewed this issue and recommended no adjustment.

c. LPI

LPI recommended that the entire amount be disallowed from rate recovery. Alternatively, LPI recommended that the amount be amortized equally over a seven-year period instead of over the lives of the associated contract amendments.

d. The ALJ

The ALJ recommended that the amortization be allowed as proposed by MP. The ALJ found that the contracts contributed to rate stability, benefitted ratepayers because lack of contracts would lead to increased risk, and that the Large Power customers receiving the cash payments did so understanding that MP could request recovery in rates. There is a benefit to the entire system.

e. Commission Action

The Commission accepts the Company's proposal as recommended by the Department and the ALJ. No adjustment is necessary.

The Commission finds that amortizing the payments over the lives of the related contract amendments more appropriately matches the costs with the benefits. Levelizing the amortization over seven years could lead to deferring costs to a future period for which there are few associated benefits. In the normal course, the test year concept suggests that a snapshot is taken of events occurring within a 12-month period. Following a formal rate process, rates are established which are anticipated to be in effect until they are no longer

reasonable, at which time the Company can seek rate relief or an investigation can be initiated by the Commission. While some costs may decrease, there may also be other costs which will increase and variations in revenue streams.

The Commission did not resolve rate recovery at the time the contract amendments and payments were approved. Rate recovery was reserved for a rate proceeding. There was no indication that the Company was prevented from seeking rate recovery.

The Commission finds that the contract amendments prevented the Large Power customers from operating without contractual commitments. Without commitment, MP's risk and cost of capital would increase which would be borne by all ratepayers. Managing this risk is a benefit for the entire system.

13. EPRI Dues

In MP's most recent general rate case, MP 87-223, the Commission excluded that portion of dues paid by MP to the Electric Power Research Institute (EPRI) which supported nuclear power research. The Commission found that nuclear research provided little or no benefit to MP's ratepayers. The Commission found that MP had no nuclear generation and purchased little power from the MAPP system, where some nuclear power is produced.

a. Minnesota Power's Proposal

MP included the full amount of the EPRI dues as a test year expense, approximately \$1.5 million. It was estimated that \$269,301 represents that portion related to nuclear research.

b. LPI

LPI recommended that the nuclear portion of EPRI dues be excluded in this case as it was in MP's most recent rate case.

c. The ALJ

The ALJ recommended that the full amount of EPRI dues be allowed.

The ALJ found that ratepayers receive benefits from the research dues, including research. MP referenced studies showing cost benefit ratios of up to 13 to 1. The ALJ indicated that there is no challenge to MP's evidence.

The ALJ also found that nuclear research has been applied to non-nuclear facilities. Further, MP cannot derive benefits unless it is a full member of EPRI. Even as a full member, MP cannot designate how its dues will be used.

d. Commission Action

The Commission will accept the Company's proposal to include the full amount of the EPRI dues as a test year expense. No adjustment will be made.

The Commission has a history of supporting research activities. The Commission further recognizes that research involving electric utility service can be extremely costly for a single utility. Combining the efforts of many utilities through the EPRI organization makes it possible to conduct research more efficiently.

The record contains evidence that the benefits of the EPRI research activities exceed the costs to MP by a ratio of up to 13 to 1. Further, the MP system receives benefits for the nuclear portions of dues even though MP does not have nuclear facilities. Nuclear research can be applied to non-nuclear facilities. As a member of MAPP, MP conducts exchanges and transactions with other MAPP members, some of which operate nuclear facilities.

**14. Financial Communications
Printing Stock Certificates
Financial Communication/Meetings**

In its FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER (March 1, 1988) in the Company's most recent rate case, MP 87-223, the Commission excluded similar costs. However, in its ORDER AFTER RECONSIDERATION (May 16, 1988), the Commission found that these activities are also necessary for conducting utility business. The Commission allowed a portion of the costs after allocating based on a utility/non-utility allocation factor.

a. Minnesota Power's Proposal

MP included \$6,991 for printing stock certificates, \$31,255 for financial communication/meetings, and \$31,306 for other financial meetings. These amounts were calculated using an allocation of 55.2% to the utility, the balance to non-utility.

b. LPI

LPI recommended that these amounts be disallowed as they were in the most recent MP rate case.

c. The ALJ

The ALJ recommended allowing these costs as was done on reconsideration in the most recent MP general rate case.

d. Commission Action

The Commission adopts the recommendation of the ALJ. No adjustment is necessary because the costs have been filed in a manner consistent with the prior action of the Commission. There is no evidence in this record to suggest the need for departure from that precedent.

15. Legislative Monitoring

In the Company's most recent rate case, MP 87-223, the Commission disallowed costs related to a special legislative project and legislative presentations as lobbying expenses not necessary in the provision of service.

a. Minnesota Power's Proposal

In this case, MP included \$102,231 as test year expense for legislative monitoring.

b. LPI

LPI recommended that this cost be excluded based on precedent in the prior rate case.

c. The ALJ

The ALJ recommended that the cost be allowed. Monitoring is not lobbying. It is in the interest of ratepayers and necessary for the provision of service to analyze and develop positions on public policy issues related to electric operations. These costs are deductible for tax purposes, while lobbying costs are not.

d. Commission Action

The Commission adopts the recommendation of the ALJ. No adjustment will be made. The costs at issue differ in nature from those addressed in the prior rate case. It is necessary to monitor legislative activities, analyze, and prepare positions on public policy issues. These costs are identified separately from lobbying costs in the budget and are included as federal tax deductions. The record indicates that lobbying costs are not tax deductible.

16. Conservation Expense

The Commission approved a deferred debit accounting mechanism and conservation tracker account in MP's most recent rate case, MP 87-223. Conservation costs recovered in rates and conservation expenditures are entered to the tracker account. As of November 30, 1993, the expenditures exceeded recoveries by approximately \$7.6 million.

The Commission approved a 2.64% conservation program adjustment (CPA) in docket E-015/M-93-996. The adjustment is included as a part of the "resource adjustment" shown on the bills. The objective of the CPA is to provide a mechanism for MP to recover the substantial CIP tracker balance. The CPA is being collected during the interim period.

a. Minnesota Power's Proposal

The Company proposed a test year CIP expense of \$7,535,568 made up of approximately \$4.8 million of test year expense and approximately \$2.7 million amortization of the previous tracker balance. MP proposed that the CPA be set a zero at the time final rates determined in this proceeding take effect. The Company's proposal would essentially combine the test year CIP expense and the CPA amount in base rates.

The Company later agreed to the recommendations of the Department.

b. The Department

The Department recommended that the Company's test year CIP expense be set at \$5,544,395 instead of the \$4.8 million amount. The Department recommended that it is more appropriate for the current test year amount to reflect the costs of programs approved by the Department. The amount approved for the test year by the Department in Docket E-015/CIP-93-767 was \$5,544,395.

The Department also recommended that the amortization of the previous tracker balance not be included in the test year. Further, the Department recommended that the CPA be reduced to zero at the time final rates determined in this proceeding are placed into effect. The CPA would remain at zero until such time as a new CPA is calculated in the upcoming CIP adjustment filing.

The effect of the Department's recommendation is that base rates determined in this proceeding would include the estimated current CIP expenses for the test year. Recovery of previous tracker balances would continue with the CPA to be determined in the next CIP adjustment filing. Additionally, approved lost margins and carrying charges would also be recovered through the CPA instead of base rates. The Department recommended that MP re-estimate its lost margin per kWh in its compliance filing.

The Department also recommended that the test year CIP expense be collected on a per kWh basis and that the CPA continue to be collected on a percentage of revenue basis.

The Department calculated a conservation cost recovery charge (CCRC) of \$0.0007822 per kWh based on test year costs of \$5,544,395 and sales of 7,088,234,000 kWh, before National restart.

c. Commission Action

The Commission accepts the recommendations of the Department which were accepted by the Company and the ALJ. Test year conservation expense will be decreased by \$1,991,173, increasing test year net income by \$1,167,425.

The Commission finds that removing the amortization of the prior tracker balance from base rates is appropriate. The base rates will be set to reflect an approved level of test year conservation expense, while the CPA will include the amortization of the prior tracker balance. Only the timing of the recovery of the past balance will be slightly modified; the recoverability will not be impaired as a result of this action. The Commission will direct that the CPA be set at zero at the time final rates determined in this proceeding become effective.

The Commission finds it appropriate that test year CIP costs be collected on a per kWh basis, while the CPA continue to be collected on a percentage of revenue basis. The CIP costs included in base rates are allocated to classes based on the rate design determinations made in the course of this rate proceeding. Collecting the CPA on a percentage of revenue basis will adequately preserve the basic rate design relationships.

The Commission finds it appropriate to consider recovery of lost margins and carrying charges through the CPA instead of base rates. Recovery of lost margins is permitted on a trial basis which may not be extended. Allowing recovery in the CPA will provide the Company the opportunity to recover approved costs, while preserving the opportunity to review those costs for reasonableness.

The Commission will direct that the Company include in its compliance filing in this docket its calculations of lost margin per kWh reflecting the rate changes resulting from this proceeding.

The Commission finds that the appropriate test year CIP expenditure to use for calculating the CCRC is \$5,544,395 as proposed by the Department, MP, and accepted by the ALJ. The Commission also finds that the appropriate test year sales volume for calculating the CCRC is 7,088,234,000 kWh (before National Stipulation). As discussed in the National Stipulation section of this order, the restart of National increases test year kWh sales by 243,268,000. As a result, the Commission calculates a test year CCRC of \$0.0007562.

The National Stipulation increases kWh sales by an additional 311,746,500 beginning January 1, 1995. As a result, the Commission calculates a CCRC of \$0.0007254 beginning January 1, 1995.

**17. Beginning O&M Budget
UPA Equalization**

a. The Department

In its review of the Company's test year budgets, the Department identified an error resulting during MP's conversion of its budgets from the responsibility centers to the cost of service. This resulted in an overstatement of O&M expense of \$54,217 in the beginning O&M budget.

Also, the Department identified an error related to an allocation of carrying costs for the UPA equalization. This error resulted in allocating a carrying cost to a deferred account instead of an expense account. This understated test year expense by \$98,915.

The Company and the ALJ incorporated these adjustments.

b. Commission Action

The Commission will incorporate these uncontested adjustments increasing test year expense by \$44,698.

18. Property Taxes

a. The Department

At the time direct testimony was filed, the Department withheld judgment of MP's projected test year property taxes until actual 1993 taxes payable in 1994 could be reviewed.

During the evidentiary hearing, schedules reducing property taxes by \$1,564,133 were introduced.

The Company agreed with the adjustment, and the ALJ incorporated the adjustment without comment.

b. Commission Action

The Commission accepts this uncontested adjustment and will reduce test year property taxes by \$1,564,133.

19. Non-Utility O&M Allocation

a. The Department

The Department identified that the Company did not apply an A&G assessment to labor relating to expenses that were charged to non-utility but not billed to a subsidiary or non-regulated customer. The Department recommended that an allocation of A&G costs be applied to all non-utility O&M labor expenses that have not been assigned A&G costs. This adjustment reduces test year O&M expense by \$154,699.

The Company agreed to the adjustment and the ALJ incorporated the adjustment.

b. Commission Action

The Commission accepts this uncontested adjustment and will reduce test year expense by \$154,699.

C. Operating Income Summary

The Company proposed an operating income of \$27,114,613 in the original filing. Incorporating the above findings, the Commission concludes that the operating income for the test year (including the effects of SFAS 106 and the 1994 effects of the National Stipulation) is \$31,890,642 as follows:

Operating Revenues	
Sales of Electricity by Rate Class	\$270,010,391
LP Interruptible, Dual Fuel	26,266,450
Other Electric Revenues	33,863,764
Other Revenues	<u>1,988,766</u>
Total Operating Revenues	332,129,371
Operating Expenses	
Operations and Maintenance	222,353,727
Depreciation	31,031,395
Amortization	1,092,799
Taxes Other Than Income	36,326,133
State Income Tax	3,509,025
Federal Income Tax	10,766,279
Provision for Deferred Tax (net)	-3,067,577
Investment Tax Credit	<u>-1,350,982</u>
Total Operating Expenses	300,660,799
Operating Income Before AFUDC	31,468,572
AFUDC	<u>422,070</u>
NET OPERATING INCOME	<u><u>\$ 31,890,642</u></u>

XIV. RATE OF RETURN

A. Introduction

The overall rate of return represents the percentage the utility is authorized to earn on its Minnesota jurisdictional rate base. The overall rate of return is determined by the capital structure, which is the relative mix of debt and equity financing most of the rate base, and the costs of these sources of capital. The Commission will first address the capital structure, then the costs of debt and preferred stock and the cost of equity. Finally, the Commission will put these factors together to derive the authorized overall rate of return on rate base.

Six parties submitted rate of return testimony in this proceeding. Testifying for the Company were Arend J. Sandbulte, James K. Vizanko, David G. Gartzke, and Roger A. Morin. Eilon Amit testified for the Department. Matthew I. Kahal testified for the RUD-OAG. LPI provided testimony of Richard A. Baudino and Randall J. Falkenberg. Peter W. Ahn testified for LLPG, and Ronald L. Knecht submitted testimony on behalf of the Seniors.

B. Capital Structure

1. Summary of the Parties' Positions

The following table shows the capital structures proposed for use in this case:

Type of Capital	MP, Department, LLPG, Seniors	RUD-OAG	LPI
Long-term debt	45.84%	45.89%	47.00%
Preferred stock	5.55%	5.56%	6.00%
Common equity	48.61%	48.55%	45.00%

a. Minnesota Power

MP derived its proposed capital structure from that of MP-Consolidated. It subtracted from the common equity balance an average test-year investment in non-utility/non-regulated activities of \$228,787,500. MP reversed certain accounting entries associated with its two leveraged Employee Stock Ownership Plans in order that neither plan will have any implications for the regulated capital structure or adversely affect the cost of service to ratepayers. Finally, MP increased the level of common equity by the unamortized balance of preferred stock call premiums and issuance expenses.

b. Department, Large Light and Power, and Seniors

MP's proposed capital structure was adopted for use by the Department, LLPG, and the Seniors.

c. RUD-OAG

The RUD-OAG proposed to reverse MP's adjustment adding the unamortized balance of preferred stock call premiums and issuance expenses to the common equity balance. The RUD-OAG proposal removes approximately \$980,000 from the equity component of total capitalization for the test year.

The RUD-OAG argued that MP's adjustment seeks to add common equity to its capital structure which does not exist. The expenses were incurred to achieve a cost savings through the refinancing of preferred stock. Such cost savings, between rate cases, increase

the profits for the Company and add to its common equity. It is not clear that the preferred stock call has a net effect of actually reducing common equity and requiring a corresponding adjustment.

d. Large Power

LPI's witness, Mr. Baudino, concluded that MP's requested equity ratio is too high. He based this conclusion on an analysis of his group of comparable companies, and recommended that the Commission impute the average capital structure of the group to MP. LPI suggested that this is more reasonable than MP's actual structure, which MP has chosen to fit its highly diversified operations. LPI said the diversified operations are riskier than MP's electric operations.

Mr. Baudino analyzed the group of 34 all electric utilities with a Value Line Safety Rank of 3, and found an average projected 1994 common equity ratio of 43.74%. Further, he found that the average projected 1994 common equity ratio for MP's group of A rated utilities, also screened for a Value Line Safety Rank of 3, was 44.73%. LPI said these analyses support the contention that MP's capital structure is too heavily weighted with common equity.

2. Recommendation of the ALJ

The ALJ recommended adoption of the capital structure proposed by the RUD-OAG. He rejected LPI's proposal to reduce the equity ratio to 45% because, except for the adjustment proposed by the RUD-OAG, he found the ratio to be reasonable in relationship to the comparison groups used by the Department, RUD-OAG, and the Company.

In reducing the equity ratio from MP's proposed 48.61% to 48.55%, he said that the cost savings resulting from the refinancing of the preferred stock, between rate cases, increase the profits for the Company and add to its common equity. The ALJ said that it is not clear that the preferred stock call has a net effect of actually reducing common equity and requiring a corresponding adjustment as claimed by Minnesota Power.

3. Commission Findings and Conclusions

The Commission agrees with the ALJ that MP's proposed capital structure is the proper starting point.

The Commission does not agree, however, with the adjustment to that proposal suggested by the RUD-OAG and approved by the ALJ.

MP's refinancing of preferred stock in 1992 resulted in cost savings as preferred stock with a lower dividend rate replaced preferred stock with a higher dividend rate. The refinancing itself was not without cost, however. The cost was approximately \$1 million in call premiums and issuance costs.

These costs were charged against retained earnings, and had the effect of reducing the balance of common equity. Until this rate case, the cost savings went to the shareholders.

In this proceeding, however, we are recognizing the reduced cost of preferred stock resulting from the refinancing. Because ratepayers are receiving the benefits, they should also be responsible for the costs.

The Commission concludes that it was proper for MP to adjust the common equity balance by adding back these costs. The Commission adopts the capital structure proposed by MP, and recommended by the Department, LLPG, and the Seniors.

C. Costs of Long term Debt and Preferred Stock

MP proposed test-year costs of long term debt and preferred stock of 7.20% and 7.03%, respectively. These figures were not disputed by any of the six parties who submitted rate of return testimony. They were recommended for use by the ALJ.

The Commission finds that the test-year cost of long term debt is 7.20%, and that the test-year cost of preferred stock is 7.03%. The Commission concludes that these figures should be used to determine the overall rate of return authorized in this proceeding.

D. Rate of Return on Common Equity (ROE)

1. Legal guidelines for Commission Decision-Making

In reaching a decision on the appropriate cost of common equity, the Commission, as an administrative agency, must act both within the scope of its enabling legislation and the strictures of reviewing judicial bodies. Two United States Supreme Court cases provide these general guidelines for Commission rate of return decisions:

- a. The allowed rate of return should be comparable to that generally being made on investments and other business undertakings which are attended by corresponding risks and uncertainties;
- b. The return should be sufficient to enable the utility to maintain its financial integrity; and
- c. The return should be sufficient to attract new capital on reasonable terms.

See Bluefield Water Works and Improvement Co. v. P.S.C., 262 U.S. 679 (1923), and FPC v. Hope Natural Gas Co., 320 U.S. 591 (1944).

No particular method or approach for determining rate of return was mandated by those cases, but the necessity of a fair and reasonable rate of return was clearly stated:

Rates which are not sufficient to yield a reasonable return on the value of the property used, at the time it is being used to render the service, are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment. Bluefield Water Works, 262 U.S. at 690.

The Minnesota Supreme Court has also provided some legal guidelines for Commission decision-making. In Minnesota Power & Light Company v. Minnesota Public Service Commission, 302 N.W. 2d 5 (1980), the Court said:

...The single term "ratemaking" has been used to describe what is really two separate functions: (1) the establishment of a rate of return, which is a quasi-judicial function; and (2) the allocation of rates among classes of utility customers, which is a quasi-legislative function.

...we now hold that the establishment of a rate of return involves a factual determination which the court will review under the substantial evidence standard.

302 N.W. 2d at 9.

In conducting its evaluation of the Commission's decision, the Court explained:

...A reviewing court cannot intelligently pass judgment on the PSC's determination unless it knows the factual basis underlying the PSC's determination. Judicial deference to the agency's expertise is not a substitute for an analysis which enables the court to understand the PSC's ruling. Henceforth, we deem it necessary that the PSC set forth factual support for its conclusion. The PSC must state the facts it relies on with a reasonable degree of specificity to provide an adequate basis for judicial review. We do not require great detail but too little will not suffice.

302 N.W. 2d at 12.

In order to provide the factual basis for its decision required by the Court, the Commission will review the testimony of each of the parties on rate of return on common equity. The Commission will also review the recommendations of the ALJ. Finally, the Commission will draw its conclusions from the parties' testimony and determine the proper rate of return.

2. Summary of the Parties' Positions

Return on equity recommendations ranged from 9.0% to 12.50%, as shown below:

MP	Department	RUD-OAG	LPI	LLPG	Seniors
12.50%	11.10%	10.85%	10.50%	9.0%	11.10%

Unlike the cost of debt or preferred stock, the cost of common equity cannot be directly observed, but must be inferred. The reason is that investors in common equity partake in the residual, the remainder of revenues after expenses have been paid. Investors purchase shares of common stock expecting to receive a stream of future payments consisting of dividends and (or) share price appreciation. Those expectations may prove to be wrong, but that is a matter of little consequence to anyone trying to evaluate the cost of equity at any particular time. Of more concern is the fact that the expectations cannot be observed. Although one may observe the prices at which transactions occur, and the dividend rates prevailing at the time of the transactions, the expectations may only be estimated.

All parties to this case employed (at least) a discounted cash flow (DCF) analysis. This analysis attempts to discern the rate of return required by investors through review of market data and information available to investors. The DCF formula includes two terms: the dividend yield (annual dividends divided by the price of the stock) and the expected growth rate.

All parties noted that Minnesota Power is a diversified company, and said it would be improper to simply determine the cost of equity for the consolidated organization and apply that to MP's electric operations, as the risk of MP-electric would differ from that of MP-consolidated. Instead, all agreed that it was necessary to estimate the cost of equity for MP's electric operations as if they were performed by a stand-alone company. It is, therefore, necessary to take particular care in selecting a group or groups of comparable or comparison companies.

a. Minnesota Power

MP selected its group of comparison companies from electric and combination electric and gas companies with a current Standard & Poor's (S&P) bond rating of A+, A, or A-. It dropped from this set companies whose stock prices were not published, whose electric operating revenue was less than 70% of total operating revenue, or whose total 1992 operating revenues exceeded \$1 billion. Finally, MP eliminated 3 companies, including MP, for unusual circumstances not evident from the other screenings.

MP examined 3 spot dividend yields and the *Value Line* average dividend yields for 1991 and 1992. To account for growth during the year, MP multiplied the published yield figures by one plus the expected growth rate. Based primarily on a study by Merrill Lynch, MP determined that a conservative estimate of common stock flotation costs would be 3%. MP adjusted the yield figures for flotation costs by dividing the yield figures by one minus 3%. MP obtained an adjusted yield range for its group of companies of 6.8% to 7.7%, and used a yield of 7%. (At the time of its rebuttal testimony, MP looked again at yields, and said they had risen to a range of 7.6% to 8% for its group.)

MP reviewed historical and projected growth rates from published sources, excluded any that were zero or negative, and determined that investors expected growth at an annual rate of 4% for its comparison group of companies. The sum of a 7% dividend yield and a 4% growth rate resulted in a cost of equity for the comparison group of 11.0%.

MP said that the cost of equity for its comparison group should not be applied directly to MP-electric, because MP's electric operations entailed greater risk for investors than the companies in the comparison group. MP said its comparison group had a higher average S&P bond rating than the A- rating carried by MP. MP also said its electric operations were riskier than those of its comparison group due to two unique risk factors:

- **Square Butte Power Purchase Agreement.** This is a long-term "take or pay" contract, in which MP is obligated for payments even if it buys no electricity. Had MP conventionally financed Square Butte, it would have additional debt, equity, and preferred stock in its capital structure. Rating agencies view MP's obligations under the contract as "debt-equivalent." An adjustment to the return on equity is necessary to counteract the lower equity ratio which would result if the debt-equivalent obligation were reported as debt.
- **Below average business risk profile [i.e., greater than average business risk].** S&P has characterized MP as having a below average business position due to its customer mix, industrial load make-up, and customer growth prospects. Industrial sales accounted for 68% of electric sales and 64% of electric revenues in 1992. MP's industrial sales are concentrated in sales to large customers in two major industries, both vulnerable to competitive business pressures.

MP said the risk of the Square Butte contract alone was worth 100-200 basis points on the return on equity. MP witness Dr. Morin estimated a risk adjustment for Square Butte of 120 basis points, and 50 basis points for business risk. MP said a conservative risk adjustment for both unique risk factors would be 150 basis points.

MP also said its history of controlling costs and maintaining low rates should be rewarded with a higher rate of return. It said the Commission could do this by choosing a return at the high end of the range of reasonableness. MP recommended that it be allowed a return on common equity of 12.50%.

The primary criticism of MP's analysis, leveled by all intervenors, was the adjustment for risk.

b. The Department

The Department performed a DCF analysis on two groups of comparison companies, and also on MP-Company.

For its Electric Comparison Group (ECG), the Department started with companies in the Compustat database with SIC Code = 4911 (electric), and with stocks publicly traded on one of the stock exchanges. The Department then applied the following screens to the group:

- S&P bond rating between AA- and BBB+
- Beta within one standard deviation of the group average beta
- Standard deviation of price change within one standard deviation of the group average

The Department ended with a group of 9 electric utilities.

For its Combination Comparison Group (CCG), the Department followed the same steps as for the ECG, only it started with SIC Code -- 4931 (combination electric and gas). It removed one company, IES Industries, because it was created in a merger in 1991. Thirteen companies were in the Department's CCG.

The Department reviewed dividend yields for its group and MP-Company based upon the most recent available four weeks data (April 25, 1994 through May 27, 1994). Yields were adjusted for dividend growth during the year and for stock issuance costs equal to 5% of total proceeds. The resulting dividend yields were as follows:

ECC	7.57%
CCG	7.79%
MP-Company	7.80%

The Department reviewed 5- and 10-year historical growth rates in Earnings per Share (EPS), Dividends per Share (DPS), and Book Value per Share (BPS), as well as 5- and 10-year internal growth rates (the internal growth rate is the retention ratio times the realized rate of return). The Department also reviewed projected 5-year growth rates for BPS, DPS, and EPS as forecasted by Value Line, and EPS as forecasted by Zacks. The Department averaged the historical and projected growth rates, and said that it believed investors were expecting the following growth rates:

ECC	3.55%
CCG	3.15%
MP-Company	3.45%

Summing the dividend yields and the growth rates, the Department found required rates of return on equity ranging from 10.94% to 11.25% as follows:

ECC	11.12%
CCG	10.94%
MP-Company	11.25%

The Department said that MP-Electric was certainly not riskier than MP-Company. The Department recommended that the Commission allow MP a rate of return on common equity at the midpoint of its range, i.e. 11.10%.

c. The RUD-OAG

The RUD-OAG began its analysis with the group of single A bond-rated utilities identified by MP. From this group, it eliminated any company not having a Value Line safety rating of 3 (MP's Value Line safety rating). Fifteen companies remained. The RUD-OAG reviewed the equity ratio of this group, and found it had a lower equity ratio than MP. This indicated, all other things equal, greater financial risk for the group than for MP. The RUD-OAG also reviewed its group for the beta statistic, and found that the average beta equalled that of MP. The RUD-OAG concluded that its group closely matched MP's overall investment risk and provides a sound basis for estimating the Company's required return on equity.

The RUD-OAG calculated an average stock price for each company in its group. The monthly price used in the calculation was the average of the high and low prices for the stock in the month, and the RUD-OAG used a 6-month period ending in May, 1994. The annualized dividend was then calculated, and divided by the average stock price. The resulting dividend yield was then adjusted for one-half the year's expected growth in dividends. The adjusted dividend yield was 7.0%.

The RUD-OAG examined the growth in retained earnings for its comparison group. This growth is made up of both internal growth (the retention ratio times the realized rate of return) and external growth (growth through issuance of shares). Internal growth rates ranged from 2.2% to 4%, and the RUD-OAG concluded that 3.0% was reasonable. Although an external growth analysis showed a growth rate of 0.3%, the RUD-OAG used 0.5% to account for uncertainty over future stock issuances. Therefore, the expected growth rate was 3.5%. The RUD-OAG said that MP's growth rate estimate of 4% should form an upper bound to investor-expected growth, so it used a growth rate range of 3.5% to 4%.

The "barebones" DCF result of the RUD-OAG was, therefore, 10.5% to 11.0%. The RUD-OAG recommended that 0.1% be added to these rates to account for flotation costs of stock issuances. The DCF range after this adjustment was 10.6% to 11.1%, and the RUD-OAG recommended using the midpoint of the range, 10.85% as the cost of equity for MP.

The RUD-OAG recommended against making a risk adjustment. It said that the DCF analysis fully reflects any Square Butte risk, and neither MP's business risk nor its good performance justify an upward adjustment to the DCF-determined fair rate of return.

d. LPI

LPI started its analysis with the group selected by MP. It eliminated the screen for companies with less than \$1 billion in total revenues, and added a screen for Value Line safety rank of 3. It also changed the screen for percentage of electric to total revenues from 70% to 80%. There were nine companies selected after this process, and LPI eliminated two of them, Puget Sound Power and Light and Sierra Pacific Resources, because of recent or anticipated dividend cuts.

LPI reviewed dividend yields for the seven comparison companies over 6- 3- and 1-month periods ending March, 1994, and concluded that because yield requirements had risen over the period, the 1-month result, 7.02%, should be used. This yield value was adjusted upward to account for expected dividend growth in the first year.

LPI reviewed analysts' forecasts from Value Line and Institutional Brokers' Estimate Service (IBES), as well as a Sustainable Growth (internal growth rate) calculation to determine the rate of growth expected by investors. LPI determined that an average of the Value Line and IBES earnings per share forecast properly represented growth expectations of investors.

LPI recommended against a flotation cost adjustment and a risk adjustment. LPI recommended that MP receive a rate of return on equity of 10.50%.

e. LLPG

LLPG's comparison group included all companies in the Value Line Electric Utility Industry, except those with stock traded on neither the New York Stock Exchange or the American Stock Exchange, or those that had decreased or omitted a common stock dividend in the current or prior four quarters. There were 85 companies in this group. LLPG also applied its methodology to three subsets of this group:

- Companies with a Value Line safety rating of "3" - 31 companies.
- Companies with an S&P stock rating of "A-" - 25 companies.
- Companies with an S&P bond rating of "A-" - 13 companies.

LLPG computed the dividend yield by averaging the high and low stock prices over the period January through March, 1994, and dividing the result into the most recent quarterly dividend, annualized, and adjusted for expected growth during the year.

LLPG used three growth measures:

- Value Line dividend growth projection
- 1993 Sustainable Growth Calculation
- Sustainable Growth based on Value Line projections on retention and return on equity

LLPG's DCF results ranged from 8.1% to 9.6%. LLPG recommended using a return of 9.0%.

LLPG recommended against using either a flotation cost adjustment or a risk adjustment.

f. Seniors

The Seniors began with the 95 electric utilities in Value Line. The Seniors first eliminated these with less than 96% of total revenues coming from electric utility operations. Next,

firms were eliminated for which meaningful current dividends and growth rate combinations are not available. Finally, the Seniors added in MP and the six companies not otherwise in the Seniors' group, but used in MP's analysis.

The Seniors used the most recent quarterly dividend as reported by Value Line and the March 15, 1994 stock price quote. The dividends were adjusted for growth in both a quarterly and an annual DCF model.

The Seniors used Value Line dividend growth projections and IBES projected earnings growth rates.

The Seniors recommended against using only a DCF method to determine the cost of equity. The Seniors also used a Risk Positioning (or Risk Premium) method and the Capital Asset Pricing Model (CAPM) to estimate the cost of equity. The Seniors applied a flotation cost adjustment, but recommended that there be no risk adjustment.

The Seniors suggested that the cost of equity should be determined by adding twice the DCF result, the Risk Positioning result, and the CAPM result, and dividing by four. The Seniors recommended that MP be allowed 11.10% as the cost of equity.

3. ALJ Recommendation

The ALJ recommended that MP be allowed a return on equity of 10.70%. In making this recommendation, the ALJ adopted the Department analysis, except that he did not make an adjustment for issuance costs.

4. Commission Findings and Conclusions

The Commission observes that, with one exception, all the analyses of the cost of equity for comparison groups lie within 60 basis points of each other. Only the LLPG analysis, at 9.0%, lies outside of the range of 10.50% to 11.10%.

The Commission finds the LLPG analysis is flawed and should not be used here. The large number of companies used covers far too wide a range of risk to allow a meaningful comparison to the cost of equity for the electric operations of MP. Among the companies chosen to compare to MP, the LLPG has included some with required returns, under its analysis, as low as 0.7% and as high as 21.4%. Although the outliers are averaged, a simple arithmetic manipulation is not a sufficient replacement for an informed and careful estimate of investor expectations.

Within the remaining set of recommendations, there is good reason to look at the higher end of the range. Two parties - the Department and the Seniors - each recommended 11.10%. The RUD-OAG recommendation of 10.85% is a midpoint, with the high end of the reasonable range equal to 11.10%. MP's finding for its comparison group was 11.0%.

(During rebuttal, MP updated its yield figures for its comparable group. Using the updated yields and the original growth rates gives a range of returns between 11.60% and 12.0%.) And LP's 10.50% recommendation was based upon a yield incorporating a six-month period ending in March, 1994. Using the same growth rates with a six-month dividend yield ending in May, 1994 causes the result to rise to 11.06%.

The Commission agrees with the ALJ that the Department's analysis is well reasoned and the most comprehensive assessment and investigation of the cost of equity for a comparison group of companies. Unlike the ALJ, the Commission finds that an issuance cost adjustment advocated by the Department (and three of the other five parties) is appropriate.

Issuance or flotation costs are not simply for use in years when the company is issuing common stock. They represent the difference between what the investors paid and the company received during public offerings, and, because there is no fixed life, as there is with a bond, they must be recovered through a return adjustment.

The Commission concludes that the issuance cost adjustment proposed by the Department is appropriate, and that the cost of equity for a group of comparison companies should be found equal to 11.10%.

The Commission finds that none of the comparison groups adequately represents the risk that would be presented to an investor in MP as a stand alone electric company.

Although the intervenors have argued that the DCF method captures the overall investment risk of MP-electric, their risk screens consider primarily the risk of MP-consolidated. Bond rating, Value Line safety rank, beta and standard deviation of price change, for example, reflect the overall investment risk in MP-consolidated, and are not available for MP-electric.

Further, MP-consolidated, although it has relatively small investments in risky industries such as paper making, is marked by diversification, which tends to reduce overall risk, and by a very large holding of liquid investments.

The Commission finds that MP-electric is subject to very substantial additional risk due to its business position. In particular, the following characteristics increase its risk relative to any company in any of the comparison groups:

- Concentration of industrial sales. Sixty-four percent of MP's electric revenues in 1992 came from industrial sales. This is at least ten percentage points above the nearest U.S. utility, and is approximately twenty percentage points above Interstate Power. Interstate is the only utility common to comparison groups chosen by all intervenors.
- Concentration of industrial customers in just two industries, paper making and taconite operations. Both industries are subject to world-wide competition.
- Concentration of industrial sales to a few extremely large customers. One need only review the record of this case to see the effect of either the loss of one of these customers (ultimately precipitating the filing of this rate request) or of the return to business of that customer (bringing about the National Settlement).

In turn, these characteristics make MP particularly vulnerable to loss of customers in the event that retail wheeling of electricity becomes a reality. It is clear from the record of this case that retail wheeling is increasingly a topic of discussion and even action both at the federal and state levels.

The intervenors argued that any company in a comparison group can be found to have some unique risk characteristic which makes it different from the group, but that is no reason to adjust the equity return found reasonable for the group.

In most situations, the Commission concurs with that assessment. Here, however, the Commission is persuaded that not only is the business position risk facing MP is unique, but also it is significant enough that a risk adjustment to the return on equity is necessary. MP's business position risk is of a different magnitude than the risks the intervenors suggested might be faced by comparison companies: regulatory climate, plant construction, even nuclear operations.

The Commission concludes that a risk adjustment to the rate of return on equity is appropriate. MP witness Dr. Morin estimated that 50 basis points would be a conservative indication of the risk differential between the comparison groups and MP-electric due to MP-electric's business position. The Commission concurs. The Commission concludes that MP ought to be allowed a return on equity of 11.60%.

E. Overall Rate of Return

Based upon the Commission's findings and conclusions on return on equity, cost of debt and preferred stock, and capital structure herein, the Commission finds the overall rate of return for MP in the test year to be 9.33%, calculated as follows:

Capital Employed	Percent	Cost	Weighted Cost
Long term debt	45.84%	7.20%	3.30%
Preferred stock	5.55%	7.03%	0.39%
Common Equity	48.61%	11.60%	5.64%
Total	100.00%		9.33%

XV. RATE DESIGN

A. Class Cost of Service Study

The issue before the Commission is which class cost of service study (CCOSS) provides the best cost information for guidance in determining appropriate class revenue allocation.

The Company's embedded class cost of service study is a variant of the average and excess demand method, using a capital substitution, or CAPSUB, model to classify power supply production costs as capacity-related and energy-related. Another component of the Company's study is the average and excess demand/probability of deficiency, or A&E/POD, model for determining how capacity-related and energy-related fixed costs, transmission-related costs, and energy costs are allocated to costing periods and subsequently to classes.

The Department's embedded class cost of service study method is similar to that of the Company's in many respects. The most significant difference between the two studies is the Department's use of the stratification method for classifying power supply production costs as demand- and energy-related. The two studies also differ with respect to the separation of competitive-rate customers and Large Power interruptible customers into separate classes, as well as the appropriate allocation of conservation costs.

The Department recommended that the Company modify its cost study in its next rate case in the following two ways: (1) by providing a description of how the Company performs its minimum distribution study, including discussions of how the minimum system is determined and of whether the demand allocation factors should be adjusted to recognize the minimum load-carrying capacity of the minimum-size system; and, (2) by using Company-specific numbers in estimating its probability of deficiency. The Company subsequently agreed to these two changes.

The RUD-OAG and the Seniors argued that cost studies require subjective judgments which result in arbitrary allocations. Because of the inherent weaknesses of cost studies, the RUD-OAG and the Seniors recommended that the Commission not base its rate design decisions solely on the results of the cost studies.

The LPI recommended that the Commission adopt the Company's cost study because it has been approved in previous rate cases. The LPI indicated that its prime concern is that both cost study methodologies show a substantial subsidy to the residential class. The LPI argued that until the Commission approves a rate design which moves the residential class closer to the cost of service, there is little benefit to be achieved in fine-tuning either of the cost of service methodologies.

The ALJ found that the Company's A&E/POD methodology provides the best information for allocating capacity- and energy-related fixed costs, transmission-related costs and variable (energy) costs. The ALJ found it appropriate for the Commission to adopt the Company's cost study methodology as was done in the MP's last general rate case.

The ALJ adopted the Department's recommendations to separate competitive rate and Large Power Interruptible customers as separate classes in the cost study, and to allocate conservation costs based on capacity and energy savings.

The Commission finds the Department's modifications, as agreed to by the Company, reasonable and appropriate. The Commission will require the Company to modify its cost study (to be filed in the its next rate case) to include information on a minimum distribution system and the use of Company specific numbers in estimating the probability of deficiency.