

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 11-K

(Mark One)

/X/ Annual Report Pursuant to Section 15(d) of the Securities Exchange Act
of 1934

For the fiscal year ended DECEMBER 31, 1999

or

/ / Transition Report Pursuant to Section 15(d) of the Securities Exchange Act
of 1934

For the transition period from _____ to _____

Commission File No. 1-3548

MINNESOTA POWER AND AFFILIATED COMPANIES
EMPLOYEE STOCK OWNERSHIP PLAN
AND TRUST

(Full Title of the Plan)

Minnesota Power, Inc.
30 West Superior Street
Duluth, Minnesota 55802-2093

(Name of issuer of securities
held pursuant to the Plan and
the address of its principal
executive office)

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REPORT OF INDEPENDENT ACCOUNTANTS

To the Participants and Administrator
of the Minnesota Power and Affiliated
Companies Employee Stock Ownership
Plan and Trust

In our opinion, the accompanying statements of net assets available for plan benefits and the related statements of changes in net assets available for plan benefits present fairly, in all material respects, the net assets available for plan benefits of the Minnesota Power and Affiliated Companies Employee Stock Ownership Plan and Trust at December 31, 1999, and 1998, and the changes in net assets available for plan benefits for the years then ended, in conformity with accounting principles generally accepted in the United States. These financial statements are the responsibility of the Plan's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The additional information included in Schedules I and II is presented for purposes of additional analysis and is not a required part of the basic financial statements but is additional information required by the Employee Retirement Income Security Act of 1974. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

PRICEWATERHOUSECOOPERS LLP

PricewaterhouseCoopers LLP
Minneapolis, Minnesota
June 9, 2000

MINNESOTA POWER AND AFFILIATED COMPANIES
EMPLOYEE STOCK OWNERSHIP PLAN AND TRUST
STATEMENT OF NET ASSETS AVAILABLE FOR PLAN BENEFITS
Thousands

	1999	DECEMBER 31, 1998
<hr style="border-top: 1px dashed black;"/>		
ASSETS, AT FAIR VALUE		
Investment in Minnesota Power, Inc. Common Stock	\$ 139,512	\$ 184,056
Contributions Receivable from Company	1,095	1,095
Interest Receivable	11	10
Cash and Cash Equivalents	489	451
Total Assets	141,107	185,612
LIABILITIES		
Accrued Interest Expense	1,095	1,095
Long-Term Debt	78,871	80,131
Total Liabilities	79,966	81,226
NET ASSETS AVAILABLE FOR PLAN BENEFITS	\$ 61,141	\$ 104,386

The accompanying notes are an integral part of these statements.

MINNESOTA POWER AND AFFILIATED COMPANIES
EMPLOYEE STOCK OWNERSHIP PLAN AND TRUST
STATEMENT OF CHANGES IN NET ASSETS AVAILABLE FOR PLAN BENEFITS
Thousands

	YEAR ENDED DECEMBER 31,	
	1999	1998
SOURCES OF NET ASSETS		
Dividend Income	\$ 8,858	\$ 8,626
Company Contributions	1,594	1,852
Net Unrealized Appreciation of Investments	-	1,844
Interest Income	39	35
	10,491	12,357
APPLICATION OF NET ASSETS		
Participants' Withdrawals	(3,122)	(5,530)
Transfers to Pension Plan	(856)	(1,600)
Interest Expense	(8,100)	(8,197)
Net Unrealized Depreciation of Investments	(41,655)	-
Administrative Expenses	(3)	(18)
	(43,245)	(2,988)
DECREASE IN NET ASSETS		
NET ASSETS AVAILABLE FOR PLAN BENEFITS		
Beginning of Year	104,386	107,374
End of Year	\$ 61,141	\$ 104,386

The accompanying notes are an integral part of these statements.

MINNESOTA POWER AND AFFILIATED COMPANIES
EMPLOYEE STOCK OWNERSHIP PLAN AND TRUST
NOTES TO FINANCIAL STATEMENTS

NOTE 1 - DESCRIPTION OF THE PLAN

The Minnesota Power and Affiliated Companies Employee Stock Ownership Plan and Trust (ESOP) provides eligible employees of Minnesota Power, Inc. (Minnesota Power) and two of its subsidiaries, Superior Water, Light and Power Company and MP Affiliated Resources, Inc., (collectively, the Companies) with Minnesota Power common stock (Common Stock) ownership benefits. The ESOP is a noncontributory defined contribution plan that is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA). At December 31, 1999 there were 1,524 participants in the ESOP.

BASIC ACCOUNT

Participants' Basic Accounts received shares of Common Stock purchased with incremental investment tax credit contributions and payroll-based tax credit contributions. Contributions to the participants' Basic Accounts ceased after 1986.

All participants' Basic Accounts are fully vested. These shares can be withdrawn at any time. Every December participants are required to make an election to receive dividends on their shares either in cash or reinvest them in Common Stock held in the ESOP.

SPECIAL ACCOUNT

For the years 1985 through 1989, the Companies received a tax deduction for cash dividends paid to participants on ESOP shares in their Basic Account. The Companies contributed to the ESOP an amount equal to the estimated income tax benefit of the dividend deduction associated with shares in the Basic Account. Shares of Common Stock purchased with these contributions were allocated to the participants' Special Account. All participants are fully vested in these shares which can be withdrawn when the participants terminate employment. Dividends on these shares are automatically reinvested in Common Stock held in the ESOP.

FIRST SUSPENSE ACCOUNT

In 1989 the ESOP was amended to enable the ESOP Trustee (as defined below) to establish a leveraged First Suspense Account. Employees become eligible to participate after one year of service with the Companies. The First Suspense Account originally consisted of 633,849 shares of Common Stock purchased for the benefit of eligible ESOP participants with proceeds from a 15 year \$16.5 million loan (First Loan) bearing interest at 9.125%. This loan was obtained by the ESOP Trustee on December 29, 1989, and guaranteed by Minnesota Power. The First Suspense Account provides that as the First Loan is repaid, shares of Common Stock in the First Suspense Account are allocated to each participant's account based on the ratio of a participant's annual compensation to the annual compensation of all participants. In any year that the value of the shares credited to a participant's account is less than 2% of the participant's annual compensation, the Companies will contribute additional shares to make up the difference. Shares of Common Stock are also allocated to participants' accounts for reinvested dividends paid on the shares in the First Suspense Account. All participants are fully vested after 5 years of continuous service with the Companies.

SECOND SUSPENSE ACCOUNT

The ESOP was again amended in 1990 to enable the ESOP Trustee to establish a leveraged Second Suspense Account and borrow an additional \$75 million (Second Loan) for the purpose of acquiring 2,830,188 newly issued shares of Common Stock from Minnesota Power for the benefit of active ESOP participants with a Basic Account. Under this amendment, active participants with a Basic Account are allocated shares to their Special Account with a value at least equal to: (a) dividends payable on shares held by those participants in the ESOP who do not elect to receive dividends in cash, and (b) tax savings generated from the deductibility of dividends paid on all shares held in the ESOP as of August 4, 1989. Pursuant to this amendment, the ESOP Trustee issued a promissory note to Minnesota Power for \$75 million at a 10.25% interest rate with a term not to exceed 25 years.

A participant who resigns or is dismissed from employment with any of the Companies shall forfeit the nonvested portion of his or her ESOP accounts as of the last day of the year in which the participant incurs a fifth consecutive one-year break in service. Forfeitures will first be used by the ESOP to meet the contribution of the 2% annual compensation requirement. Second, forfeitures will be allocated to the payment of expenses. Third, remaining forfeitures, if any, will be reallocated to the accounts of remaining participants as of the last day of the year in which the forfeiture occurs.

ADMINISTRATION

The ESOP is administered for the Companies by the Employee Benefit Plans Committee (Committee). The mailing address of the Committee is 30 West Superior Street, Duluth, Minnesota 55802-2093. The Committee is authorized to make rules and regulations as it may deem necessary to carry out the provisions of the ESOP and to employ investment managers (as defined by ERISA), attorneys, accountants and such other persons as it shall deem necessary or desirable in the administration of the ESOP. The Committee consists of 12 members who were appointed by the Board of Directors of Minnesota Power. The Board of Directors has the power to remove members of the Committee from office. Members of the Committee receive no compensation for their services with respect to the ESOP.

As of June 1, 2000 the members of the Committee, all employees of Minnesota Power, and their respective titles are as follows:

Name	Title
Robert D. Edwards	Executive Vice President and President - Minnesota Power Electric (1)
David G. Gartzke	Senior Vice President - Finance and Chief Financial Officer
Philip R. Halverson	Vice President, General Counsel and Secretary
Brenda J. Flayton	Vice President - Human Resources
Claudia R. Scott Welty	Vice President - Information Technology
Mark A. Schober	Controller
Donald J. Shippar	Chief Operating Officer - Minnesota Power Electric
Roger P. Engle	Vice President - Minnesota Power Electric and President and Chief Operating Officer - Superior Water, Light and Power Company
Lori A. Collard	President - Electric Outlet, Inc.
Alan R. Hodnik	Manager - Laskin Energy Center
Jeweleon W. Tuominen	Manager - Executive Compensation and Employee Benefits
Deborah Amberg	Senior Attorney

(1) Committee Chairman

Mellon Bank N.A. (Mellon Bank) acts as trustee (ESOP Trustee) for the ESOP. The ESOP Trustee's main office is located at One Mellon Bank Center, Pittsburgh, Pennsylvania 15258-0001. The ESOP Trustee carries blanket bond insurance in the amount of \$100 million. Minnesota Power maintains the participants' records and issues quarterly reports to each participant showing the status of individual accounts.

ESOP TERMINATION

The Companies reserve the right to reduce, suspend or discontinue their contributions to the ESOP or to terminate the ESOP in its entirety subject to the provisions of ERISA. In the event that the ESOP is terminated, the Committee may require that the accounts of all participants and beneficiaries be distributed as soon after the termination date as the Committee deems practicable, regardless of the length of time Common Stock has been allocated to any account.

CONTRIBUTIONS

The Companies' contributions for each year shall be paid to the ESOP Trustee either in cash or in Common Stock. Subject to a statutory maximum, the expenses incidental to establishing and administering the ESOP may be deducted from the Companies' contributions to the ESOP or income earned by the shares held in the ESOP. Expenses not attributable to such sources are payable by the Companies. No fees or charges will be payable by any ESOP participant.

TRANSFERS

Upon retirement, participants may elect to transfer the vested amount of their ESOP account balances to the Minnesota Power and Affiliated Companies Retirement Plan A or Plan B.

FORFEITED ACCOUNTS

At December 31, 1999 there were no forfeited nonvested accounts. At December 31, 1998 forfeited nonvested accounts totaled \$3,876. These accounts were used to reduce employer contributions in 1999. In 1998 employer contributions were reduced by \$13,602 from forfeited nonvested accounts at December 31, 1997.

NOTE 2 - SUMMARY OF ACCOUNTING POLICIES

The ESOP uses the accrual basis of accounting and, accordingly, reflects income in the year earned and expenses when incurred. Investments are reported at their fair value based on the quoted market price.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to (i) make estimates and assumptions that affect the reported amounts of assets and liabilities, (ii) disclose contingent liabilities at the date of the financial statements and (iii) report amounts of revenue and expense during the reporting period. Actual results could differ from those estimates.

The Plan presents in the statement of changes in net assets available for plan benefits the net appreciation (depreciation) in the fair value of its investment which consists of the realized gains or losses and the unrealized appreciation (depreciation) on those investments.

NOTE 3 - FEDERAL INCOME TAX STATUS

A favorable determination letter dated January 30, 1996 was obtained from the Internal Revenue Service stating that the ESOP, as amended and restated effective January 1, 1992, qualifies as an employee stock ownership plan under Section 401(a) of the Internal Revenue Code of 1986.

NOTE 4 - INVESTMENTS

Minnesota Power Common Stock		Number of Shares	Cost	Market

Thousands				
December 31, 1999	Allocated	3,763	\$ 32,868	\$ 63,738
	Unallocated	4,474	64,450	75,774
		-----	-----	-----
		8,237	\$ 97,318	\$ 139,512
		=====	=====	=====
December 31, 1998	Allocated	3,637*	\$ 40,574	\$ 80,014
	Unallocated	4,729*	58,770	104,042
		-----	-----	-----
		8,366*	\$ 99,344	\$ 184,056
		=====	=====	=====

* Reflected Minnesota Power's two-for-one Common Stock split effective on March 2, 1999.

NOTE 5 - REPAYMENT OF LOANS

The ESOP Trustee repays principal and interest on the First Loan and Second Loan with dividends paid on the shares of Common Stock in each suspense account and with certain employer contributions to the ESOP. The shares of Common Stock acquired by the ESOP Trustee are held in the First Suspense Account and Second Suspense Account, and allocated to the accounts of ESOP participants as the First Loan and Second Loan are repaid. Under current tax law, the Companies expect to realize tax savings from the two transactions.

The First Loan was obtained from a third party lender and is guaranteed by Minnesota Power with 464,933 unallocated shares of Common Stock pledged as collateral at December 31, 1999. The lender has no rights against shares once they are allocated under the ESOP.

Principal Payments \$16.5 Million 9.125% Loan	

Thousands	
2000	\$ 1,472
2001	1,708
2002	1,969
2003	2,259
2004	1,540

	\$ 8,948
	=====

The Second Loan was obtained from Minnesota Power. There are 4,008,694 unallocated shares of Common Stock pledged as collateral at December 31, 1999. Prepayments can be made without penalty. The lender has no rights against shares once they are allocated under the ESOP.

Principal Payments \$75 Million 10.25% Loan	

Thousands	
2011	\$ 9,923
2012	15,000
2013	15,000
2014	15,000
2015	15,000

	\$69,923
	=====

MINNESOTA POWER AND AFFILIATED COMPANIES
EMPLOYEE STOCK OWNERSHIP PLAN AND TRUST
SCHEDULE OF INVESTMENTS HELD
AS OF DECEMBER 31, 1999
Thousands

(a)	(b)	(c)	(d)	(e)
Identity of Issuer	Description of Investment	Cost	Fair/ Contract Value	
*	Minnesota Power, Inc.	Common Stock - 8,237 Shares	\$97,318	\$139,512

* Party-in-interest

Schedule II

MINNESOTA POWER AND AFFILIATED COMPANIES
EMPLOYEE STOCK OWNERSHIP PLAN AND TRUST
SCHEDULE OF REPORTABLE TRANSACTIONS
IN EXCESS OF 5% OF FAIR VALUE OF PLAN ASSETS
FOR THE YEAR ENDED DECEMBER 31, 1999
Dollars in Thousands

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Identity of Party Involved	Description of Asset	Purchase Price	Selling Price	Lease Rental	Expense Incurred	Cost of Asset	Current Value of Asset	Net Gain or (Loss)
Minnesota Power	Common Stock	\$3,613	-	-	-	-	\$3,613	-
Minnesota Power	Common Stock	-	\$3,575	-	-	\$3,575	\$3,575	-

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Employee Benefit Plans Committee has duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

Minnesota Power and Affiliated Companies
Employee Stock Ownership Plan
and Trust

(Name of Plan)

June 13, 2000

By

R.D. Edwards

R.D. Edwards
Chairman,
Employee Benefit Plans Committee