#### 7. MINNESOTA

(1999 Utility statistics from <u>www.eia.doe.gov</u>)

Population (2001 Census Estimate) 4,972,294 Net Summer Capability (MW) 10,157 Electricity Consumption (MWh) 60,169,575

	Investor- Owned	Public	Federal	Coop- erative	Total
Number of Utilities	5	125	1	47	178
Percentage of Retail Sales	68.4	14.1	0.1	17.5	100.0

Mechanism: 1.5-2.0% of each electric utility's gross operating revenues

Creation: Legislative

Duration: New plans every two years; no sunset

Administration: State agency sets goals, approves and evaluates programs. Utilities retain

funds; design and implement programs.

Budget: \$53million+/year

Program Name: Generally known as Conservation Improvement Programs (CIPs)

Benefit Measure: Modified Societal Benefits

Incentives: Cost recovery and performance incentives

### **Survey Questions**

#### 1. Process and timeline

The 1982 Conservation Improvement Program (CIP) statute required utility commitments to energy efficiency. 1991 CIP legislation required specific revenue percentage investment in end-use efficiency, and involved the State in planning and evaluation. 2001 CIP legislation clarified utility investment and priorities.

### 2. Organizational structure

State regulated utilities (primarily investor-owned "IOUs") administer electric and natural gas energy efficiency programs (CIPs). IOUs submit two-year CIP plans to the Department of Commerce (DOC) for approval or modification. The DOC sets energy savings goals for CIPs. DOC staff, with technical assistance from the Energy Office, review plans, monitor programs and make recommendations to the DOC Commissioner. The Commissioner can add, delete, or modify programs and spending. The IOUs submit program results to DOC for review and reporting purposes. They submit results to the Public Utilities Commission (PUC) for incentive determination and planning purposes.

Municipal and cooperative utilities have statutory CIP responsibilities. However, the DOC

can only make recommendations to increase the effectiveness of their activities. The utilities use a variety of accounting methods, leading to differences in administrative costs reported.

A variety of staff from the DOC Advocacy Unit, Advisory Unit and from the Energy Office contribute a total of 4-5 FTE effort to the CIP effort.

# **Advisory Board**

There is no advisory board. Information about every CIP filing will be sent to all persons who request to be on the CIP Service List.

# 3. Funding mechanisms

The new statute requires every electric utility (IOUs and all others) to invest 1.5% of their instate gross operating revenues in energy conservation improvements. A utility operating a nuclear plant in the state must invest 2% of its revenues. Gas utilities must invest 0.5% of their revenues. Up to 3% of the funds may be used for program monitoring and evaluation.

DOC reports indicate that in 2002:

Regulated natural gas utilities spent \$9.79 million;

Regulated electric utilities spent \$46.39 million; and

According to DOC staff munis and coops spent over \$32 million in 2002.

The work the DOC does for the CIP is on a fee for service basis, billed to the appropriate utilities. Costs are recovered through the usual PUC procedures.

#### 4. Association with a long run resources plan

Statutes require that major gas and electric utilities, including the G&T entities that provide electricity to municipal and cooperative utilities, file biennial Integrated Resource Plans (IRPs) and Transmission plans with the PUC.

The PUC assumes energy savings goals determined in CIP planning are the minimum attainable, and may call for higher investments by the utility. At least three utilities are contributing more funds than statutorily required due to the IRP process.

#### 5. Guidelines for program effectiveness and success

The statute requires programs to be cost-effective, and an "adequate amount" of residential CIP funding must directly address the needs of renters and low-income persons.

According to DOC staff, CIPs must meet the energy savings goals, reach all customer groups, address a broad spectrum of end uses and be cost-effective.

By statute, the municipal and cooperative utilities must spend a gradually increasing percent

of funds on programs that achieve energy savings, rather than load management. The "2002 CIP Primer" prepared for municipalities gives guidance for meeting this requirement.

# 6. Pre-implementation program evaluation guidance

Both the PUC and the DOC use a modified societal benefits test when assessing cost-effectiveness of programs and energy efficiency potential. Due to their statutory and regulatory differences, the IOU plans are held to a benefit/cost evaluation by the DOC, but the municipal and cooperative utilities are not.

The statute requires the DOC to evaluate CIP plans for effectiveness and to make recommendations for further changes. The State Energy Office helps with engineering assumptions and other technical matters.

# 7. Results of program evaluation

Although the DOC may order an independent audit of CIPs, generally utility reports are accepted, since assumptions were discussed when the plan was accepted.

The following results from the 2001 Energy Planning Report cover accomplishments of the IOUs, which provide about two-thirds of the electricity in the State:

From 1997-2000 electric IOUs spent an average of \$42.7million/year on CIPs. Five-year demand savings (1996-2000) totaled 641MW (average 128 MW/year) Average cost of capacity saved was \$343/kW.

Five-year energy savings totaled 1,680,843 MWh (average 336,169 MWh/yr) DOC anticipates 1999-2000 CIP investments will save 21.8billion kWh over the lifetime of the investments, at an average cost to utilities of 1.4cents/kWh.

Each municipal and cooperative utility must report biennially on its CIP and results. They must analyze CIP cost-effectiveness with the help of the DOC.

#### 8. Financial or performance incentives

By statute, utilities are allowed to recover CIP expenses required by the DOC.

In 1999 the PUC agreed to a performance-based incentive with a threshold of 91% goal attainment. Exemplary performance is capped at 150%, making the utility eligible for "shared net benefits" of 30% of the program budget. Ratepayers fund this incentive during the following year when the PUC adjusts rates. Recently these charges have been on the order of 1.45%.

The non-State-regulated municipal and cooperative utilities do not have these incentive options, but they also have few consequences for poor performance.

# **Issues and Special Situations**

There is a large customer opt-out provision.

There is some concern about the method for computing some industrial energy savings. There can be disagreement about how to compute incremental energy savings when industry goes through a process line expansion.

### **Programs**

The statute requires energy-efficient lighting programs, and supports rebates for high-efficiency appliances, rebates or subsidies for high-efficiency lamps, small business energy audits, and building "recommissioning." All IOU load management programs must result in actual energy savings.

#### Resources

Minnesota Department of Commerce, Energy Planning and Advocacy Unit 651-296-4026
Chris Davis, Senior Utility Rates Analyst, evaluated CIP for Chapter 4 of Plan 651-296-7130, <a href="Christopher.Davis@state.mn.us">Christopher.Davis@state.mn.us</a>
Lois Mack, Manager of CIP and Special Projects 651-296-8900, <a href="Lois.Mack@state.mn.us">Lois.Mack@state.mn.us</a>
2001 State Energy Planning Report, January 2002, Department of Commerce <a href="www.state.mn.us/mn/externalDocs/Energy\_Planning\_Report\_121602022402\_2002PlanningRpt.pdf">www.state.mn.us/mn/externalDocs/Energy\_Planning\_Report\_121602022402\_2002PlanningRpt.pdf</a>

Minnesota Statutes 2002, Chapter 216B, 216B.24 "Energy conservation improvement" www.revisor.leg.state.mn.us/stats/216B/241.html

Center for Energy and Environment *2002 CIP Primer* prepared for the Minnesota Municipal Utility Association, May 2002 <a href="https://www.mncee.org/ceedocs/cipprimer.pdf">www.mncee.org/ceedocs/cipprimer.pdf</a>

Minnesota Public Utilities Commission 2001 and 2002 Annual Reports <a href="https://www.puc.state.mn.us/docs">www.puc.state.mn.us/docs</a>

ME3 (Minnesotans for an Energy Efficient Economy) <a href="https://www.me3.org">www.me3.org</a>
Michael Noble, Executive Director 651-225-0878, <a href="https://www.me3.org">Noble@me3.org</a>