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# ANNUAL PERFORMANCE REPORT

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1998

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MINNESOTA  
DEPARTMENT  
OF  
PUBLIC SERVICE

Prepared: December 28, 1998

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**MISSION:** The mission of the Minnesota Department of Public Service (DPS) is to efficiently provide public interest advocacy, enforcement and regulatory services for all Minnesota consumers and to expand economic opportunities while improving the environment and our quality of life.

Department of Public Service Spending and Staffing, Fiscal Year 1998

Program	Estimated Expenditures		Full-Time Staff	
	Dollars (in Thousands)	Percent of Total	Positions	Percent of Total
Telecommunications Regulation	\$908	6	10.9	9
Weights and Measures	3,041	19	43.0	34
Information and Operations Mgmt	1,614	10	23.4	18
Energy	4,126	25	48.2	38
TACIP	<u>6,547</u>	<u>40</u>	<u>1.4</u>	<u>1</u>
Total	\$16,236	100%	126.9	100%
General Fund	\$8,189			
Special Revenue	7,167			
Federal Fund	880			
Total	\$16,236			
Revenue Generated <sup>1</sup>				
Non-dedicated General Revenue <sup>2</sup>				
Gas & Electric Assessments	\$4,044			
Telephone Assessments <sup>3</sup>	1,474			
Weights & Measures Fees	1,523			
W&M Petroleum Inspection Fees <sup>4</sup>	2,915			
Other Dedicated Revenue	<u>1</u>			
General Fund Revenues	\$9,957			
Dedicated Revenue				
TACIP Surcharge	\$7,666			
Federal Indirect Cost	83			
Exxon (Federal Grant)	290			
Federal (SEP)	859			
Other Dedicated Revenue	<u>3</u>			
Total Dedicated Revenue	<u>8,901</u>			
Total Revenue	\$18,858			

Source: DPS 2000-01 Biennial Budget

- 1 The revenues reported here are on a cash basis for FY 1998.
- 2 Also includes costs assessed on behalf of the Attorney General's Office for utility regulatory matters.
- 3 This fee is first deposited into a special revenue revolving account and then transferred to the general fund at the end of the fiscal year.
- 4 Collected on behalf of the DPS by the State Department of Revenue. (This revenue is not reflected on the DPS Biennial Budget Agency Revenue Summary.)

**ORGANIZATION:** The Department is organized into 5 program areas: 1) Telecommunications; 2) Weights and Measures; 3) Energy; 4) Information and Operations Management; 5) Telecommunications Access for Communications Impaired Persons (TACIP).

The Department is chiefly responsible for enforcing state policies regarding the evaluation of public utilities, the conservation of energy, and the standardization of weights and measures. While Minnesota statutes assign to the Public Utilities Commission (PUC) legislative and quasi-judicial functions related to utilities regulation, they charge the department with the duty to enforce relevant statutes and commission orders providing for the regulation of electric, natural gas, telephone and telegraph companies. Among other things, the department collects and analyzes energy statistics, reviews the effects of changing utility rates, advocates for the public interest in rate and service hearings before the PUC, establishes standards for energy efficiency in homes and other buildings, and promotes energy conservation and planning to the general public. The department also represents the interests of Minnesotans by intervening before bodies and agencies outside the state that make, interpret or implement national or international energy policy.

The DPS also provides services to communication impaired persons through the TACIP program. The mission of the TACIP program is to provide access to the telecommunications network for people with hearing, speech or mobility impairments residing in Minnesota. The TACIP program accomplishes this goal through the Equipment Distribution Program (EDP) and the Minnesota Relay Service (MRS). The EDP distributes a variety of specialized telecommunication devices to eligible communication impaired persons throughout the state. The MRS provides a statewide telecommunications relay service that offers a means of communication between the users of TTY/TDDs and all other telephone users. The two programs are funded by a seventeen-cent surcharge on each telephone customer access line in Minnesota.

In addition, the Department has supervision and control over all weights, weighing devices and measures in the state. (Minn. Stat. § 239.01.) The weights and measures program inspects and tests weights and measures against state and national standards in order to reduce inaccuracies and prevent unfair or deceptive dealings. Statutes also direct the department to inspect and test petroleum products sold in the state and to encourage, by means of posted notices, the recycling of used motor oil and lead acid batteries. (Minn. Stat. § 239.011, subd. 1, §§ 239.75-239.80.)

**WAYS TO IMPROVE PROGRAM OUTCOMES:** There are several areas in which statutory changes may be considered to increase the flexibility of particular programs to respond to changing needs. The DPS reviews each program when preparing the Biennial Budget Request and through the process of developing the Biennial Performance Report. Legislative initiatives are then prepared for proposed statutory changes to improve program outcomes.

The Performance Report was initially established by holding staff meetings with each program unit. Employees were encouraged to identify appropriate objectives and performance measures. Management then reviewed the proposed objectives and measures and formulated the goals, objectives and performance measures that went into the 1994 Performance Report. The employees also participated in collecting the data that was used in the performance report.

To prepare the 1996 Performance Report, a copy of the 1994 Performance Report was provided to all employees in the central office. The employees were asked to recommend changes and modifications to existing performance measures or to recommend new performance measures when appropriate. The employees also assisted in collecting the data for the 1996 Performance Report.

AGENCY EXPENDITURE SUMMARY

F.Y. 1998

NAME	(in thousands \$)	% of \$	FTE	% of FT
AGENCY: PUBLIC SERVICE DEPT	\$16,236	100.0%	126.9	100.0%
PROGRAM: TELECOMMUNICATIONS	\$908	5.6%	10.9	9.0%
PROGRAM: WEIGHTS & MEASURES	\$3,041	18.7%	43.0	34.0%
PROGRAM: INFORMATION & OPERATION MGT	\$1,614	10.0%	23.4	18.0%
PROGRAM: ENERGY	\$4,126	25.4%	48.2	38.0%
PROGRAM: TACIP	\$6,547	40.3%	1.4	1.0%

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1998)

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$908	5.59%
From Special Revenue Funds	\$127	
General	\$781	
Number of FTE Staff	10.9	8.59%
General Fund Revenue		
Telephone Assessments	1,474 <sup>1</sup>	

1 The revenues reported here are on a cash basis and include the recovery of administrative overhead, statewide indirect costs and cost assessed on behalf of the Office of Attorney General.

PROGRAM GOALS:

- Ensure that reliable monopoly telephone service is provided at just and reasonable rates in a non-discriminatory manner throughout the state of Minnesota.
- Promote general economic welfare of Minnesota citizens through the development and advocacy of sound regulatory policies in proceedings before the Public Utilities Commission, in hearings conducted by the Minnesota Legislature and/or before the general public.
- Collect, monitor, develop and distribute information that allows consumers of telephone services to make informed decisions concerning the telecommunications services that they purchase.
- Enforce the Orders of the Public Utilities Commission and Minnesota Statutes Chapters 237 and 216.

DESCRIPTION OF SERVICES:

The purpose of this program is to represent and protect Minnesota consumers in all aspects of the regulation of the provision of regulated intrastate monopoly telecommunications services. The Department achieves this goal through its intervention on behalf of the general public in all telecommunications matters taken up by the Minnesota Public Utilities Commission. Regulated telecommunications services are those defined in Minn. Stat. § 237 and in decisions rendered by the Public Utilities Commission or the Courts.

The Department's Telecommunications Program performs a wide variety of functions including to regulate the rates and services of telephone service providers that offer local monopoly telecommunications services. This includes the analysis of new service offerings, maintenance of service area boundaries, determination of competitive entry criteria, alternative regulatory structures, and the enforcement of policies that are consistent with Minnesota Statutes and Federal mandates. The telecommunications program is also involved in the resolution of customer complaints and inquiries, determination of costs, demand forecasting, mergers and acquisitions, extension and withdrawal of service, infrastructure modernization, maintenance of service quality standards and the enforcement of Public Utilities Commissions Orders and Rules.



In 1998, Minnesota's citizens will spend more than \$1.3 billion in the purchase of telephone services from companies regulated by the Minnesota Public Utilities Commission. Further, providers of competitive services, such as long-distance companies, subject to fewer regulatory requirements, will collect hundreds of millions of dollars for the provision of intrastate services. Federal regulations and state laws result in the reduction of government regulation in markets that demonstrate competitive tendencies. Services provided by monopoly service providers continue to require formal regulatory scrutiny as the transition is made from a monopoly to a more competitive environment.

### **BACKGROUND INFORMATION:**

The telephone regulation function involves a quasi-judicial process involving both public hearings and evidentiary hearings. The Department of Public Service (DPS), the Public Utilities Commission (PUC), and the Office of Administrative Hearings (OAG) have a major role in this regulatory process.

The Office of Administrative Hearings serves two functions in this process. First of all, representatives of this office schedule and conduct both public and evidentiary hearings pertaining to each contested case. Public hearings provide an opportunity for utility ratepayers to express their views on the case, while evidentiary hearings are the forum in which statistical, financial, economic, technical and other information is presented by the company, the DPS and other formal intervening parties. At the conclusion of the hearings, the hearing examiner submits a report to the Commission which contains a summation of the evidence and recommendations.

The Department is an advocacy and enforcement agency. The Department serves in its advocacy role by presenting information and recommendations which represent the interest of the state as a whole -- the broad general public, consisting of all classes of regulatory utility customers and the utilities themselves. The DPS is statutorily required to take into consideration the financial condition of the company providing service (M.S. 216B.01). In other words, the Department provides recommendations without respect to specific special interests. Individual user classes very often also intervene in rate case proceedings to present information and recommendations that reflect the special interests of that class.

The Commission makes its decisions and establishes policies based on information and recommendations entered into the formal record of proceeding. The PUC is a quasi-judicial, decision-making and policy-setting body. Once the record on a particular case is completed and closed, the Public Utilities Commission issues a written Order which the DPS then enforces with respect to the general public and the utility involved.

Throughout all of the formal quasi-judicial proceedings and in any potential court case resulting from these proceedings, both the Department and the Commission are represented by the Attorney General's staff.

AGENCY: Public Service, Department of:  
PROGRAM: Telecommunications

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**MEASURE TYPES: WORKLOAD**

<b><u>Measure</u></b>	<b><u>1994-95</u></b>	<b><u>1995-96</u></b>	<b><u>1996-97</u></b>	<b><u>1997-98</u></b>
Authority Applications				
New Companies	64	104	127	102
Coin Phone Companies	95	67	104	88
Election Regulated	10	17	1	1
Alternative Regulated	-0-	51	5	4
Tariff Change Filing				
Non-Elected Companies	217	224	235	270
Elected Companies	149	194	174	177
Alternative Companies	-0-	90	300	281
Long Distance Companies	175	221	316	378
Depreciation Investigations	60	51	70	38
Property Acquisitions	28	34	38	64
PUC Investigation	4	6	15	5
DPS Investigation	58	17	5	14
Citizens Petitions	8	21	28	34
Emergency 911	-0-	20	21	28
Complaints	16	21	16	27
Rulemaking	1	-0-	3	-0-
All Other Filings	<u>3</u>	<u>-0-</u>	<u>8</u>	<u>5</u>
TOTAL	888	1,138	1,466	1,516

**PROGRAM DRIVERS:**

The telephone industry is undergoing dramatic changes in technology. Further, there is increasing interest into entry into various sectors of the telecommunications business. As a result of declining costs and newer technology, some prices have been declining and the Department is confronted with issues including, but not limited to, competitive entry, financial health of the incumbent monopoly service provider, service pricing, universal service, local calling areas, customer privacy, and the introduction of new services, service areas and service costs.

**OBJECTIVE #1:**

At least 95% of Minnesota households will have at least one working telephone.

**Measure:** Minnesota's results as calculated by the Federal Communications Commission and reported in its Monitoring Report, CC Docket No. 87-339.

Actual Performance	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
Percent Penetration	96.9	97.1	96.7	96.1	95.6	97.3	97.1	96.9

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** The proportion of households contacted in a federal survey that indicate there is at least one working telephone available for use at the time the survey is conducted.

**Rationale:** State law designates the Department of Public Service as the agency that represents consumers who purchase regulated telephone service. Other states also have agencies that bear this responsibility. While the population of the United States enjoys widespread access to telephone services, there are significant differences among states as to the extent to which every citizen has a telephone in his or her residence. This outcome measure directly assesses the extent to which initial installation fees and monthly rates are affordable; furthermore, it includes the effectiveness of the agency to assure that telephone service is uniformly available throughout the state of Minnesota.

**Data Source:** Federal Communications Commission Monitoring Report, CC Docket No. 87-339.

**DISCUSSION OF PAST PERFORMANCE:**

Except for 1993, surveys conducted by the Federal Communications Commission indicate that Minnesota ranks among the top 10 states in its telephone penetration rate. The penetration rate has fluctuated but remained above 96% during the past three years.

**OTHER FACTORS AFFECTING PERFORMANCE:**

**Factors Beyond Agency's Control that Affect Performance:** Survey flaws; legal appeals to decisions made by the Public Utilities Commission; substitution of cellular telephones for wire-based telephones in isolated locations; economic conditions; employment rates; subscriber preferences.

**OBJECTIVE #2:**

The rate of increase in average price for local telephone service provided by a monopoly will not exceed general inflationary rates.

**Measure:** A comparison of the average annual revenue paid by Minnesota residential and business telephone access line customers with the rate of increase in the Consumer Price Index.

<u>Year</u>	<u>Average Monthly Revenue Per Line</u>	<u>Annual Change</u>	<u>Annual CPI Change</u>
1997	\$36.54	-1.0%	+1.6%
1996	\$36.88	+0.7%	+1.8%
1995	\$36.64	-3.7%	+2.5%
1994	\$38.05	+2.8%	+2.3%
1993	\$35.91	+1.0%	+2.7%
1992	\$35.55	-1.3%	+2.9%
1991	\$26.01	-1.5%	+3.1%

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** The revenue per access line per month provides a measure of the rates paid for telephone service absent the effects of a company's rate design. This composite information includes data for U S WEST Communications, GTE Minnesota, United Telephone Company of Minnesota, and Frontier Telephone Company of Minnesota. The Consumer Price Index (CPI) is a national index of the cost of living in urban areas of the United States. When compared with the change in monthly revenue, it provides a measure of the changes in costs for telephone service as compared with price changes for other services.

**Rationale:** The economic costs of operating a telephone company are largely affected by interest rates, operating costs, computer technology, infrastructure costs, and various taxes. This index provides an overview of the relationship between the costs of telephone service and other goods and services. In recent years, revenues paid by Minnesotans have declined while general inflation has been positive.

**Data Source:** Survey of Current Business (U.S. Department of Commerce), annual reports filed with the Department of Public Service.

**DISCUSSION OF PAST PERFORMANCE:**

The general cost of living has risen while average telephone bills paid for monopoly services have declined from 1989-1993. While this diversion need not continue, productivity increases should maintain the growth in the average telephone bill at rates equal to or below the general inflation rate.

**PLAN TO ACHIEVE TARGETS:**

The Department aggressively audits monopoly providers of local telephone service. Unwarranted costs will be detected and complaints filed with the Public Utilities Commission when necessary. For example, the 1995-96 quality of service audit of U S WEST resulted in a settlement payment of \$5,000,000. Additional penalties have been assessed in 1997.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control that Affect Performance:* Capital costs; effects of new competition on monopolists; new services offerings or service improvements; legal appeals to decisions made by the Public Utilities Commission; cost and measurement of inputs used by monopoly companies; changes in federal laws that affect regulatory authority.

**OBJECTIVE #3:**

Advocacy of responsible telecommunication policies before the Public Utilities Commission will continue within time frames established by Commission rules.

Measure (A): Number and percentage of completed dockets per year.

	<u>1995</u>		<u>1996</u>		<u>1997</u>		<u>1998</u>	
	<u>Coin</u>	<u>All</u>	<u>Coin</u>	<u>All</u>	<u>Coin</u>	<u>All</u>	<u>Coin</u>	<u>All</u>
	<u>Telephone</u>	<u>Other</u>	<u>Telephone</u>	<u>Other</u>	<u>Telephone</u>	<u>Other</u>	<u>Telephone</u>	<u>Other</u>
Filings Received by PUC	101	811	67	1071	104	1362	88	1428
Completions	101	796	64	977	100	1374	65	1358
Percentage Completed	100%	98%	96%	91%	96%	100%	74%	95%

**DEFINITION, RATIONALE, DATA SOURCE:**

*Definition:* The number of reports and recommendations sent to the Public Utilities Commission, divided by the number of new filings assigned a docket number.

*Rationale:* This measure is one indicator of the effectiveness of the agency to complete its work in a timely fashion.

*Data Source:* Docket book of the Public Utilities Commission.

**DISCUSSION OF PAST PERFORMANCE:**

From 1990-1992 the Telecommunications unit was able to complete fewer matters than were filed by the regulated utilities. Additional staff members were added in 1992 and 1993 which enabled the division to reduce its backlog in 1993 and 1994. With the large increase in filings in 1996, 1997 and 1998, the unit has fallen behind in its review of less-important filings.

Staff members will continue to prioritize activities to ensure that most important matters are addressed first. Staff will continue to perform required analysis and attempt to evaluate petitions as they are filed and to eliminate any backlog. The division will comply with the Commission's newly enacted filing requirements which reduce the time allowed for the completion of our work to 60 days or less.

**PLAN TO ACHIEVE TARGETS:**

The agency has requested an increase in staff of 3.0 FTE to reduce backlog in the telecommunications program.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control that Affect Performance:* Number of filings generated by regulated telephone companies, the complexity of the filings and the economic circumstances that affect the regulated companies' financial condition, and opportunities to provide new or additional services.

**Measure (B):** Percentage of Department recommendations accepted by PUC shall equal or exceed 90% of all Department Recommendations.

	<u>1995</u>		<u>1996</u>		<u>1997</u>		<u>1998</u>	
	<u>Coin</u>	<u>All</u>	<u>Coin</u>	<u>All</u>	<u>Coin</u>	<u>All</u>	<u>Coin</u>	<u>All</u>
	<u>Telephone</u>	<u>Other</u>	<u>Telephone</u>	<u>Other</u>	<u>Telephone</u>	<u>Other</u>	<u>Telephone</u>	<u>Other</u>
Recommendations sent to PUC	101	811	64	1071	59	1362	43	1428
Accepted Recommendations	101	796	64	1055	59	1346	43	1419
Percentage Approved	100%	98%	100%	99%	96%	99%	100%	99%

**DEFINITION, RATIONALE, DATA SOURCE:**

*Definition:* The proportion of reports and recommendations sent to the Public Utilities Commission each year which are adopted by that agency.

*Rationale:* This measure is one indicator of the effectiveness of the agency to represent the public interest.

*Data Source:* Docket book and Orders of the Public Utilities Commission.

**DISCUSSION OF PAST PERFORMANCE:**

Some recommendations sent to the Commission are routine matters that receive approval. However, as the competitive environment changes and new technology is introduced, complex issues arise more often, and Commission acceptance of Department reports may be affected.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control that Affect Performance:* Errors of law made by the Public Utilities Commission; acceptance of reasoning and analyses offered by other parties.

**AGENCY:** Public Service, Department of  
**PROGRAM:** Telecommunications

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**OBJECTIVE #4:**

Minnesota's consumers will continue to receive information about the provision of and purchase of telecommunications services in Minnesota.

**Measure:** Number of consumer brochures issued annually.

	Objectives					
	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>
Brochures Issues	2	2	2	2	1	2

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** The number of brochures or reports issued by the Department of Public Service that address telephone consumer interest issues.

**Rationale:** This measure is one indicator of the agency's efforts to inform consumers of changing regulatory or market conditions that affect telephone services or prices.

**Data Source:** The agency.

**DISCUSSION OF PAST PERFORMANCE:**

The Department continues to develop brochures on current telecommunications issues of interest to the consuming public. These topics are intended to educate the public on these matters and to assist customers in the purchase of telephone services in the most cost-effective manner.

**OTHER FACTORS AFFECTING PERFORMANCE:**

**Factors Beyond Agency's Control that Affect Performance:** None.

**OBJECTIVE #5:**

Responsible regulatory action will assist regulated telephone companies in the goal of maintaining credit ratings that will result in access to reasonably-priced capital.

**Measure:** Bond ratings of largest four regulated monopoly providers shall remain investment grade.

	<u>1992</u>	<u>1995</u>	<u>1998*</u>
U S WEST Communications, Inc.	Aa3	Aa2	A+
GTE Corp.	A3	A2	A
Sprint/United Telecommunications	Baa3	Baa3	B+
Frontier Telephone	A2-A3	A3	A+

\* ValueLine safety rating used for 1998 only. All four companies are considered to be investment grade.

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** The year-end bond rating of each regulated telephone company's parent, as given by Moody's Bond Rating Service. Moody's defines "investment grade" as any bond rated Baa or higher.

**Rationale:** This measure is one indicator of the regulatory risk borne by bondholders of a telephone company. It is vitally important that publicly offered telecommunications companies can attract investors for operating capital. The rating method used by Moody's is described as follows:

**MOODY'S BOND RATINGS**

**Purpose:** The system of rating securities was originated by John Moody in 1909. The purpose of Moody's Ratings is to provide the investors with a simple system of gradation by which the relative investment qualities of bonds may be noted.

**Rating Symbols:** Gradations of investment quality are indicated by rating symbols, each symbol representing a group in which the quality characteristics are broadly the same. There are nine symbols as shown below, from that used to designate least investment risk (i.e., highest investment quality) to the greatest investment risk (i.e., lowest investment quality):

Aaa    Aa    A                      Baa    Ba    B                      Caa    Ca    C

**Data Source:** Moody's Investor Service.

**DISCUSSION OF PAST PERFORMANCE:**

Since 1990, all monopoly local telephone companies in Minnesota have maintained investment-grade status.



**AGENCY:** Public Service, Department of  
**PROGRAM:** Telecommunications

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**PLAN TO ACHIEVE TARGETS:**

The Department will continue to advocate fiscally sound policies that protect the public interest while permitting each company to attract capital at reasonable rates.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control that Affect Performance:* Rating changes attributable to corporate mismanagement or regulatory decisions made in other states.

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1998)

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$3,041	18.73%
General	\$3,041	
Number of FTE Staff	43.0	33.88%
General Fund Revenue Generated		
Weights & Measures Inspection Fees	1,523	
Weights & Measures Petroleum Inspection Fees <sup>1</sup>	<u>2,915</u>	
Total Revenue Generated	4,438 <sup>2</sup>	

PROGRAM GOALS:

- Support businesses in Minnesota and elsewhere by offering precision physical measurement services certified by the National Institute of Standards and Technology (NIST) and accredited under ISO 9000, Guide 25. The Division's metrology laboratory provides measurement services in mass, volume, length, temperature, liquid density, solid density, and magnetic susceptibility. (MS 239.011)
- Offer the highest level of mass measurement accuracy in the nation, outside of the National Institute of Standards and Technology (NIST). Mass, volume, and length measurement services are provided by the division's laboratory, which is certified by the NIST.
- Ensure uniform and accurate commercial weighing and measuring by inspecting and testing all of the state's gasoline pumps, grocery scales, grain elevator scales, railroad scales, and a wide variety of other equipment, and by issuing repair orders for noncomplying equipment or, in cases of serious violation, removing equipment from service until it can be repaired. (M.S. 239.011)
- Certify accuracy of repairs of weighing and measuring equipment by offering a voluntary program for service technicians. Participants in this "placing-in-service" program have their repair work monitored and are allowed to place new and repaired equipment into service. Registration and equipment calibration are renewed annually.
- Provide quality assurance for motor and heating fuel through a statewide sampling and testing program. Samples from major terminals and refineries are tested weekly and retail outlets are tested on a random sampling basis. (M.S. 230.011 and 239.75)
- Provide uniform highway load enforcement by testing permanent and portable law enforcement scales for state and local police agencies.

<sup>1</sup> This fee is collected on behalf of the DPS by the State Revenue Department. This fee is not reflected in the DPS Biennial Budget Agency Revenue Summary pages.

<sup>2</sup> These fees also include recovery of DPS overhead costs, statewide indirect costs and costs for services from the Office of Attorney General.

- Ensure, by regular inspection, that commodities packaged by weight or measure carry accurate statements of weight or measure. Emphasis is on prepackaged food and agricultural commodities.
- Enhance environmental quality by posting motor oil and battery recycling information at all retail outlets where they are sold.
- Recover the full operating cost of the Weights and Measures Division, including external overhead costs and previously unrecovered costs. (M.S. 239.101)

**DESCRIPTION OF SERVICES:**

The mission of the Department of Public Service Weights and Measures Division is to protect consumers and businesses in Minnesota's free enterprise markets by providing inspection and calibration services that promote and ensure equity and accuracy in weighing and measurement, that ensure petroleum product quality, and that provide precision physical measurement services to industry. The Division must recover the full cost of these activities by charging direct inspection fees for some services, and by charging a per-gallon petroleum inspection fee for petroleum related services.

**NOTE:** Statistical data presented in this report have been derived from information extracted from an accounts receivable data base that is no longer in use. Statistics on weighing and measuring inspections and petroleum inspections had to be derived from the data base because the data base was designed only to track accounts receivable. Much of the information up through FY 93 is our best estimate of the work performed by the Division. Development of a new data base is partially completed. When the new data base is complete, the Division will be able to provide accurate management information on all activities for FY 94 and future years.

**BACKGROUND INFORMATION:**

**MEASURE TYPE: WORKLOAD BY FISCAL YEAR**

<b><u>Number of Inspections</u></b>	<b><u>1996-97</u></b>	<b><u>1997-98</u></b>	<b><u>1998-99</u></b>	<b><u>1999-00</u></b>
Gasoline Pumps in Use	39,310	43,238	39,310	43,238
Retail Scales	10,967	13,105	10,967	13,105
LPG Meters	897	1,251	897	1,251
Heavy Capacity Scales	3,862	4,082	3,862	4,082
Package Inspections	626	724	740	750
Petroleum Tests	16,400	16,400	16,400	16,400
Lab Octane Tests	3,500	3,661	3,600	3,600
Gasoline Tank Inspections	12,000	12,000	12,000	12,000
Precision Mass Calibrations	1,875	1,954	2,000	2,100
Mass Tolerance Calibrations	12,250	12,500	12,500	12,700
Volumetric Calibrations	332	330	330	330
Temperature	120	130	140	150
Linear	27	32	25	25
Law Enf. Scales	449	460	460	470

**OBJECTIVE #1:**

To provide physical measurement services to businesses, at the highest levels of precision available in the United States, so that businesses can verify the accuracy and quality of manufacturing processes and manufactured products, and to enable businesses to export to European Economic Community Nations. Minnesota Statutes, Section 239.011, subdivision 2.

**Measure (A): Maintain NIST certification of the metrology laboratory.**

Physical standards used in the laboratory must remain traceable to NIST standards. This unbroken chain of valid calibrations defines the value of the services provided by the laboratory. Continued traceability is dependent on meeting a wide range of NIST performance standards. Outcome will be measured by continued certification.

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
Traceability to NIST	Yes	Yes	Yes	Yes	Yes	Yes

Traceability of the state standards of mass, length, volume and temperature is maintained by annually demonstrating and documenting the stability of the state standards, and by demonstrating the quality of metrology laboratory measurement operations, to the NIST Office of Weights and Measures (NIST/OWM).

**RATIONALE:**

The Department of Public Service is required by Minnesota Statutes, Section 239.011 to maintain traceability of the state standards to the national standards held by the United States Department of Commerce, National Institute of Standards and Technology (NIST). The accuracy and reliability of all basic measurements made in Minnesota is dependent on an unbroken chain of valid standards and methods from NIST through the Department of Public Service to Minnesota businesses and consumers.

**DATA SOURCE:**

NIST/OWM issues annual certificates of traceability to the Department of Public Service metrology laboratory. NIST also issues individual qualification certificates to the laboratory staff.

**OTHER FACTORS AFFECTING PERFORMANCE:**

Factors Beyond The Agency's Control That Affect Performance: Continued certification of the metrology laboratory and the laboratory staff depend on continuation of the NIST/OWM certification program.

**Measure (B): Achieve and maintain ISO registration.**

Under a statutory mandate, the Division's metrology laboratory must become registered as a qualified ISO 9000 service provider. Outcome will be measured by achieving and maintain ISO 900 registration

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
NIST/OWM	Yes	Yes	Yes	Yes	Yes	Yes
Military Standard 45662A	Yes	Yes	Yes	Yes	Yes	Yes
NIST/NVLAP (ISO 9000)	No	Yes	Yes	Yes	Yes	Yes

NIST: US Department of Commerce, National Institute of Standards and Technology  
NIST/OWM: US Department of Commerce, NIST, Office of Weights and Measures  
NVLAP: US Department of Commerce, NIST, National Voluntary Laboratory Accreditation Program

**DEFINITION:**

Accreditation by the U.S. Department of Commerce, National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NIST/NVLAP) is internationally recognized as evidence of compliance with the ISO 9000 series of quality standards, and with ISO/IEC Guide 25 calibration laboratory quality standards.

**RATIONALE:**

The Department of Public Service is required by Minnesota Statutes, Section 239.011 to maintain accreditation of its metrology laboratory under ISO 9000 and ISO/IEC Guide 25 quality standards. This accreditation is extremely important to U.S. companies that compete in the European Economic Community. These companies must receive ISO 9000 registration for the products and services they sell. This means that every supplier of goods or services to these companies must also be registered or accredited under ISO 9000 standards. The metrology laboratory provides a broad range of ISO accredited calibration and measurement services to many U.S companies, enabling them to compete in the European Community.

**DATA SOURCE:**

NIST/NVLAP has audited the Department of Public Service metrology laboratory and issued a certificate of accreditation.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control That Affect Performance:* Continued ISO 9000 accreditation of the metrology laboratory depends on continued operation and international recognition of the NIST/NVLAP accreditation program.

**Measure (C): Maintain the lowest attainable statistical uncertainties for all measurement processes.**

The Division's services have value to industry only if measurements are extremely precise. No measurement is perfect. However, we can determine with a high degree of certainty that the value of an individual measurement falls within a known range. Uncertainty is the statistical determination of this range. Measurements provided by the metrology laboratory fall within very narrow ranges. The following chart is based on calendar year data.

**Mass Measurement Uncertainties  
(in parts per million)**

		<u>FY1990</u>	<u>FY1992</u>	<u>FY1994</u>	<u>FY1996</u>	<u>FY1998</u>
1kg	MN	446.7215	132.6	55.15	55.15	41.04
	NIST	60	60	54	45	39.27
100g	MN	399.8	399.8	159.6	159.6	130.6
	NIST	195	195	195	107.4	107.4
1g	MN	305.9	305.9	1560	1560	1460
	NIST	1750	1750	1260	1260	1260

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** NIST certification and ISO 9000 registration are external recognition of the precision, reliability and quality of the metrology laboratory measurement capabilities and services.

Uncertainty is a definitive statistical statement of measurement precision. The metrology laboratory, by using the most modern high quality equipment and by maintaining tight process controls, can reduce measurement uncertainty to a minimum.

**Rationale:** Minnesota Statutes require the Division to maintain NIST certification to achieve ISO 9000 registration, and to provide measurement and consultation services to businesses.

ISO 9000 registration will allow the metrology laboratory to provide "one-stop" measurement services to businesses that export products to European Economic Community nations. Under ISO 9000 requirements, any manufacturing process that involves a measurement of mass, dimension, volume, temperature or density must be verified by an unbroken chain of calibrations tracing back to national standards. The metrology laboratory will provide this service without the need for expensive, time consuming audits performed by the client.

Statistical uncertainty is the most concise measurement of the quality of service provided by the metrology laboratory. Focused efforts involving standards surveillance and instrument performance monitoring reduce uncertainties to a predicted minimum. The minimum is based on the uncertainties of the state standards, as assigned by NIST, and on the use, design and construction of the measurement instruments employed in the laboratory. The predicted minimum is the goal for this objective.

*Data Source:* Weights and Measures Division statistical process control records and equipment control charts.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control that Affect Performance:* Misapplication of ISO 9000 standards by a qualified registrar would prevent registration of the metrology laboratory.

**OBJECTIVE #2:**

**To protect Minnesota businesses and consumers from financial losses due to inaccurate measurement. Minnesota Statutes, Section 239.011, subdivisions 1 and 2.**

Increasing numbers of commercial weighing and measuring devices will be installed. DPS will maintain the best possible inspection frequency and the highest possible compliance rates.

**Measure (A): Inspect annually, or as often as possible, commercial weighing and measuring equipment in Minnesota, and maintain high compliance rates.**

	<u>Actual</u> <u>F.Y. 1997</u>	<u>Actual</u> <u>F.Y. 1998</u>	<u>Est.</u> <u>F.Y. 1999</u>	<u>Est.</u> <u>F.Y. 2000</u>	<u>Est.</u> <u>F.Y. 2001</u>
Gasoline Pumps in Use	45,000	47,000	50,000	56,000	58,000
Number Inspected	39,310	43,238	45,000	46,000	47,000
Compliance Rate	90%	90%	90%	90%	91%
Retail Scales in Use	14,000	14,250	14,500	14,700	14,900
Number Inspected	10,697	13,105	13,500	13,500	13,500
Compliance Rate	94%	94%	93%	92%	92%
LPG Meters in Use	1,500	1,500	1,500	1,500	1,500
Number Inspected	897	1,251	1,300	1,300	1,300
Compliance Rate	92%	92%	92%	92%	92%
Vehicle Scales in Use	4,500	4,676	4,750	4,800	4,800
Number Inspected	3,862	4,082	4,100	4,150	4,150
Compliance Rate	80%	80%	80%	80%	80%

**DEFINITION:**

An inspection is defined as an unannounced inspection and test of commercial weighing or measuring equipment in Minnesota.

**RATIONALE:**

The program goal is to protect consumers and businesses from financial loss caused by inaccurate weighing or measuring. Commercial weighing and measuring equipment is never "perfect." There are always errors. The Division approves equipment that is within the tolerance limits set by rule. Equipment that fails to meet the tolerances is rejected and must be prepared.

**DATA SOURCE:**

Compliance estimates were taken from the Weights and Measures Division inspection database. Loss estimates were made by experienced Division managers using information obtained from the Minnesota Department of Revenue Petroleum Tax Division, the Minnesota Department of Agriculture, the Minneapolis Grain Exchange, and the Farmers Elevator Association.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control That Affect Performance:* Staff turnover temporarily reduces staff resources, productivity and revenues, but not costs.

**Measure (B): Limit financial losses to consumers and businesses by maintaining or improving compliance.**

Inaccuracy causes financial losses to businesses and consumers. It is important to note that errors are rarely random -- they are consistent and systematic for a given type, make and model of equipment. Inaccuracy in some types of equipment harms only the seller. For example, inaccurate LPG meters and fertilizer scales almost always cause a financial loss for the seller. In other types of equipment, the loss could favor either the buyer or seller. One make of gasoline pump, when it becomes inaccurate, will consistently measure in favor of the seller, another make will consistently measure in favor of the buyer. The Division treats all of these errors as losses, without regard for the direction of error.

	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999e</u>
	<b>Dollars in (000s)</b>			
Total Value of Metered Petro Deliveries	\$9,721,754	\$9,982,526	\$9,579,088	\$9,680,878
Total Losses from Delivered Petro Products	\$20,862	\$21,423	\$20,557	\$20,775
Total Value of Grain Weighing	\$9,707,282	\$9,981,556	\$9,599,865	10,932,700
Total Losses from Weighing Grain	\$23,079	\$23,656	\$22,608	\$25,747
Total Value of LPG Sold	\$368,155	\$381,600	\$392,413	\$404,950
Total Losses from Metered LPG	\$6,258	\$6,259	\$5,728	\$5,494
Total Values of Fertilizer Weighings	\$976,800	\$1,124,893	\$1,174,000	\$1,144,000
Total Losses from Fertilizer Weighings	\$750	\$863	\$778	\$778



**DEFINITION:**

- An inspection is defined as an unannounced inspection and test of commercial weighing or measuring equipment in Minnesota.
- Financial losses are estimated by multiplying the absolute value of the average errors (as found when the equipment was inspected) by the total value of the product sold annually through the equipment, and multiplying again by the number of times the product is weighed or measured. The error percentage shown for approved equipment and for non-complying equipment is the average error as found when the equipment was tested.
- Petroleum products. For FY 96, the loss calculation is based on an average error of 0.693% for non-complying pumps and 0.173% for approved pumps. Products are handled and measured twice -- first at a refinery or terminal, and again when sold at retail.
- Agriculture. For FY96, the loss calculation is based on an average error of 0.565% for non-complying scales and 0.180% for approved scales. Grain is generally handled and weighed three times -- first at a country elevator, second when shipped to a terminal elevator, and third when shipped out of the terminal elevator for use or processing. Sugar beets are generally weighed only once when they are received at a processing plant.
- Liquefied petroleum gas (LPG). For FY96, the loss calculation is based on an average error of 2.0% for non-complying meters and 0.5% for approved meters. LPG is usually metered only once when it is sold at retail. The Division began enforcing a tighter tolerance in FY96. The old tolerance allowed approved meters to have errors up to 1.73%. The new tolerance is 1.0%. However, as a result of the tighter tolerance, both the approved meters and non-complying meters will produce significantly smaller errors and smaller financial losses.
- Fertilizer. For FY96, the loss calculation for agricultural fertilizer is based on an average error of 0.20% for non-complying scales and 0.60% for approved scales. Fertilizer is usually weighed twice -- once at wholesale and again when it is sold to farmers.

**RATIONALE:**

The table illustrates the financial losses caused by non-complying equipment and approved equipment. Using petroleum equipment as an example, 9% of the pumps and meters in Minnesota were found to be inaccurate in FY96. This percentage of rejected equipment was responsible for 28% of the total financial loss. As inspection frequency decreases, the percentage of equipment found to be inaccurate will increase. Therefore, the highest compliance rate will result in the lowest financial loss. The program objective, to limit financial losses, will be achieved by maintaining the highest possible inspection frequencies.

**DATA SOURCE:**

Compliance estimates were taken from the Weights and Measures Division inspection database. Loss estimates were made by experienced Division managers using information obtained from the Minnesota Department of Revenue Petroleum Tax Division, the Minnesota Department of Agriculture, the Minneapolis Grain Exchange, and the Farmers Elevator Association.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control That Affect Performance:* Staff turnover temporarily reduces staff resources, productivity and revenue, but not costs.

**OBJECTIVE #3:**

To protect Minnesota consumers and to support Minnesota businesses by preventing financial losses due to inaccurate measurement. Minnesota Statutes, Section 239.011, subdivisions 1 and 2.

**Measure: Enforce uniform, nationally recognized standards. The Division is required by Minnesota Statutes Section 239.101 to adopt and enforce uniform, nationally recognized standards.**

Throughout the United States, weights and measures regulations are enforced by states, counties and cities. However, it is vitally important for commerce that all of these state and local jurisdictions enforce the same requirements. Nationwide regulatory uniformity reduces manufacturing and marketing costs for manufacturers of weighing and measuring equipment, and for producers and packagers of weighed or measured commodities. The following table illustrates that the Division has maintained uniformity by adopting the four most essential components of the model laws and regulations published by the National Institute of Standards and Technology, and the National Conference on Weights and Measures.

	<u>FY1994</u>	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>	<u>FY1999</u>
<b>Model Weights and Measures Law</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>NIST Handbook-44</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>NIST Handbook-133</b>	No	No	Yes	Yes	Yes	Yes
<b>National Type Evaluation Program</b>	No	No	Yes	Yes	Yes	Yes

**DEFINITION:**

- NIST Handbook-44, incorporated by reference into Department rules, contains specifications, tolerances and other technical requirements for commercial weighing and measuring equipment.
- NIST Handbook-133, incorporated by reference into Department rules, contains an inspection system and accuracy requirements for commodities packaged by weight, count or measure.
- The National Type Evaluation Program (NTEP) is operated jointly by the National Institute of Standards and Technology and the National Conference on Weights and Measures. The program conducts laboratory tests to certify that specific types and models of equipment meet the requirements of NIST Handbook-44. Since January of 1996, the Department requires NTEP certification for all new weighing and measuring equipment installed in Minnesota.
- The 1993 Minnesota Legislature amended Minnesota Statutes Chapter 239 so that Minnesota's weights and measures laws are functionally identical to the NIST model law.

**RATIONALE:**

The Department is required by Minnesota Statutes Section 239.011 to enforce uniform nationally recognized weights and measures codes.

**DATA SOURCE:**

Minnesota Statutes Chapter 239; Department of Public Service Rules, Chapter 7601.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control That Affect Performance:* None

**OBJECTIVE #4:**

To protect Minnesota businesses and consumers by employing a wide range of techniques to ensure the quality of motor, heating and industrial fuels distributed in Minnesota. Promote air quality improvement by ensuring that motor fuels meet state and federal standards. Minnesota Statutes, Section 239.011, Subdivision 2 and Sections 239.75 through 239.80.

**Measure: Increase numbers of samples tested, and improve compliance rates.**

This measure protects Minnesota businesses and consumers by employing a wide range of techniques to ensure the quality of motor, heating and industrial fuels distributed in Minnesota. Promote air quality improvement by ensuring that motor fuels meet state and federal standards. Minnesota Statutes, Section 239.011, subdivision 2 and Sections 239.75 through 239.80.

	<u>Actual</u> <u>F.Y. 1997</u>	<u>Actual</u> <u>F.Y. 1998</u>	<u>Est.</u> <u>F.Y. 1999</u>	<u>Est.</u> <u>F.Y. 2000</u>	<u>Est.</u> <u>F.Y. 2001</u>
Petro Product Tests Compliance Rate	16,400 98%	16,400 98%	16,400 98%	16,400 98%	16,400 98%
Oxy Gasoline Sold Compliance Rate	1.045x10 <sup>9</sup> 99.5%	2.093x10 <sup>9</sup> 99.5%	2.2x10 <sup>9</sup> 99.5%	2.4x10 <sup>9</sup> 99.5%	2.5x10 <sup>9</sup> 99.5%
Octane Tests Compliance Rate	3,500 98%	3,661 98%	3,600 98%	3,600 98%	3,600 98%
Petro Tanks Insp. Compliance Rate	12,000 99%	12,000 99%	12,000 99%	12,000 99%	12,000 99%

**DEFINITIONS:**

Compliance is measured by determining the number of samples found to be in compliance and dividing by the total number of samples tested. Samples are tested to meet federal and state mandates for oxygenated gasoline, gasoline octane requirements, water contamination of motor fuels, and to assist distributors by providing quality control services.

- The compliance rate is measured by determining the number of samples found to be in compliance, and dividing by the number of samples tested.
- Samples are tested to meet federal regulatory and state statutory requirements for gasoline oxygenation, octane, water contamination, sulfur content, volatility, flash point, and distillation.

- Under statutory requirement, the Division also tests petroleum products as part of an independent quality control service to petroleum distributors.
- Petroleum storage tanks are inspected for water, and other contamination, during each inspection visit. Minnesota's climate and ground water are serious sources of contamination problems in underground storage tanks.
- Octane tests are performed by near infra-red spectrophotometric methods. The equipment is mobile. Tests identified above as "mobile lab" tests are performed at gasoline stations.

**RATIONALE:**

The purpose of this program is to protect consumers and businesses from poor quality or contaminated petroleum products. Approximately 3.2 billion gallons of petroleum products are sold in Minnesota each year. It is impossible to test every load of petroleum delivered to every retail outlet or end user. To maintain reasonable compliance rates, the Division leverages its minimal resources by using a variety of enforcement and assistance approaches to gain maximum compliance. The Division employs a traditional approach by maintaining a significant enforcement presence in the industry. This is accomplished by testing a large number of samples and by regularly inspecting all petroleum storage tanks throughout the state.

One of the Division's non-traditional approaches to enforcement involves the use of immediate enforcement actions. This method provides a strong impetus to maintain product quality because the immediate penalty, temporary cessation of business, is very costly for the retailer. Division inspectors have authority to shut down equipment and prohibit sale of non-complying product until the product is replaced or brought into compliance.

In another alternative approach, the Division cooperates with petroleum distributors by providing a quality control service and providing education and encouragement to assist them in meeting federal gasoline standards relating to air quality.

**DATA SOURCE:**

Weights and Measures Division inspection records.

**OTHER FACTORS AFFECTING PERFORMANCE:**

***Factors Beyond Agency's Control That Affect Performance:*** Extreme weather conditions can increase water contamination in underground storage tanks. Federal and state standards designed to address one problem (petroleum spills, for example) frequently cause other problems (increased water contamination).

**OBJECTIVE #5:**

To recover the full operating cost of the Weights and Measures Division metrology laboratory, including external overhead costs and previously unrecovered costs.

**Measure:** Increase metrology laboratory income to recover the laboratory's current costs and to recover the initial investment, made in 1994, to upgrade laboratory equipment and services.

The 1993 Minnesota Legislature authorized a large investment in the metrology laboratory to upgrade equipment and improve services. Laboratory equipment was upgraded in fiscal year 1994. At that time, the Division stated that it would need five years to increase its customer base to the point that laboratory income would equal costs.

	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>	<u>FY1999e</u>
Cost	\$248,882	\$240,202	\$214,732	\$216,350	\$240,000
Income	\$160,033	\$188,609	\$269,004	\$315,092	\$315,000

**OBJECTIVE #6:**

To recover the full operating cost of the Weights and Measures Division, including external overhead costs and previously unrecovered costs.

**Measure:** Increase the Division's income from weights and measure fees to recover the cost of providing weights and measures inspection services, including overhead costs and previously unrecovered costs.

Minnesota Statutes, Section 239.101, require the division to recover the full cost of its operations, including overhead costs and previously unrecovered costs, through two separate fee systems. Petroleum related costs, including petroleum quality testing, gas pump inspection, and other meter inspection, are recovered by the Commissioner of Revenue through a fee of \$0.85 per thousand gallons of petroleum sold through Minnesota terminals. Other weights and measures costs, including scale inspection and package inspection, are recovered through direct user fees charged at the time of inspections.

	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>	<u>FY1999e</u>
Non-Petroleum-Cost + Overhead	\$1,306,735	\$1,426,790	\$1,417,000	\$1,393,799	\$1,433,000
Non-Petroleum-Income	\$1,127,000	\$1,176,189	\$1,414,000	\$1,523,000	\$1,525,000
Petroleum-cost + Overhead	\$1,549,234	\$1,624,210	\$1,233,337	\$1,781,736	\$1,825,000
Petroleum-Income	\$2,615,496	\$2,504,880	\$2,214,000	\$2,327,000	\$2,112,000

**DEFINITION:**

- Weights and measures inspection fees are direct user fees charged at the time of inspection. Income is volatile because fees are assessed only when inspections are performed.
- The Petroleum Inspection Fee is charged against all petroleum products withdrawn from terminals and refineries in Minnesota. Income exhibits steady growth because the fee is based on petroleum consumption.

**RATIONALE:**

The Division is required to recover its costs. Cost and income data are presented above to illustrate that the Division has experienced a time lag in implementing fee increases as a result of the lengthy administrative rules process. The data also illustrate that the Division has implemented a long term plan to fully recover all costs and all previously unrecovered costs.

The long term plan will increase income through workload growth and managed productivity improvements. For example, the revenue increases from weights and measures fees in FY95 and FY96 are the direct result of productivity improvements. The Division will incur future revenue increases from a combination of workload growth and managed productivity improvements.

**DATA SOURCE:**

Weights and Measures Division inspection database and cost calculation spreadsheets.

**OTHER FACTORS AFFECTING PERFORMANCE:**

***Factors Beyond Agency's Control That Affect Performance:***

- The length of the administrative rules process has delayed the implementation of fee increases.
- Staff turnover temporarily reduces staff resources, productivity and revenue, but not costs.
- Each fee increase, accomplished through the administrative rules process, requires approximately twelve months from inception to final adoption of the proposed rule. Cost increases have occurred annually as a result of negotiated salary increases, other inflationary factors, and metrology laboratory improvements. The combination of annual cost increases and delays in the administrative rules process has resulted in a substantial deficit.

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1998)

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$1,614	10.11%
General	\$1,484	
From Special Revenue Funds	\$130	
Number of FTE Staff	23.4	18.44%

\* Approximately 87% of General Fund costs are recovered as indirect costs allocated to the Energy, Telecommunications, and Weights and Measures programs. The 87% estimate is based on the actual amount recovered in FY 97. The actual percent for FY98 cannot be determined until the assessment is finalized in November of 1998.

PROGRAM GOALS:

- Educate and inform the public regarding energy, weights and measures, and telecommunications.
- The balance of this program involves providing management, accounting, personnel, labor relations, word processing, computer support, and central filing services for the Telecommunications, Weights and Measures, and Energy programs.

DESCRIPTION OF SERVICES:

The purpose of the Information and Operations Management Division is to provide for the efficient operation of the department, facilitate the smooth flow of information among divisions and to the public, and coordinate department activities with other governmental agencies and the private sector.

This program is responsible for the overall policy development, coordination and development of annual and long-range objectives, overall resource allocation and program evaluation. Management works with the Governor's Office, legislators and other government entities to produce and advance legislative initiatives regarding energy conservation, energy and telecommunications regulation, and Weights and Measures issues such as petroleum testing, scale inspections, etc. The measure of the management function is the degree to which the performance objectives of the three program divisions are accomplished.

This program also delivers general support services to the entire department by providing management, accounting, personnel, word processing, docket control, central files and computer support services. In general, centralized support services improve government efficiency by providing department-wide services that would require duplication of effort if performed individually by each division.

**OBJECTIVE #1:**

Educate and inform the public regarding energy, weights and measures, and telecommunications. To review, edit, update when necessary over 90 DPS publications annually.

Measure: Number of publications distributed per year.

	<u>FY1993</u>	<u>FY1994</u>	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>
Number of Publications distributed per year	163,477	173,004	143,420	150,056	202,677	195,222

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** The DPS publishes and distributes numerous brochures which inform the public about energy use, policy, alternatives and conservation measures.

**Rationale:** Public information is important and vital to accomplishing the Department's mission. Because developing an outcome measure for this goal would be extremely difficult, the Department believes this output measure is a cost effective way to gauge its effectiveness.

**Data Source:** Publication distribution records from the Department's Energy Information Center.

**DISCUSSION OF PAST PERFORMANCE:**

The distribution of energy information literature occurs through the Department's Energy Information Center. Literature is distributed to individuals calling the telephone hotline and at various trade shows throughout the state.

**PLAN TO ACHIEVE TARGETS:**

The communications office will continue to coordinate the preparation and production of information which will be distributed through the Energy Information Center, at Trade Shows, and the Minnesota State Fair.

**OTHER FACTORS AFFECTING PERFORMANCE:**

**Factors Beyond Agency's Control that Affect Performance:** The agency cannot control attendance at builders shows, retailers conventions and the state fair, which constitute the major distribution sites for DPS publications. Demand for publications tends to increase when prices are high and during any sort of energy related "crisis" or when a major energy issue captures significant public attention, i.e., Prairie Island Nuclear Plant dry cask storage, certificate of need proceedings and subsequent legislative actions from 1991-1994.



**OBJECTIVE #2:**

Educate and inform the public regarding energy, weights and measures, and telecommunications.

Measure: To reach each adult Minnesotan approximately six times per year.

	<u>FY1994</u>	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>
Number of Print Media Contacts	20,366,470	15,605,611	24,528,007	15,358,158	24,825,000
Contacts/Adult per year	8.1	6.2	9.8	6.1	9.9

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** Earned media refers to coverage by print and broadcast media.

**Rationale:** The only way the public can make use of, or benefit from Department services and information is if they are informed regarding the consequences of energy and telephone service choices, benefits of energy conservation, availability and effectiveness of energy conservation grant and loan programs, availability and range of weights and measures services, availability of alternative energy technologies and the range and cost of telecommunications services.

**Data Source:** Measuring the level of success of our earned media (news) efforts is not an exact science but we have developed systems for tracking our effectiveness.

For measuring print media exposure, we have estimated the adult population at 2.5 million out of a total state population of approximately 4 million people. The Department has reached over 20 million Minnesotans (in other words, we have reached each adult in the state approximately 10 times) in the past year through print media coverage of news conferences, news releases and media advisories. Calculations are based on clipping service results, circulation data and repeated exposure in large and small media markets across the state. In many instances, information is intentionally targeted toward particular communities with a strong emphasis on non-metro Minnesota.

Measuring coverage in broadcast mediums (television and radio) is more difficult without specific data on a particular station's Area of Dominant Influence, market cumulative totals and shares, and household penetration. The cost of obtaining and evaluating the information is beyond the scope of our budget. Experience indicates that stories carried by newspapers are also often carried by broadcast entities. An exact measurement of message penetration due to broadcast coverage would greatly increase the audience level.

**DISCUSSION OF PAST PERFORMANCE:**

The DPS issued news releases on all major DPS actions and interventions. The Department actively participated in answering Minneapolis Star Tribune Fixit Column letters in addition to distributing the Energy Tip of the Month to news media statewide. The DPS exceeded its target of reaching each adult in Minnesota six times per year in all years since 1993.

**PLAN TO ACHIEVE TARGETS:**

As part of its on-going activities, the communications staff will continue distribution of advisories and releases regarding DPS actions while further monitoring print media coverage through a hard count of total news articles appearing in print media across the state via our newspaper clipping service.

**AGENCY:** Public Service, Department of  
**PROGRAM:** Information and Operations Management

**1998 Annual Performance Report**

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**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control that Affect Performance:* The agency can provide educational information to newspaper and broadcast media, but has no control over its final disposition or circulation.

*Process Used:* The information used to evaluate this objective comes from the publication clipping files of the DPS and from inventory distribution records of the DPS information office.

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1998)

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$4,126	25.41%
General	\$2,883	
From Federal Funds	\$880	
From Special Revenue Funds	\$363	
Number of FTE Staff	48.2	37.98%
General Fund Revenue Deposited in FY98*	\$4,044	

\* This includes revenue collected for department administrative costs, statewide indirect costs, and the attorney general's costs.

PROGRAM GOALS:

The program's purpose is to ensure reliable, affordable and environmentally sound energy supplies for Minnesotans now and into the future. The department strives to achieve this mission by meeting the following goals that:

- Advocate for meeting Minnesota's energy needs at the lowest societal cost, while ensuring affordable and reliable energy services. (M.S. 216A, M.S. 216B)
- Encourage more competition and customer choices where possible while pursuing governmental intervention where the state can best advance the following goals: state economic development; environmental quality; risk mitigation through resources diversity; energy education; access to investment capital; and acceleration of new technologies to the market. (M.S. 216A, M.S. 216B)
- Improve the efficiency of Minnesota's energy use, measured in Btus per real dollar of Gross State Product, by at least 30% by the year 2020 while lowering the total energy cost per real dollar of Gross State Product. (M.S. 216B, M.S. 216C)
- Promote a self-supporting, innovative energy industry with emphasis on renewable and other alternative energy development in Minnesota. (M.S. 216B, M.S. 2422-2424, and M.S. 216B.168)
- Protect consumers from unreasonable or unfair utility rates and practices through intervention and advocacy before the Minnesota Public Utilities Commission (PUC).
- Ensure that gas and electric utility companies provide adequate and reliable services to their customers.

- Provide fair and non-discriminatory treatment for residential, commercial and industrial utility customers.
- Avoid unnecessary power plant construction with its high cost and adverse environmental effects by investigating and intervening in electric supply plans, focusing on such topics as: the achievable amounts of conservation and load management; the implementation of renewable resources; the accuracy of forecasted customer demand; and the reliability and cost-effectiveness of proposed supply-side resources, such as new power plants and life-extension of existing plants.
- Mandate appropriate utility investment in Conservation Improvement Programs (CIP).
- Assure the state's ability to cope with supply and price issues by actively monitoring and maintaining statewide data on energy supplies, demand, price, forecasts, trends and technologies.
- Enable consumers to use energy economically by providing unbiased, accurate information on energy use and by providing guidance and technical assistance to local governments, community organizations, utilities and others in designing conservation and other energy programs.
- Ensure that Minnesota consumers receive the benefits of new technologies improving the efficient use of energy, including renewable sources.
- Ensure that Minnesotans benefit from efficient and safe building construction by training the professionals who implement these technologies and by designing and enforcing energy codes, lighting standards, and insulation product standards.
- Provide financial assistance through state and federal programs to encourage schools, hospitals, cities and counties to become more energy-efficient.
- Intervene on the state's behalf in energy matters at the federal level with Congress and agencies such as the U.S. Department of Energy, the Federal Energy Regulatory Commission and the Nuclear Regulatory Commission. This advocacy role is carried out in coordination with the Public Utilities Commission (PUC), the Minnesota Attorney General's Office, the Environmental Quality Board (EQB), and other state agencies both within and outside Minnesota.
- Provide a healthy economic environment for utility companies so that they may obtain financing for needed equipment and plant improvement to provide adequate and reliable service at reasonable rates of interest.

#### **DESCRIPTION OF SERVICES:**

The Energy program has many functions including: (1) gas and electric utility regulation which involves evaluation of utility company rate proposals, service proposals, service area disputes, integrated resource plans, conservation improvement investment plans, certificate of need applications for new facilities, nuclear waste disposal plans, nuclear decommissioning cost proposals, financial incentive regulation plans, forecasting future energy availability and consumption, external environmental costs associated with electric generating facilities, and utility company acquisition and merger proposals; (2) conservation loans and grants; (3) petroleum supply monitoring and emergency allocation authority; (4) development and enforcement of energy conservation codes and standards; and (5) research, development, and implementation of renewable energy resources.

**BACKGROUND INFORMATION:**

The gas and electric regulation function of the Energy Program involves a quasi-judicial process involving both public hearings and evidentiary hearings. The Department of Public Service (DPS), the Public Utilities Commission (PUC), and the Office of Administrative Hearings (OAG) have a major role in this regulatory process.

The Office of Administrative Hearings serves two functions in this process. First of all, representatives of this office schedule and conduct both public and evidentiary hearings pertaining to each contested case. Public hearings provide an opportunity for utility ratepayers to express their views on the case, while evidentiary hearings are the forum in which statistical, financial, economic, technical and other information is presented by the company, the DPS and other formal intervening parties. At the conclusion of the hearings, the hearing examiner submits a report to the Commission which contains a summation of the evidence and recommendations.

The Department is an advocacy and enforcement agency. The Department serves in its advocacy role by presenting information and recommendations which represent the interest of the state as a whole -- the broad general public, consisting of all classes of regulatory utility customers and the utilities themselves. The DPS is statutorily required to take into consideration the financial condition of the company providing service (M.S. 216B.01). In other words, the Department provides recommendations without respect to specific special interests. Individual user classes very often also intervene in rate case proceedings to present information and recommendations that reflect the special interests of that class.

The Commission makes its decisions and establishes policies based on information and recommendations entered into the formal record of proceeding. The PUC is a quasi-judicial, decision-making and policy-setting body. Once the record on a particular case is completed and closed, the Public Utilities Commission issues a written Order which the DPS then enforces with respect to the general public and the utility involved.

Throughout all of the formal quasi-judicial proceedings and in any potential court case resulting from these proceedings, both the Department and the Commission are represented by the Attorney General's staff.

**ENERGY BASE WORKLOAD**

<b><u>Measure</u></b>	<b><u>F.Y. 1996</u></b>	<b><u>F.Y. 1997</u></b>	<b><u>F.Y. 1998</u></b>
General Rate Cases	2	0	2
Tariff Change	83	103	68
Service Areas	32	41	24
Resource Plans	6	2	10
Cons. Imp. Programs (CIP)	58	26	28
Rule Making	4	2	1
Affiliated Interest	6	15	21
Certificate of Need	2	0	1
Depreciation Studies	12	12	16
Property Acquisitions	8	4	3
Fuel Clause Adj./Ref.	213	232	227
Security Issuances	10	10	9
PUC Investigations	1	6	9
DPS Investigations	2	1	0
Complaints	2	2	1
Other Filings	2	8	3
Total Filings	450	464	423

**OBJECTIVE #1:**

Hold the rate of increase in rates from their 1994 levels to no more than the average rise for utility rates in Wisconsin, Iowa, North Dakota and South Dakota.

**Measure: Percent rate increases in Minnesota and those for the bordering states.**

Protect Minnesota's consumers against unreasonable utility rates. Some increase in rates is inevitable, due to general inflation and rising demand, so the most appropriate measure of DPS success is to compare the long-term increase in utility rates with those of the bordering states of Wisconsin, Iowa, North Dakota, and South Dakota. The Department goal is that Minnesota's average annual increase in rates from calendar year 1994 on should be at or below the average for those bordering states.

**Measure:**

	<u>CY1994</u>	<u>CY1995</u>	<u>CY1996</u>	<u>CY1997</u>
Avg. Rate/kWh in MN	5.63	5.65	5.54	5.61
Avg. Rate/kWh in Border States	5.84	5.81	5.76	5.77
Avg. Annual % increase in MN		0.36%	(1.95%)	1.26%
Avg. Annual % increase in Border States		0.51%	(.86%)	.17%

	<u>CY1994</u>	<u>CY1995</u>	<u>CY1996</u>	<u>CY1997</u>
Avg. Rate/Mcf in MN	4.36	3.95	4.35	4.61
Avg. Rate/Mcf in Border States	4.56	4.10	4.37	4.85
Avg. Annual % increase in MN		-9.40%	10.13%	5.98%
Avg. Annual % increase in Border States		-10.09%	6.59%	10.98%

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** Utility companies file petitions to raise customer rates for services provided by the utility companies based on increases in cost caused by changes in demand, inflation, and various other factors, and the costs of meeting those costs.

**Rationale:** The DPS acts to keep rates low by intervening in rate cases and in the development of Integrated Resource Plans. We also oversee Conservation Improvement Program designs, distribute grants to help public institutions become more energy efficient, and disseminate information to the public on conservation and alternative energy to further help keep down demand. Therefore, the Department works to keep rates down by reducing demand, as well as by working to control utility profits. By comparing the rate of increases with that of peer states, we have a yardstick to measure our progress.

**Data Source:** The information comes from utility rate filings in Minnesota, and from the neighboring states.

**DISCUSSION OF PAST PERFORMANCE:**

This goal was established in 1994. In both 1994 and 1995 Minnesota's gas and electric prices were below prices in neighboring states. Minnesota's electric prices increased in 1995, while electric prices in bordering states fell slightly. Gas rates in Minnesota decreased significantly in 1995, but the decrease in bordering states was slightly greater. The goal is not currently being met, but should be met in the long term.

**PLAN TO ACHIEVE TARGETS:**

Through utility rate cases, Integrated Resource Plans, Conservation Improvement Programs and other proceedings, the Department will attempt to minimize the cost of providing safe and reliable utility service.

**OTHER FACTORS AFFECTING PERFORMANCE:**

Factors Beyond Agency's Control that Affect Performance: While the DPS can advocate for lower rates in rate cases and for better Integrated Resource Plans, the decisions are made by the PUC. Likewise, while the Department can disseminate information on conservation, energy use and production, the decision to follow through on that information is made by companies and private citizens. Also, since rate increases are not continuous, but rather occur in lump sums when rate cases are filed.

**OBJECTIVE #2:**

Double Minnesota's use of renewable energy by the year 2020.

Measure: Gross renewable energy consumption in BTUs.

MN Renewable Energy Production (in trillions)	1992 Btu	1993 Btu	1994 Btu	1995 Btu	1996 Btu	1997 Btu	1998 Btu
	78*	162	177	179	180	180	

\* Base Year

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** BTU stands for British Thermal Unit and is a recognized standard of energy measurement.

**Rationale:** Each energy source, though measured in different physical units -- gallons or kilowatt hours -- can be converted to BTUs. Once converted to these units, equitable comparison such as percent of energy use and price per unit can be more accurately compared. The DPS in the 1992 *Energy Policy Report* set out a variety of specific strategies and action steps for increasing Minnesota's use of renewable energy.

**Data Source:** The Department collects energy use data from several sources including annual utility reports, annual reports from the petroleum industry, petroleum tax records, and the U.S. DOE. This information is collected, processed and entered into a historical database. This database, maintained for over 15 years, is called the Regional Energy Information System, or REIS. Most data to measure progress toward this goal will come from REIS data.

**DISCUSSION OF PAST PERFORMANCE:**

This goal is a modification to a renewable goal established in 1992. Past initiatives have included promotion of wood heating fuel, research and development in whole tree burning, solar and photovoltaics, promotion and support for ethanol production, extensive wind monitoring, and the quantification of environmental costs for electric resource planning. Between 1990 and 1994 Minnesota's use of renewable energy increased by 50 percent.

**PLAN TO ACHIEVE TARGETS:**

The DPS will incorporate environmental cost considerations in making the recommendations regarding future energy generation facility acquisitions by utility companies to more accurately reflect the cost of non-renewable energy generating facilities and thereby promote renewable energy productions. The Department will continue funding of demonstration projects in wind, biomass and photovoltaics renewable resource projects. The Department will monitor NSP to ensure that NSP develops at least the 425 MW of wind power and 125 MW of biomass required under Minnesota statutes. The Department will continue to promote alternative fuels for transportation through various initiatives including development of the state AFV (Alternative Fuel Vehicle) plan.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control That Affect Performance:* Progress toward this goal will be critically influenced by factors outside the Department's control. The major factors include price of traditional fuels, price of alternative fuels, new technology advances, and new state and federal regulations -- particularly the inevitable deregulation of the electric generation market.

**OBJECTIVE #3:**

Improve the efficiency of our energy use per real dollar of gross state product by 30 percent by 2020, while maintaining or improving our comfort and productivity.

Measure: BTUs per real dollar of gross state product.

Energy Use per GSP in thousand BTU/dollar	<u>FY1990</u>	<u>FY1991</u>	<u>FY1992</u>	<u>FY1993</u>	<u>FY1994</u>	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>
Actual	11.384	11.701	11.294	10.964	10.737	10.907	11.000	11.214	11.305
% Change from 1990 (base yr)		2.78%	-0.79%	-3.69%	-5.68%	-4.19%	-3.39%	-1.49%	-0.69%

**DEFINITION, RATIONALE, DATA SOURCE:**

*Definition:* BTU stands for British Thermal Unit and is a recognized standard of energy measurement. When we divide the state's total energy use by the real gross state product, we achieve a measurement of how efficiently we produce goods and services.

*Rationale:* To examine how efficiently energy is used in our economy, we must use an indicator beyond gross energy use. One standard economic basis commonly used is gross state product. By using this combined energy and economic statistic, we eliminate the energy use effects caused by significant swings in the economy that are hidden in gross energy consumption numbers. We can also monitor whether we are achieving energy use reductions by reducing economic output or through true efficiency.



**Data Source:** The Department collects energy use data from several sources including annual utility reports, annual reports from the petroleum industry, petroleum tax records, and the U.S. DOE. This information is collected, processed and entered into a historical database. This database, maintained for over 17 years, is called the Regional Energy Information System, or REIS. Most data to measure progress toward this goal will come from REIS data. Gross state product data and deflators for determining real value come from standard econometric forecasting sources such as Data Resources, Inc. (DRI), Regional Economic Models Incorporated, the Department of Revenue, Department of Finance and the State Economist.

#### **DISCUSSION OF PAST PERFORMANCE:**

This goal was established in 1992. Energy use per dollar of GSP has declined consistently since 1991. However, our most recent forecast indicates that achieving the 30 percent reduction by 2020 will be difficult.

#### **PLAN TO ACHIEVE TARGETS:**

We will aggressively pursue cost-effective energy efficiency through CIP, utility financial incentives for conservation projects, and integrated resource planning for both electric and gas utilities.

#### **OTHER FACTORS AFFECTING PERFORMANCE:**

Factors Beyond Agency's Control that Affect Performance: National and international supply and demand level, which affect the prices of Minnesota goods and services, is outside of Department control. Some of this variation is accounted for by modifying nominal values to real values to remove the influences of inflation. Changes in the state's economy if it continues to move away from agricultural and manufacturing to service jobs will also affect this measure.

#### **OBJECTIVE #4:**

Ensure that investor owned utilities meet statutorily required Conservation Improvement Program (CIP) spending levels by the end of 1995.

Measure: Comparison of actual performance to the Commissioner's required budget goals.

	<b>FY1992</b>	<b>FY1993</b>	<b>FY1994</b>	<b>FY1995</b>	<b>FY1996</b>	<b>FY1997</b>	<b>FY1998</b>
	<b><u>\$(000s)</u></b>	<b><u>\$(000s)</u></b>	<b><u>\$(000s)</u></b>	<b><u>\$(000s)</u></b>	<b><u>\$(000s)</u></b>	<b><u>\$(000s)</u></b>	<b><u>\$(000s)</u></b>
<b>Required utility CIP investment</b>	24,284	26,593	28,901	31,209	34,184	33,684	35,447
<b>Actual utility CIP investments</b>	34,333	52,466	65,353	81,905	70,566	54,512	49,444

#### **DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** Spending levels required under the statute are 1.5 percent of gross revenue for electric investor-owned utilities, except for NSP which is required to spend 2.0%, and 0.5 percent for gas investor-owned utilities. For 1992-1995, required spending levels were determined by using 1991 gross revenues for each utility. Actual spending for 1991 was used as a baseline. The difference between the baseline and the 1995 target was determined in proportionate increments per year in order to reach the required spending goal. For 1996-1998, the utilities' most recent available gross revenues were used to calculate required spending levels.

**Rationale:** The CIP statute specifically states that the Commissioner of the Department of Public Service must insure that investor-owned utilities meet certain spending levels by the end of 1995. To do so, the Commissioner, along with Department staff, review each utility's CIP biennial filing, monitor their compliance and, if necessary, direct them to improve their performance.

This measure directly demonstrates whether the Commissioner has followed the law in meeting the objective stated above. Additionally, the Commissioner reviews biennial filings for balance in meeting the needs of its customers, the ability of the utility to implement the projects proposed, and probably most importantly, the ability of the program to be implemented in a cost-effective manner.

Although this stated measure does not discuss any of the qualitative skills necessary to administer the CIP program, it does demonstrate the ability of the Department to ensure that utilities meet their statutory spending goals.

***Data Source:***

1. Individual project filings as submitted by participating utilities.
2. Individual analysis done by Department of Public Service analysts.
3. Department of Public Service data base.
4. Rate case filings.
5. Utility annual jurisdictional reports.

**DISCUSSION OF PAST PERFORMANCE:**

As shown above, the total expenditures by regulated utilities in 1992 and 1995 far exceeds the statutory requirement.

**PLAN TO ACHIEVE TARGETS:**

Continuation of aggressive budget and energy savings goals for 1994 and 1995.

**OTHER FACTORS AFFECTING PERFORMANCE:**

***Factors Beyond Agency's Control that Affect Performance:*** None.

**OBJECTIVE #5:**

Promote and increase the amount of actual energy savings and energy efficiency measures implemented through the Conservation Improvement Program (CIP).

Measure: Comparison of annual kWh (kilowatt hour) savings as a percentage of total kWh sales by all regulated electric utilities. Comparison of annual Mcf (thousand cubic feet) savings as a percentage of total Mcf sales by all regulated gas utilities

	<u>FY1993</u>	<u>FY1994</u>	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>
kWh savings (000s)	344,108	464,610	495,552	377,209	487,149
kWh savings as % of sales	1.21%	1.64%	1.75%	1.08%	1.20%
Mcf savings	545	743	788	1,060	1,002
Mcf savings as % of sales	0.19%	0.29%	0.31%	0.30%	0.30%

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** kWh is a kilowatt hour, a measure of electricity consumption. Mcf is an acronym for thousand cubic feet, a measure of natural gas consumption.

**Rationale:** The CIP statute, in general terms, requires that the Department of Public Service review each investor owned utility's CIP filing (filed every two years) for any number of qualities, including the ability of the utility's programs to deliver cost-effective, energy saving programs. Although the direct measurable outcome required by the law is a spending level, the underlying intent of the statute is to reduce energy consumption, thereby reducing the damaging effects of power generation to the environment.

Each individual project within a utility's overall CIP program is analyzed for its potential to save energy. An estimated target is determined at the outset of the project. Once a project has been in effect for at least one year, an evaluation is performed and estimates are recalculated to determine whether goals have been met or exceeded, and whether there are roadblocks to reaching the goals.

The results of our review of this information are necessary and prudent in determining whether a specific project is performing adequately, whether that project needs to be improved, or whether the project needs to be dropped from the overall CIP program. The information also allows us to make a determination as to where more emphasis may be placed so that more substantial energy savings can be captured. The ultimate goal is to spend the required budgets in a balanced and cost-effective manner.

***Data Source:***

1. Individual project filings as submitted by participating utilities.
2. Individual analysis done by Department of Public Service analysts.
3. Department of Public Service data base.

It should be noted that the Department initiated a data base in 1992 to collect information on expenditures by each utility for each individual CIP project. As a continuing improvement of that data base, the Department is working on expanding that data base to include the resulting energy impacts. The data base has preliminary data on energy savings, although not complete, and will provide a baseline to compare future energy savings into the rest of the decade.

**DISCUSSION OF PAST PERFORMANCE:**

kWh savings are clearly increased in 1993, while the measure of Mcf savings cannot be adequately compared until 1994 and 1995 savings are known.

**PLAN TO ACHIEVE TARGETS:**

DPS will continue to review program cost effectiveness and the implementation feasibility of new program proposals. There will be increased emphasis upon obtaining higher degrees of cost effectiveness within specific projects and increased emphasis on periodic project evaluation.

**OTHER FACTORS AFFECTING PERFORMANCE:**

***Factors Beyond Agency's Control that Affect Performance:*** Regardless of how much evaluation and monitoring is done on a specific project, it is very difficult to quantify actual energy savings. It is impossible to measure what an individual or a business would have done had the energy improvement or energy education not taken place. The very nature of demand-side management evaluation is that the preliminary estimates will be improved upon through monitoring and evaluation, but will very rarely be absolute measurements. Although the Department is concerned about this factor, it is not an overriding deficiency in our attempt to measure progress.

**OBJECTIVE #6:**

Reduce the energy use and energy cost of local government buildings and services by providing low cost financing for energy efficiency projects.

Measure:	Annual Energy Savings Annual Energy Cost Savings
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	1993 (000s)	1994 (000s)	1995 (000s)	1996 (000s)	1997 (000s)	1998 (000s)
Actual Loan/\$	\$5,100	\$4,847	7,108	322	6,084	600
Goal Loan/\$	\$4,000	\$5,000	\$5,000	\$5,000	4,000	4,000
Annual Energy Cost Saving	\$571	\$714	\$1,047	\$47	896	88
Annual Energy Saving (MMBTU)	95.166	119.0	174.5	7.9	149.3	14.7

**DEFINITION, RATIONALE, DATA SOURCE:**

***Definition:*** BTU stands for British Thermal Unit and is a recognized standard of energy measurement. To determine how efficient a given building is and compare it to others, gross energy use in BTUs is divided by the building's area in square foot.

**Rationale:** We measure the success of our energy conservation financing programs by looking for changes in the energy use patterns of the building we serve. If our loans are having their desired or expected impact, the actual energy use in the school or public facility will decrease. The best measure of this performance measure is the energy use of a building measured in BTUs per square foot. As this number gets lower, the building is becoming more efficient, cheaper to operate, and (in general) less environmentally damaging. This building measure is very similar in concept to our *1996 Energy Policy Report* goal of increasing energy efficiency measure in BTUs per dollar of gross state product.

**Data Source:** This data comes directly from the utility bills and fuel records of the participating facility. We direct mail standard reporting forms to program participants in the fall of each year. The clientele fill out these forms using their own utility bills. Once returned, this information is entered into a large, historical energy use database. Analysis is done as necessary. We can easily track the progress of a single building over time. In the past we have also collected this data from non-participants to form a comparison group. We could, therefore, compare energy use characteristics of a sample of both participant and non-participant buildings.

#### **DISCUSSION OF PAST PERFORMANCE:**

The effect of loan programs for institutions is well-documented, especially for schools. They are the largest group of participants in our loan program, with adequate sample sizes in both the participant (438 buildings) and non-participant (1,027 buildings) categories. Our data for the 1991 school year shows:

<b><u>Indicator</u></b>	<b><u>Participant</u></b>	<b><u>Non-Participant</u></b>	<b><u>Percent Difference</u></b>
Heat Energy per Sq. Ft.	73.0 M BTUs	78.0 M BTUs	-7.0%
Electric Energy per Sq. Ft.	16.13M BTUs	17.91M BTUs	-10.0%
Heat Cost per Sq. Ft.	\$.24	\$.29	-17.2%
Electric Cost per Sq. Ft.	\$.30	\$.33	-9.0%

#### **PLAN TO ACHIEVE TARGETS:**

Continue to seek funding from the Legislature and continue to promote and award loans to institutions.

#### **OTHER FACTORS AFFECTING PERFORMANCE:**

**Factors Beyond Agency's Control that Affect Performance:** Some factors influencing this measure are beyond our control. For example, if a building significantly changes its operation pattern -- more students, more hours of operation, adds air conditioning -- this will reflect in the energy use per square foot calculation and mask part of the efficiency gains achieved by our financing program. Survey research methods to eliminate this variation from program evaluation are very difficult and expensive.

**OBJECTIVE #7:**

Maintain the utilities' ability to attract capital at a reasonable cost.

**Measure:** Interest rates on new bond issues of Minnesota utilities and the national average interest rates on new utility bond offerings.

Average Interest Rate Comparison	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
MN Average Interest Rate	7.68%	6.93%	6.19%	6.24%
National Average Interest Rate	8.32%	7.90%	6.84%	6.97%

**DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** The average interest rate is the yield to maturity on long-term debt.

**Rationale:** By keeping interest rates on utility bond issues low, the Department helps the citizens of Minnesota in two ways: a healthier business environment is created and that, in turn, lowers the fees that the utilities charge for service. Both ratepayers and stockholders benefit.

**Data Source:** Data on the bond issues is published in various newspapers (such as *The Wall Street Journal*) and is also available from Standard and Poors and Moody's.

**DISCUSSION OF PAST PERFORMANCE:**

Utilities in Minnesota have continued to issue debt at rates significantly below the national average.

**PLAN TO ACHIEVE TARGETS:**

In all utility-related proceedings, we will continue to address the needs of utilities to attract capital at reasonable rates. We will also consider the utilities' financial health when developing our energy policies.

**OTHER FACTORS AFFECTING PERFORMANCE:**

**Factors Beyond Agency's Control that Affect Performance:** A company's credit worthiness is affected by many factors which are not under the Department's control. For instance, Minnesota's general business environment includes a number of factors, such as taxes, population growth and growth of Minnesota's Gross State Product, which the Department cannot control. Technical problems for the company, such as safety problems, are regulated by other state and/or federal agencies, but may affect the rate at which a firm can borrow money. The performance of utility management is also a key determination of a utility's capita cost.

**OBJECTIVE #8:**

To advocate effectively before the PUC to set rates for service and rates of return on utility investment. Possible measures of the effectiveness of the DPS would be the degree to which the Department's recommendations are accepted and adopted by the PUC.

Measure (A): To maintain the utilities' allowed return on equity within a range deemed to be reasonable for comparable utility companies so that the utility companies will be able to attract capital at reasonable cost.

**Return on Equity Comparison**

<u>Company Name and Fiscal Year</u>	<u>Company Requested ROE</u>	<u>DPS Recommended Range</u>	<u>PUC Approved ROE</u>
<b>CY1992</b>			
Minnegasco	13.00%	11.00-12.00%	11.50%
Midwest Gas	13.00%	11.00-11.90%	11.50%
NSP Gas	12.50%	10.00-12.00%	11.47%
NSP Electric	12.50%	10.00-12.00%	11.47%
<b>CY1993</b>			
Minnegasco	12.00%	11.11%	11.00%
<b>CY1994</b>			
Minnesota Power	12.00%	11.00%	11.00%
<b>CY1995</b>			
Minnegasco	12.00%	11.00%	11.00%
Interstate Power-Electric	11.75%	11.00%	11.00%
Interstate Power-Gas	11.75%	10.70%	10.75%
<b>CY1996</b>			
Western Gas	11.00%	11.00%	11.00%
<b>CY1997</b>			
NSP Gas	12.00%	6.18%	8.70%
<b>CY1998</b>			
None			

**Measure (B):** The dollar value of reductions made to utility companies' requests for rate increases is one indication of the Department's success in consumer protection. The DPS goal is to achieve PUC approval of at least 75 percent of DPS recommended rate increase reductions. The following charts show information based on the fiscal year in which the case was filed.

	CY1994 \$ in (000s)	CY1995 \$ in (000s)	CY1996 \$ in (000s)	CY1997 \$ in (000)s
1) Company Requested Increase	\$34,350	\$31,314	\$431	\$18,504
2) DPS recommended \$ reductions*	(\$11,850)	(\$16,742)	(\$309)	(\$8,969)
3) \$ reductions* ordered by PUC	(\$11,421)	(\$14,051)	(\$309)	(\$5,091)
Reductions* sustained by PUC	96%	83.9%	100.0%	71%

**Statutory References:** M.S. Chapters 216, 216B, 216C and 237

<u>Fiscal Year</u>	<u>Number of Rate Cases</u>	<u>Increase Requested</u> \$ in (000s)	<u>Department Recommendations</u> \$ in (000s)	<u>Amount Allowed</u> \$ in (000s)
91	4	\$15,521	\$8,770	\$10,079
92	4	\$162,005	\$44,159	\$76,131
93	2	\$22,700	\$10,912	\$8,086
94	1	\$34,350	\$22,500	\$22,929
95	3	\$31,314	\$14,572	\$17,263
96	1	\$431	\$122	\$122
97	1	\$18,504	\$9,535	\$13,413

\* Reductions from the level requested by the Company.

#### **DEFINITION, RATIONALE, DATA SOURCE:**

**Definition:** Utility companies file petitions to raise customer rates for services provided by the utility company and to provide the companies return of their capital investments. The DPS analyzes the filings and makes recommendations to the PUC regarding the magnitude of the need for rate increases and appropriate returns on capital.

**Rationale:** The degree of harmony between the Department recommendations and the PUC decisions is a measure of the DPS's effectiveness in advocating before the PUC.

**Data Source:** This information comes from the utility rate case filings, the DPS testimonies, and the final Public Utilities Commission Orders.

#### **DISCUSSION OF PAST PERFORMANCE:**

The DPS has exceeded the goal of sustaining at least 75% of its recommended rate reduction in all years except 1997 where 71% of the recommended reductions were sustained.



**PLAN TO ACHIEVE TARGETS:**

We will aggressively pursue cost-effective energy efficiency through review of utility conservation improvement plans, utility financial incentives for conservation projects, integrated resource planning for electric utilities, and efforts to educate the public on energy efficiency.

**OTHER FACTORS AFFECTING PERFORMANCE:**

*Factors Beyond Agency's Control that Affect Performance:* National and international supply and demand levels, which affect the prices of Minnesota goods and services, are outside of Department control. Some of this variation is accounted for by modifying nominal values to real values to remove the influences of inflation. Changes in the state's economy, if it continues to move away from agricultural and manufacturing to service jobs, will also affect this measure. Finally, changes in real energy prices can significantly affect the amount of energy-efficiency measures consumers are willing to implement.

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1998)		
	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$6,547	40.32%
From Special Revenue Funds	\$6,547	
Number of FTE Staff	1.4	1.10%

**PROGRAM GOALS:**

- To make the telephone network in Minnesota fully accessible to communication-impaired persons. (M.S. 237.50-237.56)

**DESCRIPTION OF SERVICES:**

The Department of Public Service has authority for the provision of telecommunications relay service for the State of Minnesota.

The mission of the TACIP program is to provide access to the telecommunications network for people with hearing, speech or mobility impairments residing in Minnesota. The TACIP program accomplishes this goal through the Equipment Distribution Program (EDP) and the Minnesota Relay Service (MRS). The EDP distributes a variety of specialized telecommunication devices to eligible communication-impaired persons throughout the state. The MRS provides a statewide telecommunications relay service that offers a means of communication between the users of TTY/TDDs and all other telephone users. The two programs are funded by a twelve-cent surcharge on each telephone customer access line in Minnesota.

The Minnesota Relay Service allows a person using a telecommunications device for the deaf (TTY/TDD) to communicate with any other telephone user. The service also works in reverse, allowing a person without a TTY/TDD to call a TTY/TDD user. Specially trained Communication Assistants (CAs) are available 24 hours a day, seven days a week, to relay calls. There is no extra charge to the user of the relay service.

The Equipment Distribution Program is responsible for distributing telecommunication devices to eligible Minnesota citizens, informing communication-impaired persons of services available through the program, providing training in the use of the telecommunication devices and maintaining the devices. The statute defines "communication-impaired" to mean certified as deaf, severely hearing-impaired, hard-of-hearing, speech-impaired, deaf and blind, or mobility-impaired if the mobility impairment significantly impedes the ability to use standard customer equipment.

The Department reimburses the Department of Human Services, Deaf and Hard of Hearing Services Division (DHHSD) through an interagency agreement for the administration of the Equipment Distribution Program. Services are provided through six DHHSD regional offices located around the state.

**BACKGROUND INFORMATION:**

**MEASURE TYPES: WORKLOAD (W)**

<u>Measure</u>	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>
Number of incoming calls	824,281	867,606	866,996	918,993

**PROGRAM DRIVERS:**

The TACIP program is affected by the number of incoming calls and the number and length of outgoing calls through the Minnesota Relay Service. The number of incoming calls has remained relatively constant for the past two years. The Department has two contracts for the provision of the Minnesota Relay Service. The DPS has a state-of-the-art telecommunications relay service center in Moorhead, Minnesota.

The provision of TRS is required under Title IV of the ADA. The Federal Communication Commission sets and enforces the rules and standards for TRS. The TACIP surcharge amount is currently at \$0.12 per month per access line. The surcharge cap is set in statute and is \$0.20 per month per access line.

**GOAL #1:** To make the telephone network in Minnesota fully accessible to communication-impaired persons.

**OBJECTIVE #1:** To meet the required Federal standards of performance.

<b>Measure:</b> To answer 85% of incoming calls within 10 seconds.
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	<u>FY1995</u>	<u>FY1996</u>	<u>FY1997</u>	<u>FY1998</u>	<u>FY1999e</u>	<u>FY2000e</u>
Number of days meeting FCC standard answer time period						
Actual	321	308	337	364	365	365
Target	365	365	365	365	365	365

**RATIONALE:**

All FCC rules and regulations are standardized across the country and designed to insure that telecommunications impaired persons receive services that are functionally equivalent to the services available to persons using standard customer premise equipment.

**DATA SOURCE:**

The TACIP program requires the telecommunications relay service provider to furnish a monthly statistical report detailing performance on a daily basis.

**PLAN TO ACHIEVE TARGETS:**

The TACIP program contracts with a telephone company (Sprint) to provide the facility, equipment and maintenance of the TRS and a local consumer organization that serves the communication-impaired persons (Communication Service for the Deaf) for the operation and maintenance of the telecommunication relay service. these contracts specify the performance requirements stated for this objective and require detailed monthly statistical reports for monitoring contract compliance.

**OTHER FACTORS AFFECTING PERFORMANCE:**

***Factors Beyond Agency's Control That Affect Performance:*** Natural disasters that affect regular telephone service (lightning, fire, floods, tornado, etc.) affect the provision of telecommunication relay services. In addition, any situation that would prevent or hinder employees from reporting to work (bad weather, strike, bomb threat, evacuations of center) will also affect the telecommunication relay service.

However, contingency plans have been made to answer as many calls as possible at other centers should any natural or man-made disasters occur.

# GLOSSARY

**Baseline forecasts:** A utility's forecast of the most likely consumption levels of gas or electricity.

**Biomass:** A generic term referring to any organic material used to generate electricity. Any plant that can be burned to generate electricity is biomass.

**BTU:** British Thermal Units is a generic measure of energy consumption. All energy consumption can be converted to BTU measurement.

**Certificate of Need:** A certificate of need must be obtained by any electric utility planning to construct a large electric generating facility.

**Conservation Improvement Program (CIP):** A legislative mandate requiring public utilities operating in the State of Minnesota to reinvest revenue dollars into programs supporting reduction of natural gas and electric consumption.

**Docket:** In regulation, the file containing all information pertaining to a particular regulatory matter. A docket is usually identified by a number that tells the year in which the docket was opened and which may, depending on the identification scheme employed by the particular regulatory body, convey other information about the matter addressed in the docket. Dockets assigned by the Minnesota Public Utilities Commission include an identification scheme for ascertaining the year in which the filing was made, the type of filing, the applicable utility, and the sequence in which the filing was made with respect to other filings during the year.

**Externalities:** Costs imposed on society that are not directly taken into account in the price of a product. For electricity production, these externalities are in the form of air emissions.

**GSP:** Gross State Product equals the value of all goods and services provided in a state.

**Incentive Regulation:** A nontraditional form of regulation where utilities are penalized or rewarded based on their ability to meet certain pre-set cost or service goals.

**Integrated Resource Plans (IRP):** Plans submitted biennially to the Public Utilities Commission that outline the utility's plans to meet growing electric load with conservation and new generating facilities.

**kWh:** Kilowatt Hour, or kWh, is a measure of electricity consumption. One kWh equals one-thousand watt hours of energy consumption.

**Load Management:** Devices applied to customers' equipment or techniques that enable electric utilities to reduce peak demand for electricity.

**MBTU:** One thousand BTUs.

**MCF:** Thousand-Cubic-Feet is a measure of natural gas consumption.

**NIST:** US Department of Commerce, National Institute of Standards and Technology

**NIST/OWM:** US Department of Commerce, NIST, Office of Weights and Measures

**NVLAP:** US Department of Commerce, NIST, National Voluntary Laboratory Accreditation Program.

PBX (Private Branch Exchange): A private telephone exchange connected to a public telephone network at the user's premises, which provides on-premise switching capability. Calls between extensions, as well as calls to and from the public network, may be connected by an attendant. PBX is also commonly used to refer to a Private Automatic Branch Exchange (PABX), in which the system provides for the transmission of calls internally between extensions and from the public telephone network.

Photovoltaics: An electricity generating technology that uses solar energy.

Renewable Resources: Electric generating resources that use renewable fuels such as wind or wood as fuel.

Return on Equity: The return on shareholders' investments, net of expenses, from sales of a product. Typically used as a measure of profitability.

Traceability: Assurance that Minnesota's standards are accurate. Traceability is assured by an unbroken chain of accurate calibrations, careful maintenance of the standards, and constant surveillance to ensure that the standards have not changed.

Uncertainty: No measurement is perfect. However, we can determine with a high degree of certainty that the value of an individual measurement falls within a known range. Uncertainty is the statistical determination of this range. Measurements provided by the metrology laboratory fall within very narrow ranges.