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Department of Public Service

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AGENCY PERFORMANCE REPORT

1996

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**PUBLIC SERVICE
DEPT**

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AGENCY : PUBLIC SERVICE DEPT

MISSION

The mission of the Minnesota Department of Public Service (DPS) is to provide public interest regulatory leadership for Minnesota consistent with the goals of enhancing the environment and quality of life. As a consumer protection agency, we accomplish this goal through developing, advocating and implementing equitable and economically efficient policies regarding energy, telecommunications and standards for weights and measures, and providing education, information and programs to the public.

The department is organized in 5 programmatic 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 person 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. 230.01). 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 what they thought were 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 where appropriate. The employees also assisted in collecting the data for the 1996 Performance Report.

Date : November 21, 1996

Agency Expenditure Summary

F.Y. 1996

NAME	(in thousands \$)	% of \$	FTE	% of FT
AGENCY: PUBLIC SERVICE DEPT	\$14,757	100.0%	134	100.0%
PROGRAM: TELECOMMUNICATIONS	\$769	5.2%	13	9.7%
PROGRAM: WEIGHTS & MEASURES	\$2,730	18.5%	43	31.9%
PROGRAM: INFORMATION & OPERATION MGT	\$1,531	10.4%	26	19.3%
PROGRAM: ENERGY	\$5,010	33.9%	50	37.6%
PROGRAM: TACIP	\$4,717	32.0%	2	1.6%

Agency : PUBLIC SERVICE DEPT

Program : TELECOMMUNICATIONS

EXPENDITURES AND STAFFING :

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$769	5.21%
From Special Revenue Funds	\$17	
General	\$752	
Number of FTE Staff:	13	9.66%

GOALS :

- Ensure that reliable telephone services are provided at just and reasonable rates in a nondiscriminatory manner throughout the state of Minnesota. (M.S. 237.09, 237.60)
- Promote the general economic welfare of Minnesota citizens by developing and advocating, in coordination with the Governor's Office, sound regulatory policies in proceedings before the Public Utilities Commission and the Federal Communications Commission in hearings conducted by the Minnesota Legislature and/or before the general public. (M.S.216A)
- Collect, monitor, develop and distribute information that allows consumers of telephone services to make informed decisions concerning the telecommunications services that they purchase. (M.S.237.02)
- Enforce the Orders of the Public Utilities Commission, Minnesota Statutes chapters 237 and 216 and the Federal Communications Commission. Ensure an orderly transition between a monopoly telecommunications environment and a competitive telecommunications market throughout the state. (M.S. 216A.07, 237.16, 237.081, 237.74)

DESCRIPTION OF SERVICES :

The purpose of this program is to represent and protect Minnesota consumers in all aspects of regulated intrastate monopoly telecommunications services. The Department achieves this goal through its intervention on behalf of the general public in all telecommunication 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, the Federal Communications Commission, or the Courts.

The Department's Telecommunications Program performs a wide variety of functions including the rate and service quality regulation of service providers offering local telecommunications services. This includes the

PUBLIC SERVICE DEPT**1996 Agency Performance Report**

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 service costs, demand forecasting, mergers and acquisitions, extension and withdrawal of service, infrastructure development, maintenance of service quality standards and the enforcement of the Public Utilities Commission's Orders and Rules.

In 1995, Minnesota's citizens spent more than \$1.5 billion to purchase telephone services from companies regulated by the Minnesota Public Utilities Commission. Further, providers of competitive services, such as long-distance companies and competitive local service providers, 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 telecommunications providers continue to require regulatory scrutiny as the transition is made from a monopoly to a more competitive environment.

BACKGROUND INFORMATION :

**MEASURE TYPES: ACTIVITIES (A), EFFICIENCY (E), OUTPUT (O), OUTCOMES (OC),
OTHER DATA (OD), UNIT COSTS (UC), WORKLOAD (W)**

**DATA BASED ON: CALENDAR YEAR (CY), FISCAL YEAR (FY), FEDERAL FISCAL YEAR
(FFY), BIENNIAL YEARS (BY)**

Type	Based	Measure	1994-95	1995-96
W	FY	Alternative Regulation	0	139
W	FY	Citizen Petitions	0	21
W	FY	Coin Telephone	97	67
W	FY	Complaints	16	20
W	FY	Depreciation	60	51
W	FY	DPS Initiated Investigation	59	18
W	FY	Elected Misc	149	195
W	FY	Election of Modified Regulation	10	17
W	FY	Emergency System (911)	8	13
W	FY	General Rate Case	0	0
W	FY	Misc Changes	218	223
W	FY	New Authority	64	103
W	FY	Property Aquisitions	28	34
W	FY	PUC Initiated Investigation	4	6
W	FY	Rule Making	1	1
W	FY	Service Area	3	10
W	FY	Telecomm Carrier	175	220
W	FY	Total	892	1128

PROGRAM DRIVERS :

The telecommunications industry is undergoing dramatic changes in technology. Further, there is an increasing interest in the telecommunications business. As a result of declining costs and newer technology, the Department is challenged with issues including competitive entry, obligations of the incumbent telecommunication service provider, service pricing, universal service, local calling areas, customer privacy, and the introduction of new services, service areas and service costs.

Goal 1 : Ensure that reliable telephone services are provided at just and reasonable rates in a nondiscriminatory manner throughout the state of Minnesota.

Objective 1 : At least 95% of Minnesota households will have at least one working telephone.

Measure 1 : Minnesota's results as calculated by the Federal Communications Commission and reported in its Monitoring Report, CC Docket No. 87-339.

	<u>F.Y.1990</u>	<u>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>
Percentage of households with one working telephone or more						
Actual	96.9%	97.1%	96.7%	96.1%	95.6%	97.3%

DEFINITION :

The proportion of households contacted in a Federal Communications Commission survey that indicated 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 four 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.

- Goal 1** : Ensure that reliable telephone services are provided at just and reasonable rates in a nondiscriminatory manner throughout the state of Minnesota.
- Objective 1** : At least 95% of Minnesota households will have at least one working telephone.
- Measure 2** : Bond ratings of largest four regulated monopoly providers shall remain investment grade.

	<u>F.Y.1990</u>	<u>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>
U S West Communications, Inc						
Actual	Aa3	Aa3	Aa3	Aa3	Aa2	Aa2
GTE Corp.						
Actual	A3	A3	A3	A3	A2	A2
Sprint/United Telecommunications						
Actual	Baa3	Baa3	Baa3	Baa3	A1	Baa3
Frontier/Rochester Telephone						
Actual	Aa2	A2	A2-A3	A3	A3	A3

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.

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:

Rating Symbols: Graduations of investment quality are indicated by rating symbols, each symbol represents a group in which the quality characteristics are broadly the same. There are nine symbols as shown below. These symbols as shown below are used to designate investment risk from the 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.

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. This is essential to the maintenance and enhancement of infrastructure necessary to support services required by both business and residential consumers.

OTHER FACTORS AFFECTING PERFORMANCE :

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

Goal 2 : Promote the general economic welfare of Minnesota citizens by developing and advocating, in coordination with the Governor's Office, sound regulatory policies in proceedings before the Public Utilities Commission and the Federal Communications Commission in hearings conducted by the Minnesota Legislature and/or before the general public.

Objective 1 : The rate of increase in average price for local telephone service provided by a monopoly provider will not exceed general inflationary rates.

Measure 1 : 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>F.Y.1990</u>	<u>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>
Average monthly revenue per line						
Actual	\$36.56	\$36.01	\$35.55	\$35.91	\$38.05	\$36.64
Annual change						
Actual	-4.9%	-1.5%	-1.3%	+1.0%	+2.8%	-3.7%
Annual CPI change						
Actual	+4.7%	+3.1%	+2.9%	+2.7%	+2.3%	+2.5%

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, Sprint/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, various taxes and directives from the Minnesota Public Utilities Commission and the Federal Communications Commission. 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 US West resulted in a settlement payment of \$5,000,000.

OTHER FACTORS AFFECTING PERFORMANCE :

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

Goal 3 : Collect, monitor, develop and distribute information that allows consumers of telephone services to make informed decisions concerning the telecommunications services that they purchase.

Objective 1 : Minnesota's consumers will continue to receive information about the provision and purchase of telecommunications services in Minnesota.

Measure 1 : Number of consumer brochures issued annually.

	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>
Brochures Issued						
Actual	2	2	2	2		

DEFINITION :

The number of brochures 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 service(s) 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 matter 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.

Goal 4 : Enforce the Orders of the Public Utilities Commission, Minnesota Statutes chapters 237 and 216 and the Federal Communications Commission. Ensure an orderly transition between a monopoly telecommunications environment and a competitive telecommunications market throughout the state.

Objective 1 : Advocacy of responsible telecommunication policies before the Public Utilities Commission will continue within time frames established by Commission rules.

Measure 1 : Number and percentage of completed dockets per year.

	<u>F.Y.1990</u>	<u>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>
Filing Received by PUC-Coin telephone						
Actual	74	138	399	244	115	101
Completions-Coin telephone petitions						
Actual	69	135	391	138	115	101
% completed-Coin telephone						
Actual	93%	98%	98%	57%	100%	100%
Filing received by PUC-All other						
Actual	651	572	705	646	875	811
Completions-All other						
Actual	479	481	496	800	851	796
% completed-All other						
Actual	74%	84%	71%	124%	97%	98%

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 an indicator of the effectiveness of the agency to complete its work in a timely fashion.

DATA SOURCE :

Docket book maintained by the Public Service.

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 1994 and 1995, the unit has not been able to complete as many matters as those filed in 1995.

PLAN TO ACHIEVE TARGETS :

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.

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.

Goal 4 : Enforce the Orders of the Public Utilities Commission, Minnesota Statutes chapters 237 and 216 and the Federal Communications Commission. Ensure an orderly transition between a monopoly telecommunications environment and a competitive telecommunications market throughout the state.

Objective 1 : Advocacy of responsible telecommunication policies before the Public Utilities Commission will continue within time frames established by Commission rules.

Measure 2 : Percentage of Department recommendations accepted by PUC shall equal or exceed 90% of all Department recommendations

	<u>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>
Recommendations sent to PUC-Coin telephone						
Actual	122	275	138	115	101	
Accepted Recommendations-Coin telephone						
Actual	122	275	138	115	101	
Percentage Approved-Coin telephone						
Actual	100%	100%	100%	100%	100%	
Recommendations sent to PUC-All other						
Actual	302	382	800	875	811	
Accepted Recommendations-All other						
Actual	296	370	773	851	796	
Percentage Approved-All other						
Actual	98%	97%	96%	97%	98%	

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 effectively represent the public interest.

DATA SOURCE :

Docket book maintained by the Department of Public Service.

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: Legal interpretations made by the Public Utilities Commission; acceptance of reasoning and analyses offered by other parties.

Agency : PUBLIC SERVICE DEPT

Program : WEIGHTS & MEASURES

EXPENDITURES AND STAFFING :

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$2,730	18.50%
General	\$2,730	
Number of FTE Staff:	43	31.89%

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. (M.S. 239.011)
- Ensure uniform and accurate commercial weighing and measuring in Minnesota: by inspecting and testing gasoline pumps, grocery scales, grain elevator scales, fertilizer scales, railroad scales, and a wide variety of other commercial weighing and measuring equipment; by inspecting packaged consumer commodities; by operating a voluntary registration program to allow privately employed service technicians to install and repair commercial weighing and measuring equipment; and by enforcing uniform, nationally recognized standards for weighing and measuring equipment and for packaged commodities. (M.S. 239.011)
- Assure the quality of motor fuels and heating fuels in Minnesota through a statewide sampling and testing program. Test petroleum product samples taken from refineries, terminals, distributors, and retail outlets. (M.S. 230.011 and 239.75)
- 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 Department of Public Service, Weights and Measures Division protects consumers and supports business in Minnesota's free enterprise markets by providing inspection and calibration services that:

- Promote and ensure equity and accuracy in weighing and measurement;
- Ensure petroleum product quality;
- Provide precision physical measurement services to industry; and
- Recover the full cost of these activities by charging direct fees from some services, and by charging a

petroleum inspection fee for petroleum related services.

BACKGROUND INFORMATION :

MEASURE TYPES: ACTIVITIES (A), EFFICIENCY (E), OUTPUT (O), OUTCOMES (OC),
OTHER DATA (OD), UNIT COSTS (UC), WORKLOAD (W)

DATA BASED ON: CALENDAR YEAR (CY), FISCAL YEAR (FY), FEDERAL FISCAL YEAR
(FFY), BIENNium YEARS (BY)

Type	Based	Measure	1994-95	1995-96
W	FY	Gasoline Pumps in Use	37,000	40,000
W	FY	Percent Inspected	93%	93%
W	FY	Number Inspected	34,405	37,394
W	FY	Compliance	92%	92%
W	FY	Retail Scales in Use	13,000	13,500
W	FY	Percent Inspected	90%	84%
W	FY	Number Inspected	11,775	11,313
W	FY	Compliance	94%	93%
W	FY	LPG Meters in Use	1,400	1,500
W	FY	Percent Inspected	86%	87%
W	FY	Number Inspected	1,198	1,311
W	FY	Compliance	70%	20*%
W	FY	Heavy Capacity Scales	3,600	3,600
W	FY	Percent Inspected	99%	99%
W	FY	Number Inspected	3,567	3,558
W	FY	Compliance	87%	87%
W	FY	Gasoline Tests	7,504	12,000
W	FY	Diesel/Heating Tests	1,875	2,094
W	FY	Compliance	98.5%	98.5%
W	FY	Oxy Gas Sold (gals.) in (000's)	862,000	1,265,000
W	FY	Compliance	98.5%	98.5%
W	FY	Lab Octane Tests	2,000	3,048
W	FY	On-site Octane Tests	0	400
W	FY	Compliance	99%	94%
W	FY	Gas Tank Inspections	10,047	10,321
W	FY	Compliance	95%	96%

- Goal 1** : 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.
- Objective 1** : To provide physical measurement services to businesses, at the highest levels of precision available in the United States, so that businesses can validate the accuracy, precision, and quality of manufacturing processes and manufactured products, and to enable businesses to export to European Economic Community nations. (Minnesota Statutes, Section 239.001, Subdivision 2)
- Measure 1** : Maintain NIST certification of the metrology laboratory, and traceability of the state standards to NIST. Minnesota Statutes, Section 239.011, mandate that 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, and forms the nation's only system to ensure uniformity in weighing and measurement. Continued traceability is dependent upon meeting a wide range of NIST performance standards. Outcome will be measured by continued certification of the laboratory and continued traceability of the state standards. Only Minnesota and Georgia have licensed ISO 9000 metrology laboratories.

	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999</u>
Certification by NIST						
Actual	Yes	Yes	Yes	Yes		
Traceability of Standard to NIST						
Actual	Yes	Yes	Yes	Yes		

DEFINITION :

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.

- Goal 1** : 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.
- Objective 1** : To provide physical measurement services to businesses, at the highest levels of precision available in the United States, so that businesses can validate the accuracy, precision, and quality of manufacturing processes and manufactured products, and to enable businesses to export to European Economic Community nations. (Minnesota Statutes, Section 239.001, Subdivision 2)
- Measure 2** : Maintain accreditation of the metrology laboratory under ISO 9002 and ISO/IEC Guide 25. Minnesota Statutes, Section 239.011, require the Division to maintain certification of the metrology laboratory, to the extent practicable, under appropriate ISO standards. This statutory requirement to pursue accreditation was enacted in 1993. Outcome will be measured by maintaining accreditation by the National Institute of Standards and Technology, National Voluntary Laboratory Accreditation Program (NIST/NVLAP)

	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999</u>
NIST/NVLAP Accreditation						
Actual	No	Yes	Yes	Yes		

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 The 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.

- Goal 1** : 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.
- Objective 1** : To provide physical measurement services to businesses, at the highest levels of precision available in the United States, so that businesses can validate the accuracy, precision, and quality of manufacturing processes and manufactured products, and to enable businesses to export to European Economic Community nations. (Minnesota Statutes, Section 239.001, Subdivision 2)
- Measure 3** : Maintain the lowest attainable statistical uncertainties for all measurement processes. The Division's services have value to industry only if the 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 will fall within very narrow ranges.

	<u>F.Y.1990</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>
Uncertainty improvements 1kg (parts per million)						
Actual	446.7	34.9	34.9	34.9	34.9e	34.9e
Uncertainty improvements 100g (parts per million)						
Actual	39.8	1.27	1.27	1.27	1.27e	1.27e
Uncertainty improvements 1g (parts per million)						
Actual	0.3059	0.0127	0.0127	0.0127	0.0127e	0.0127e

DEFINITION :

NIST certification and ISO accreditation are external recognition of the precision, reliability, and quality of the metrology laboratory's 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. The uncertainty chart shown above is an illustration of some of the improvements in the laboratory's capabilities. There are too many uncertainty parameters to include all of the data in this report.

RATIONALE :

Minnesota Statutes, Section 239.011, require the Division to maintain NIST certification and, to that extent practicable, to maintain ISO 9000 accreditation. The Division is also required to provide calibration and consultation services to businesses.

ISO 9000 accreditation will allow the metrology laboratory to provide "one-stop" measurement services to businesses that export products to European Economic Community nations. Under the ISO 9000 series of standards, any manufacturing process that involves a measurement of mass, dimension, volume, temperature, or density must be verified by an unbroken chain of calibrating tracing back to national standards and an accredited laboratory. The metrology laboratory provides 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 :

The data presented above were extracted from Weights and Measures Division statistical process control records and laboratory instrument control charts.

OTHER FACTORS AFFECTING PERFORMANCE :

Factors Beyond The Agency's Control That Affect Performance: Misapplications of ISO 9000 standards by NIST could prevent future accreditation of the laboratory.

Goal 2 : Ensure uniform and accurate commercial weighing and measuring in Minnesota: by inspecting and testing gasoline pumps, grocery scales, grain elevator scales, fertilizer scales, railroad scales, and a wide variety of other commercial weighing and measuring equipment; by inspecting packaged consumer commodities; by operating a voluntary registration program to allow privately employed service technicians to install and repair commercial weighing and measuring equipment; and by enforcing uniform, nationally recognized standards for weighing and measuring equipment and for packaged commodities.

Objective 1 : 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 1 : Inspect annually, or as often as possible, commercial weighing and measuring equipment in Minnesota, and maintain high compliance rates.

	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999</u>
Gasoline Pumps in Use						
Actual	34,000	37,000	40,000	42,000e	46,000e	48,000e
% Inspected						
Actual	59%	93%	93%	92%	89%	87%
Compliance Rate						
Actual	94%	92%	92%	92%	93%	93%
Retail Scales in Use						
Actual	12,000	13,000	13,500	13,500e	13,700e	13,800e
% Inspected						
Actual	90%	90%	84%	89%	91%	92%
Compliance Rate						
Actual	94%	94%	93%	92%	93%	94%
LPG Meters in Use						
Actual	1,300	1,400	1,500	1,500e	1,500e	1,500e
% Inspected						
Actual	75%	86%	87%	90%	90%	90%
Compliance Rate						
Actual	60%	60%	20%	23%	25%	35%
Heavy Capacity Scales						
Actual	3,400	3,600	3,600	3,800e	3,800e	3,800e
% Inspected						
Actual	100%	99%	99%	97%	97%	97%
Compliance Rate						
Actual	88%	87%	85%	85%	85%	85%

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 repaired.

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

Goal 2 : Ensure uniform and accurate commercial weighing and measuring in Minnesota: by inspecting and testing gasoline pumps, grocery scales, grain elevator scales, fertilizer scales, railroad scales, and a wide variety of other commercial weighing and measuring equipment; by inspecting packaged consumer commodities; by operating a voluntary registration program to allow privately employed service technicians to install and repair commercial weighing and measuring equipment; and by enforcing uniform, nationally recognized standards for weighing and measuring equipment and for packaged commodities.

Objective 1 : 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 2 : 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>C.Y.1994</u>	<u>C.Y.1995</u>	<u>C.Y.1996</u>	<u>C.Y.1997</u>	<u>C.Y.1998</u>	<u>C.Y.1999</u>
Dollars in (000s)						

Total Value = # of petro prod x price x 2 metered deliveries						
Actual	\$8,754,437	\$8,964,653	\$9,721,754	\$9,982,526e	\$1,033,708e	\$10,685,518e
Total combined losses from metered delv of petro. products						
Actual	\$17,876	\$19,238	\$20,862	\$21,422e	\$21,634e	\$22,374e
Total value - quantities of grain x Price x 3 weighings						
Actual	\$8,221,073	\$9,597,385	\$13,423,852	\$13,255,852e	\$13,836,668e	\$13,359,118e
Total loss = combined losses from all weighing of grains						
Actual	\$19,927	\$23,513	\$31,915	\$31,416e	\$32,585e	\$31,460e

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**Total value=quantity of
LPG sold at retail x unit
price**

Actual	\$289,800	\$354,655	\$368,155	\$381,600e	\$395,100e	\$408,600e
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**Total loss=combined
losses from metered retail
deliv. LPG**

Actual	\$6,085	\$7,447	\$6,258	\$5,727e	\$5,531e	\$5,622e
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**Total value=quantity
fertilizer x unit price x 2
weighings**

Actual	\$974,820	\$968,000	\$976,800	\$976,800e	\$976,800e	\$976,800e
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**Total loss=combined
losses from weighings of
fertilizer**

Actual	\$1,208	\$1,021	\$750	\$750e	\$664e	\$664e
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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 FY96, 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 the 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 The Agency's Control That Affect Performance: Staff turnover temporarily reduces staff resources, productivity, and revenue, but not costs.

Goal 2 : Ensure uniform and accurate commercial weighing and measuring in Minnesota: by inspecting and testing gasoline pumps, grocery scales, grain elevator scales, fertilizer scales, railroad scales, and a wide variety of other commercial weighing and measuring equipment; by inspecting packaged consumer commodities; by operating a voluntary registration program to allow privately employed service technicians to install and repair commercial weighing and measuring equipment; and by enforcing uniform, nationally recognized standards for weighing and measuring equipment and for packaged commodities.

Objective 1 : 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 3 : Enforce uniform, nationally recognized standards. (NEW MEASURE) 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. Nation-wide 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>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999</u>
Model Weights and Measures Law						
Actual	Yes	Yes	Yes	Yes		
NIST Handbook-44						
Actual	Yes	Yes	Yes	Yes		
NIST Handbook-133						
Actual	No	No	Yes	Yes		
National Type Evaluation Program						
Actual	No	No	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 The Agency's Control That Affect Performance: None

- Goal 3** : Assure the quality of motor fuels and heating fuels in Minnesota through a statewide sampling and testing program. Test petroleum product samples taken from refineries, terminals, distributors, and retail outlets.
- Objective 1** : To protect Minnesota consumers and support Minnesota businesses by ensuring the quality of motor, heating, and industrial fuels distributed in Minnesota and promote air quality improvement by ensuring that motor fuels meet state and federal standards. (Minnesota Statutes, Section 239.011, and Sections 239.75 through 239.80)
- Measure 1** : Maintain reasonable 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. The Division will also promote air quality by ensuring that motor fuels meet state and federal requirements for oxygenation. The table below illustrates that the Division will continue to leverage minimal resources by shifting its product inspection emphasis to areas that prove to need additional attention. Minnesota Statutes, Section 239.011 and Sections 239.75 through 239.80.

	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999</u>
Total Petro sample tested						
Actual	7,000	9,379	14,094	9,400e	9,400e	9,400e
Compliance Rate						
Actual	98%	98.5%	98.5%	98.5%	98.5%	98.5%
Oxy Gasoline gals sold in (000s)						
Actual	323,000	862,000	1,265,000	1,407,000e	2,195,000e	2,194,000e
Compliance Rate						
Actual	98.5%	98.5%	98.5%	98.5%	98.5%	98.5%
Octane Tests (mobile lab)						
Actual	0	0	400	1,500e	1,500e	1,500e
Octane Tests (central lab)						
Actual	2,000	3,048	1,500	1,500e	1,500e	1,500e
Compliance Rate						
Actual	99%	94%	96%	97%	97%	97%
Tank Inspections						
Actual	5,000	10,047	10,321	10,600e	11,000e	11,000e
Compliance Rate						
Actual	90%	95%	96%	98%	98%	98%

DEFINITION :

- 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.

In FY94, gasoline oxygenation was required for only 4 months. This accounts for the small quantity of oxygenate sold in FY94. In FY96, the Division increased the number of samples tested in the petroleum lab. This was done to ensure compliance with statutory requirements for year-around gasoline oxygenation in the Twin Cities metropolitan area. Because compliance remained very high, the Division will reduce the number of samples tested in FY97. The staff resources will be shifted to octane testing, and to field inspection of gasoline pumps and retail scales. The shift will be designed to improve octane compliance, and to improve inspection frequency for the increasing number of gas pumps in commercial use in Minnesota.

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 petroleum laboratory database.

OTHER FACTORS AFFECTING PERFORMANCE :

Factors Beyond The 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).

Goal 4 : Recover the full operating cost of the Weights and Measures Division, including external overhead costs and previously unrecovered costs.

Objective 1 : To recover the full operating cost of the Weights and Measures Division, including external overhead costs and previously unrecovered costs.

Measure 1 : 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. (NEW MEASURE) 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>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999</u>	<u>F.Y.2000</u>
Cost + Overhead						
Actual	\$318,280	\$326,651	\$306,600e	\$340,000e	\$312,000e	\$290,000e
Income						
Actual	\$160,033	\$188,609	\$244,500e	\$296,300e	\$310,000e	\$330,000e

- Goal 4** : Recover the full operating cost of the Weights and Measures Division, including external overhead costs and previously unrecovered costs.
- Objective 1** : To recover the full operating cost of the Weights and Measures Division, including external overhead costs and previously unrecovered costs.
- Measure 2** : 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. (NEW MEASURE) 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>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999</u>	<u>F.Y.2000</u>
Non-Petroleum-Cost + Overhead						
Actual	\$1,306,735	\$1,426,790	\$1,436,090e	\$1,436,090e	\$1,436,090e	\$1,436,090e
Non-Petroleum-Income						
Actual	\$1,127,000	\$1,176,189	\$1,400,000e	\$1,565,000e	\$1,612,000e	\$1,625,000e
Petroleum-Cost +Overhead						
Actual	\$1,549,234	\$1,624,210	\$1,625,910e	\$1,607,249e	\$1,607,249e	\$1,607,249e
Petroleum-Income						
Actual	\$2,454,782	\$2,504,880	\$2,556,000e	\$2,607,120e	\$2,659,262e	\$2,712,448e

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 The 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.

Agency : PUBLIC SERVICE DEPT

Program : INFORMATION & OPERATION MGT

EXPENDITURES AND STAFFING :

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$1,531	10.37%
From Special Revenue Funds	\$108	
General	\$1,423	
Number of FTE Staff:	26	19.31%

GOAL :

- Educate and inform the public regarding energy, weights and measures, and telecommunications. (M.S. 216 B, M.S. 216 C, M.S. 237, M.S. 239)

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 inspection, 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, document imaging, library, 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.

- Goal 1** : Educate and inform the public regarding energy, weights and measures, and telecommunications.
- Objective 1** : To review, edit, update when necessary and distribute over 90 DPS publications annually.
- Measure 1** : Number of publications distributed per year.

	<u>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>
Number of publications distributed per year						
Actual	184,687	178,990	163,477	173,004	143,420	150,056

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.

Goal 1 : Educate and inform the public regarding energy, weights and measures, and telecommunications.

Objective 2 : To reach each adult Minnesotan approximately six times per year.

Measure 1 : Number of print media contacts per year.

	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>
Number of Print Media Contacts						
Actual	15,176,632	20,366,470	15,605,611	24,528,078		
Contacts/adult per year						
Actual	6.1	8.1	6.2	9.8		

DEFINITION :

Earned media refers to coverage by print and broadcast news 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 new conferences, new 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 Dominate 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.

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.

Agency : PUBLIC SERVICE DEPT

Program : ENERGY

EXPENDITURES AND STAFFING :

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$5,010	33.95%
From Federal Funds	\$747	
From Special Revenue Funds	\$1,435	
General	\$2,828	
Number of FTE Staff:	50	37.57%

GOALS :

- 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)
- 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)

DESCRIPTION OF SERVICES :

The Energy program has many functions including: (1) gas and electric utility public interest regulatory advocacy which involves evaluation of utility company rate proposals, service proposals, mergers, 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.

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 (OAH) 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.

BACKGROUND INFORMATION :

MEASURE TYPES: ACTIVITIES (A), EFFICIENCY (E), OUTPUT (O), OUTCOMES (OC), OTHER DATA (OD), UNIT COSTS (UC), WORKLOAD (W)

DATA BASED ON: CALENDAR YEAR (CY), FISCAL YEAR (FY), FEDERAL FISCAL YEAR (FFY), BIENNIUM YEARS (BY)

Type	Based	Measure	1994-95	1995-96
W	FY	Affiliated Interest	N/A	6
W	FY	Auto Fuel Adjustment	N/A	208
W	FY	Certificate of Need	N/A	3
W	FY	CIP (Conservation Improvement Program) plans	N/A	56
W	FY	CIP Complaints	N/A	6
W	FY	Cogeneration	N/A	0
W	FY	Complaints	N/A	2
W	FY	Depreciation	N/A	10
W	FY	DPS Initiated Investigation	N/A	2

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W	FY	Federal Dockets	N/A	6
W	FY	General Rate Cases	N/A	3
W	FY	Merger Review	N/A	4
W	FY	Misc Rate Changes	N/A	84
W	FY	Periodic Reports	N/A	3
W	FY	Property Acquisitions	N/A	2
W	FY	PUC Initiated Investigations	N/A	1
W	FY	Integrated Resource Planning (IRP)	N/A	6
W	FY	Rule Making	N/A	2
W	FY	Securities Review	N/A	7
W	FY	Service Area Disputes	N/A	30
W	FY	Total	N/A	435

- Goal 1** : Advocate for meeting Minnesota's energy needs at the lowest societal cost, while ensuring affordable and reliable energy services.
- 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 1** : Percentage comparison of rate increases in Minnesota and those for the bordering states. 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 for each calendar year should be at or below the average for those bordering states.

	<u>C.Y.1994</u>	<u>C.Y.1995</u>	<u>C.Y.1996</u>	<u>C.Y.1997</u>	<u>C.Y.1998</u>	<u>C.Y.1999</u>
Average Rate/kWh in MN						
Actual	5.63	5.65				
Average Rate/kWh in Border States						
Actual	5.84	5.81				
Average Annual % increase in MN						
Actual		0.36%				
Average Annual % increase in Border States						
Actual		-0.51%				
Average Rate/Mcf in MN						
Actual	4.36	3.95				
Average Rate/Mcf in Border States						
Actual	4.56	4.10				
Average Annual % increase in MN						
Actual		-9.40%				
Average Annual % increase in Border States						
Actual		-10.09%				

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 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 the Federal Energy Information Administration.

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, rate increases are not continuous, but rather occur in lump sums when rate cases are filed.

Goal 1 : Advocate for meeting Minnesota's energy needs at the lowest societal cost, while ensuring affordable and reliable energy services.

Objective 2 : Maintain the utilities' ability to attract capital at a reasonable cost.

Measure 1 : Interest rates on new bond issues of Minnesota utilities compared to the national average interest rates on new utility bond offerings.

	<u>C.Y.1994</u>	<u>C.Y.1995</u>	<u>C.Y.1996</u>	<u>C.Y.1997</u>	<u>C.Y.1998</u>	<u>C.Y.1999</u>
MN Aver. Interest Rate						
Actual	7.68%	6.93%				
National Aver. Interest Rate						
Actual	8.32%	7.90%				

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 :

In 1994 and 1995 utilities in Minnesota were able 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 need 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 capital cost.

- Goal 1** : Advocate for meeting Minnesota's energy needs at the lowest societal cost, while ensuring affordable and reliable energy services.
- Objective 3** : To advocate effectively before the PUC to set rates for service and rates of return on utility investment. A measure of the effectiveness of the DPS is the degree to which the Department's recommendations are accepted and adopted by the PUC.

Measure 1 : To maintain the utility's 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. Note: Rate of return may not be calculated every year for each or any regulated company. This information depends on frequency of general rate case filings.

C.Y.1992 C.Y.1993 C.Y.1994 C.Y.1995 C.Y.1996 C.Y.1997

See Discussion of Past
Performance

DISCUSSION OF PAST PERFORMANCE :

Calendar Year Company Name	Company Requested ROE	DPS Recommended Range ROE	PUC Approved ROE
C.Y. 1992			
Minnegasco	13.00%	11.00-12.00%	11.50%
Midwest Gas	13.00%	11.00-11.90%	11.50%
NSP Gas	12.50%	11.00-12.00%	11.47%
NSP Electric	12.50%	10.00-12.00%	11.47%
C.Y. 1993			
Minnegasco	12.00%	11.10%	11.00%
C.Y. 1994			
Minnesota Power	12.00%	11.00%	11.00%
C.Y. 1995			
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%
C.Y. 1996			
Western Gas	11.00%	11.00%	Pending

- Goal 1** : Advocate for meeting Minnesota's energy needs at the lowest societal cost, while ensuring affordable and reliable energy services.
- Objective 3** : To advocate effectively before the PUC to set rates for service and rates of return on utility investment. A measure of the effectiveness of the DPS is the degree to which the Department's recommendations are accepted and adopted by the PUC.

Measure 2 : 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 dollar reductions. The following charts show information based on the fiscal year in which the case was filed.

	<u>C.Y.1991</u>	<u>C.Y.1992</u>	<u>C.Y.1993</u>	<u>C.Y.1994</u>	<u>C.Y.1995</u>	<u>C.Y.1996</u>
***** Chart 1 of 2						

Company Requested Increase in (000s)						
Actual	\$15,521	\$162,005	\$22,700	\$34,350	\$31,314	\$431
DPS recommended \$ reductions in (000s)						
Actual	\$-6,751	\$-117,846	\$-11,728	\$-12,100	\$-16,742	\$-309
\$ reductions ordered by PUC in (000s)						
Actual	\$-5,442	\$-85,874	\$-14,614	\$-11,421	\$-14,051	\$Pending
% of DPS \$ reductions sustained by PUC						
Actual	80.6%	72.8%	100%	94.4%	83.9%	Pending%
*****Chart 2 of 2						

Number of rate cases						
Actual	4	4	2	1	3	1
Company increases requested in (000s)						
Actual	\$15,521	\$162,005	\$22,700	\$34,350	\$31,314	\$431
Department recommendations in (000s)						
Actual	\$8,770	\$44,159	\$10,972	\$22,500	\$14,572	\$123
Amount allowed by PUC in (000s)						
Actual	\$10,079	\$76,131	\$8,086	\$22,929	\$17,263	\$Pending

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 concurrence 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 filing, DPS filed testimony, and the final Public Utilities Commission Orders.

DISCUSSION OF PAST PERFORMANCE :

In Fiscal Year 1991 we exceeded our goal and in Fiscal Year 1992 we fell just short. The DPS exceeded its goal in Fiscal Years 1993, 1994, and 1995.

PLAN TO ACHIEVE TARGETS :

We will continue to develop sound financial recommendations in utility rate cases and defend them vigorously before the Minnesota Public Utilities Commission.

OTHER FACTORS AFFECTING PERFORMANCE :

Factors Beyond Agency's Control That Affect Performance: The DPS is not the only intervenor in utility rate filings. In some instances, some of the changes may be the result of issues of other intervenors. Other factors beyond the agency's control include withdrawn petitions and other legal factors, such as misconduct, which may cause the Commission to totally reject a company's case.

Goal 2 : 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.

Objective 1 : Improve the efficiency of our energy use per real dollar of Gross State Product by 30 percent by 2020, while lowering the total energy cost per real dollar of Gross State Product.

Measure 1 : Btus per real dollar of Gross State Product.

	<u>F.Y.1990</u>	<u>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>
Energy Use per GSP in (000s) of Btus/\$						
Actual	11.384	11.701	11.294	10.964	10.737	
% Change from 1990 (base Yr.)						
Actual		2.78%	-0.79%	-3.69%	-5.68%	

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 eliminated 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 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.

Goal 2 : 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.

Objective 2 : Ensure that investor owned utilities meet statutorily required Conservation Improvement Program (CIP) spending levels by the end of 1995, and continue to meet their required spending levels in succeeding years.

Measure 1 : Comparison of actual performance to the Commissioner's required budget goals.

	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>
Required utility CIP investment \$ in (000s)						
Actual	\$24,284	\$26,593	\$28,901	\$31,209	\$40,673e	\$40,673e
Actual utility CIP investment \$ in (000s)						
Actual	\$34,333	\$52,466	\$65,353	\$81,905	\$64,529e	\$55,986e

DEFINITION :

Spending levels required under the statute are 1.5 percent of gross revenue for electric investor-owned utilities and 0.5 percent for gas investor-owned utilities. 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.

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 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 review 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 have far exceeded the statutory requirements from 1992 through 1995.

PLAN TO ACHIEVE TARGETS :

The DPS will continue to aggressively monitor utility companies' required CIP program expenditures and monitor the energy savings produced by approved CIP projects.

OTHER FACTORS AFFECTING PERFORMANCE :

Factors Beyond Agency's Control That Affect Performance: None

- Goal 2** : 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.
- Objective 3** : Reduce the energy use and energy cost of local government buildings and services by providing low cost financing for energy efficient projects.
- Measure 1** : 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>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>
kWh savings in (000s)						
Actual	108,170	200,392	344,108	464,610	495,552	
kWh savings as % of sales						
Actual	0.38%	0.71%	1.21%	1.64%	1.75%	
Mcf savings in (000s)						
Actual			545	743	788	
Mcf savings as % of sales						
Actual			0.19%	0.29%	0.31%	

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 review done by Department of Public Service analysts and engineering staff.
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. That data base will provide a baseline to compare future energy savings into the rest of the decade.

DISCUSSION OF PAST PERFORMANCE :

kWh savings have increased consistently and significantly since 1991. Mcf savings have increased significantly since 1993.

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. The Department sees this as a concern, but not an overriding deficiency in our attempt to measure progress.

Goal 2 : 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.

Objective 3 : Reduce the energy use and energy cost of local government buildings and services by providing low cost financing for energy efficient projects.

Measure 2 : Annual Energy Savings and Annual Energy Cost Savings

	<u>F.Y.1991</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>
Actual Loans/\$ in (000s)						
Actual	\$2,200	\$3,200	\$5,100	\$4,800	SNA	SNA
Goal Loans/\$ in (000s)						
Actual	\$3,000	\$3,000	\$4,000	\$5,000	\$3,000	\$3,000
Annual Energy Cost Savings/\$ in (000s)						
Actual	\$428	\$428	\$571	\$714	\$428	\$428
Annual Energy Saving (MMBtu) in (000s)						
Actual	71.300	71.300	95.166	119.0	71.4	71.4

DEFINITION :

Btu stands for British Thermal Unit and is a recognized standard of energy measurement. To determine how efficient a given building is and to compare it to others, gross energy use in Btus is divided by the building's area in square feet.

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 measures 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 of 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:

Indicator	Participant	Non-Participant	% Difference
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 operations, 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.

Goal 3 : Promote a self-supporting, innovative energy industry with emphasis on renewable and other alternative energy development in Minnesota.

Objective 1 : Double the use of renewable energy by the year 2020.

Measure 1 : Gross renewable energy consumption in Btus.

	<u>F.Y.1990</u>	<u>F.Y.1992</u>	<u>F.Y.1993</u>	<u>F.Y.1994</u>	<u>F.Y.1995</u>	<u>F.Y.1996</u>
MN Renewable Energy Consumption (in trillions) Actual Btus						
Actual	118	147	162	177	179	180

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 1996 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 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.

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.

Agency : PUBLIC SERVICE DEPT

Program : TACIP

EXPENDITURES AND STAFFING :

	<u>(\$ in Thousands)</u>	<u>Percent of Department</u>
Total Expenditure	\$4,717	31.96%
From Special Revenue Funds	\$4,717	
Number of FTE Staff:	2	1.57%

GOAL :

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

DESCRIPTION OF SERVICES :

On July 1, 1995, the Department of Public Service (hereinafter DPS or Department) assumed authority for the provision of telecommunications relay service (TRS) for the State of Minnesota. Prior to that time, telecommunications relay service was administered by the Telecommunications Access for Communication Impaired Persons (TACIP) Board. As of July 1, 1995, the TACIP Board was eliminated and administrative oversight for the Minnesota Relay Service (MRS) was transferred to the Department and the Equipment Distribution Program was transferred to the Department of Human Services.

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.

The Minnesota Relay Service (MRS) 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

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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 premises equipment.

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

BACKGROUND INFORMATION :

MEASURE TYPES: ACTIVITIES (A), EFFICIENCY (E), OUTPUT (O), OUTCOMES (OC), OTHER DATA (OD), UNIT COSTS (UC), WORKLOAD (W)

DATA BASED ON: CALENDAR YEAR (CY), FISCAL YEAR (FY), FEDERAL FISCAL YEAR (FFY), BIENNIAL YEARS (BY)

Type	Based	Measure	1994-95	1995-96
A	FY	Number of incoming calls.	824,281	867,606

PROGRAM DRIVERS :

The TACIP program is affected by the number of incoming calls and the number and length of outgoing calls to the Minnesota Relay Service. The number of incoming calls has remained relatively constant for the past two years. The Department has recently established new contracts for the provision of the Minnesota Relay Service. Under the new contracts, several new features will be offered including an automatic number identification, call branding, caller identification and a customized customer database. Other new features will be available upon the construction by the vendors of a new state-of-the-art telecommunications relay service center in Moorhead, Minnesota. An increase in calls is expected based on the additional service being provided.

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 \$0.17 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.

Measure 1 : To answer 85% of incoming calls within 10 seconds.

	<u>F.Y.1995</u>	<u>F.Y.1996</u>	<u>F.Y.1997</u>	<u>F.Y.1998</u>	<u>F.Y.1999</u>	<u>F.Y.2000</u>
Number of days meeting FCC standard answer time period						
Actual	321	308	330e	365e	365e	365e
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 (lighting, 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 for 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 Unit 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.
INTERGRATED 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/OWM:	US Department of Commerce, NIST, Office of Weights and Measures
NIST:	US Department of Commerce, National Institute of Standards and Technology
NVALP:	US Department of Commerce, NIST, National Voluntary Laboratory Accreditation Program.
PBX:	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.
PHOTOVOLTIACS:	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.
ROTARY HUNT:	An arrangement which allows calls placed to seek out an idle circuit in a pre-arranged multi-channel group. If the line dialed is busy, the call will find the next open line to establish a through channel. Rotary hunt service provides access to two or more business or residence lines or trunks of a customer when the primary listed telephone number is dialed.
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.

APPENDIX