
ANNUAL PERFORMANCE REPORT

1994

MINNESOTA DEPARTMENT OF PUBLIC SERVICE

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1994 Annual Performance Report

CONTENTS/INDEX
Department of Public Service

	Page
AGENCY SUMMARY.....	1

PROGRAM 01: Telecommunications

Summary	Page
Fiscal Summary.....	3
Description of regulated telephone services.....	3
Background Description of Minnesota's utility regulatory process.....	4
Summary description of DPS performance objectives	
1. Minnesota's national universal service ranking (Obj. #1)	5
2. Comparison of Minnesota phone service cost to the Consumer Price Index (Obj. #2).....	6
3. Comparison of new filings received to filings completed (Obj. #3, Measure A).....	7
4. Comparison of recommendations made by the DPS to the PUC with the number of DPS recommendations adopted by the PUC (Obj. #3, Measure B).....	8
5. DPS consumer education and information performance (Obj. #4).....	9
6. Telephone company bond rating performance (Obj. #5).....	10
7. DPS performance relating to reviewing requests for competitive service operating authority (Obj. #6).....	11

PROGRAM 02: Weights and Measures

Summary	Page
Fiscal Summary.....	13
Program goals	13
Description of regulatory services provided.....	14
Summary description of DPS performance objectives	
1. Metrology Laboratory performance (Obj. #1, Measures A. B. & C.)	14
2. Commercial weighing and measuring inspection rates (Obj. #2, Measure A).....	16
3. Consumer and business financial weighing and measuring loss estimates (Obj. #2, Measure B)..	17
4. Motor, heating and industrial fuels quality testing performance measures (Obj. #3)	18

PROGRAM 03: Information and Operations Management

Summary	Page
Fiscal Summary.....	20
Program goals	20
Description of program services	20
Summary description of DPS performance objectives	
1. Publications distributed annually (Obj. #1).....	21
2. Print media performance measures (Obj. #2).....	22

PROGRAM 04: Energy

Summary	Page
Fiscal Summary.....	24
Program goals	24
Description of energy program services.....	25
Background Description of utility regulation process	25
Summary description of energy program performance	
1. Comparison of gas and electric utility measures rate increases with bordering states (Obj. #1).....	26
2. Renewable energy consumption (Obj. #2).....	27
3. Per capita energy consumption (Obj. #3)	28
4. Improvements in efficiency of energy use (Obj. #4)	30
5. Conservation Improvement Program spending levels (Obj. #5)	31
6. Energy savings resulting from Conservation Improvement Program investments (Obj. #6)	32
7. Energy savings generated by loan and grant programs (Obj. #7).....	34
8. Utility bond rating performance (Obj. #8)	35
9. Utility rate of return performance measurement (Obj. #9, Measure A).....	36
10. Comparison of company requested rate increases to DPS recommendations and PUC ordered rate changes (Obj. #9, Measure B)	36

GLOSSARY	39
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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.

Department of Public Service Spending and Staffing, Fiscal Year 1994

<u>Program</u>	<u>Estimated Expenditures</u>		<u>Full-Time Staff</u>	
	<u>Dollars</u> <u>(in Thousands)</u>	<u>Percent</u> <u>of Total</u>	<u>Positions</u>	<u>Percent</u> <u>of Total</u>
Telecommunications Regulation	\$1,035	10	12.4	9
Weights and Measures	2,822	26	45.6	34
Information and Operations Mgmt	1,610	15	27.7	20
Energy	<u>5,304</u>	<u>49</u>	<u>50.6</u>	<u>37</u>
Total	\$10,771	100%	136.3	100%
General Fund	\$7,787			
Special Revenue	2,200			
Federal Fund	554			
LCMR Fund	<u>230</u>			
Total	\$10,771			
Revenue Generated ¹				
Non-dedicated General Revenue				
Utility Assessments ²	\$5,568 ³			
Weights & Measures Fees	925			
W&M Petroleum Inspection Fees	<u>1,561⁴</u>			
Total	\$8,054			

Source: Department of Finance, Managers Financial Report and the Estimated and Actual Receipts report for FY 1994.

- 1 The revenues reported here are on a cash basis for FY 1994.
- 2 Includes costs assessed on behalf of the Attorney General's Office for utility regulatory matters.
- 3 This includes a one time \$600,000 increase in receipts due to an objective to accelerate the assessment process and represents six quarters of receipts collected in FY 94.
- 4 This is based on the actual cost for the Weights & Measures petroleum inspection costs plus an estimate of the indirect administrative costs which will be finalized in November of 1994.

ORGANIZATION: The department is organized into 4 programmatic areas: 1) Telecommunications; 2) Weights and Measures; 3) Energy; 4) Information and Operations Management.

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.

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

WAYS TO IMPROVE PROGRAM OUTCOMES: There are several areas in which statutory changes may be considered to increase the flexibility of particular programs to respond to changing needs:

AGENCY: Public Service, Department of:
PROGRAM: Telecommunications

1994 Annual Performance Report

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1994)

(\$ in Thousands)

General Fund:	\$727	10% of department's budget
Special Revenue:	<u>308</u>	
Total Expenditures:	\$1,035	
Revenue Deposited FY94*:	\$1,816	
Number of FTE Staff:	12.4	9% of department's staff

***This includes revenue collected for department administrative costs, statewide indirect costs and Attorney General's costs.**

PROGRAM GOALS:

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

DESCRIPTION OF SERVICES:

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

The Department's Telecommunications Program performs a wide variety of functions including: rate and service regulation of telephone service providers that offer local monopoly telecommunications services. This includes the analysis of new service offerings, maintenance of service area boundaries, determination of competitive entry criteria, alternative regulatory structures, and the enforcement of policies that are consistent with Minnesota Statutes and Federal mandates. The telecommunications

program is also involved in the resolution of customer complaints and inquiries, determination of costs, demand forecasting, mergers and acquisitions, extension and withdrawal of service, infrastructure modernization, maintenance of service quality standards and the enforcement of Public Utilities Commission Orders and Rules.

In 1993, Minnesota's citizens will spend more than \$ 3 billion in the purchase of telephone services from companies regulated by the Minnesota Public Utilities Commission. Further, providers of competitive services, such as long-distance companies, subject to fewer regulatory requirements, will collect hundreds of millions of dollars for the provision of intrastate services. Federal regulations and state laws result in the reduction of government regulation in markets that demonstrate competitive tendencies. Services provided by monopoly service providers continue to require formal regulatory scrutiny.

BACKGROUND INFORMATION:

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

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

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

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

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

PROGRAM DRIVERS:

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

AGENCY: Public Service, Department of:
PROGRAM: Telecommunications

1994 Annual Performance Report

OBJECTIVE #1:

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

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

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

DEFINITION, RATIONALE, DATA SOURCE:

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

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

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

DISCUSSION OF PAST PERFORMANCE:

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

OBJECTIVE #2:

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

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

<u>Year</u>	<u>Average Monthly Revenue Per Line</u>	<u>Annual Change</u>	<u>Annual CPI Change</u>
1993	\$35.91	+1.0 %	+2.7 %
1992	\$35.55	-1.3 %	+2.9 %
1991	\$26.01	-1.5 %	+3.1 %
1990	\$36.56	-4.9 %	+4.7 %
1989	\$38.45		

DEFINITION, RATIONALE, DATA SOURCE:

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

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

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

DISCUSSION OF PAST PERFORMANCE:

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

PLAN TO ACHIEVE TARGETS:

The Department plans to audit aggressively the monopoly providers of local telephone service. Unwarranted costs will be detected and complaints filed with the Public Utilities Commission when necessary.

AGENCY: Public Service, Department of:
PROGRAM: Telecommunications

1994 Annual Performance Report

OTHER FACTORS AFFECTING PERFORMANCE:

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

OBJECTIVE #3:

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

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

	1990		1991		1992		1993	
	Coin Telephone	All Other	Coin Telephone	All Other	Coin Telephone	All Other	Coin Telephone	All Other
Filings Received by PUC	74	651	138	572	399	705	244	646
Completions	69	479	135	481	391	496	138	800
Percentage Completed	93%	74%	98%	84%	98%	71%	57%	124%*

DEFINITION, RATIONALE, DATA SOURCE:

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

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

Data Source: Docket book of the Public Utilities Commission.

DISCUSSION OF PAST PERFORMANCE:

* From 1990-1992 the Telecommunications unit was able to complete fewer matters than were filed by the regulated entities. Additional staff members were added in 1992 and 1993 which enabled the division to substantially reduce its backlog in 1993.

PLAN TO ACHIEVE TARGETS:

Now that staff numbers have increased, the program backlog should continue to shrink even as new cases are filed. In addition, 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.

AGENCY: Public Service, Department of:
PROGRAM: Telecommunications

1994 Annual Performance Report

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.

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

	1991		1992		1993	
	Coin Telephone	All Other	Coin Telephone	All Other	Coin Telephone	All Other
Recommendations sent to PUC	122	302	275	382	138	800
Accepted Recommendations	122	296	275	370	138	773
Percentage Approved	100%	98%	100%	97%	100%	96%

DEFINITION, RATIONALE, DATA SOURCE:

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

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

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

DISCUSSION OF PAST PERFORMANCE:

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

OTHER FACTORS AFFECTING PERFORMANCE:

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

AGENCY: Public Service, Department of:
PROGRAM: Telecommunications

1994 Annual Performance Report

OBJECTIVE #4:

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

Measure: Number of consumer brochures issued annually.

Objectives

	<u>1993</u>	<u>1994</u>	<u>1995</u>
Brochures Issues	2	2	2

DEFINITION, RATIONALE, DATA SOURCE:

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

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

Data Source: The agency.

DISCUSSION OF PAST PERFORMANCE:

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

OTHER FACTORS AFFECTING PERFORMANCE:

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

OBJECTIVE #5:

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

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

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
U S WEST Communications, Inc.	Aa3	Aa3	Aa3	Aa3
GTE Corp.	A3	A3	A3	A3
Sprint/United Telecommunications	Baa3	Baa3	Baa3	Baa3
Vista*				
Rochester Telephone	Aa2	A2	A2-A3	A3

* Vista, previously Central Telephone of MN, was purchased by Rochester Telephone in June 1991 for 100% equity. Vista issued debt in a private placement in February 1993. This debt is not rated, however, est. @ mid to low Aa.

DEFINITION, RATIONALE, DATA SOURCE:

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

Rationale: This measure is one indicator of the regulatory risk borne by bondholders of a telephone company. The rating method used by Moody's is described as follows:

MOODY'S BOND RATINGS

Purpose: The system of rating securities was originated by John Moody in 1909.

The purpose of Moody's Ratings is to provide the investors with a simple system of gradation by which the relative investment qualities of bonds may be noted.

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

Aaa Aa A Baa Ba B Caa Ca C

Data Source: Moody's Investor Service.

DISCUSSION OF PAST PERFORMANCE:

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

AGENCY: Public Service, Department of:
PROGRAM: Telecommunications

1994 Annual Performance Report

PLAN TO ACHIEVE TARGETS:

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

OTHER FACTORS AFFECTING PERFORMANCE:

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

OBJECTIVE #6:

Competitive service providers will receive expedited analysis of requests for operating authority in Minnesota.

Measure: At least 80% of all applications for authority from Coin-telephone companies, telecommunications carriers and competitive access providers will be reviewed and sent to the PUC for action within 60 days.

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
Applications Filed	76	99	204	249
Applications Completed Within 60 Days	66	66	165	215
Percentage of Total Applications	87%	67%	81%	86%

DEFINITION, RATIONALE, DATA SOURCE:

Definition: The proportion of new authority petitions filed with the Public Utilities Commission by the Department of Public Service within 60 days of the filing date.

Rationale: This measure is one indicator of the agency's efforts to respond quickly, yet provide thorough analysis to the Public Utilities Commission, whenever competitive service providers request authority to operate in Minnesota.

Data Source: Public Utilities Commission docket control materials.

DISCUSSION OF PAST PERFORMANCE:

Timeliness decreased as number of applications rose dramatically. Staff size did not increase commensurate with this filing increase, which produced delays. Hiring of additional staff members improved staff productivity.

PLAN TO ACHIEVE TARGETS:

Maintain staffing levels consistent with division workload.

AGENCY: Public Service, Department of:
PROGRAM: Telecommunications

1994 Annual Performance Report

OTHER FACTORS AFFECTING PERFORMANCE:

Factors Beyond Agency's Control that Affect Performance: Incomplete or inaccurate applications made by telephone service provider; delays in the agency's investigation caused by the provider requesting authority.

AGENCY: Public Service, Department of:
PROGRAM: Weights and Measures

1994 Annual Performance Report

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1994)

(\$ in Thousands)

General Fund:	<u>\$2,822</u>	26% of department's budget
Total Expenditures:	\$2,822	
Revenue:		
Weights and Measures Fees	\$925	
Petroleum Inspection Fee	\$1,561	
Number of FTE Staff:	45.6	34% of department's staff

PROGRAM GOALS:

- Offer the highest level of mass measurement accuracy in the nation, outside of the National Institute of Standards and Technology (NIST). Mass, volume, and length measurement services are provided by the division's laboratory, which is certified by the NIST.
- Ensure uniform and accurate commercial weighing and measuring by inspecting and testing all of the state's gasoline pumps, grocery scales, grain elevator scales, railroad scales, and a wide variety of other equipment, and by issuing repair orders for noncomplying equipment or, in cases of serious violation, removing equipment from service until it can be repaired.
- Certify accuracy of repairs of weighing and measuring equipment by offering a voluntary program for service technicians. Participants in this "placing-in-service" program have their repair work monitored and are allowed to place new and repaired equipment into service. Registration and equipment calibration are renewed annually.
- Provide quality assurance for motor and heating fuel through a statewide sampling and testing program. Samples from major terminals and refineries are tested weekly and retail outlets are tested on a random sampling basis.
- Provide uniform highway load enforcement by testing permanent and portable law enforcement scales for state and local police agencies.
- Guarantee, by regular inspection, that commodities packaged by weight or measure carry accurate statements of weight or measure. Emphasis is on prepackaged food and agricultural commodities.
- Enhance environmental quality by posting motor oil and battery recycling information at all retail outlets where they are sold.

AGENCY: Public Service, Department of:
PROGRAM: Weights and Measures

1994 Annual Performance Report

DESCRIPTION OF SERVICES:

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

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

OBJECTIVE #1:

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

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

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

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>2000</u>
Traceability to NIST	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Measure (B): Achieve and maintain ISO registration.

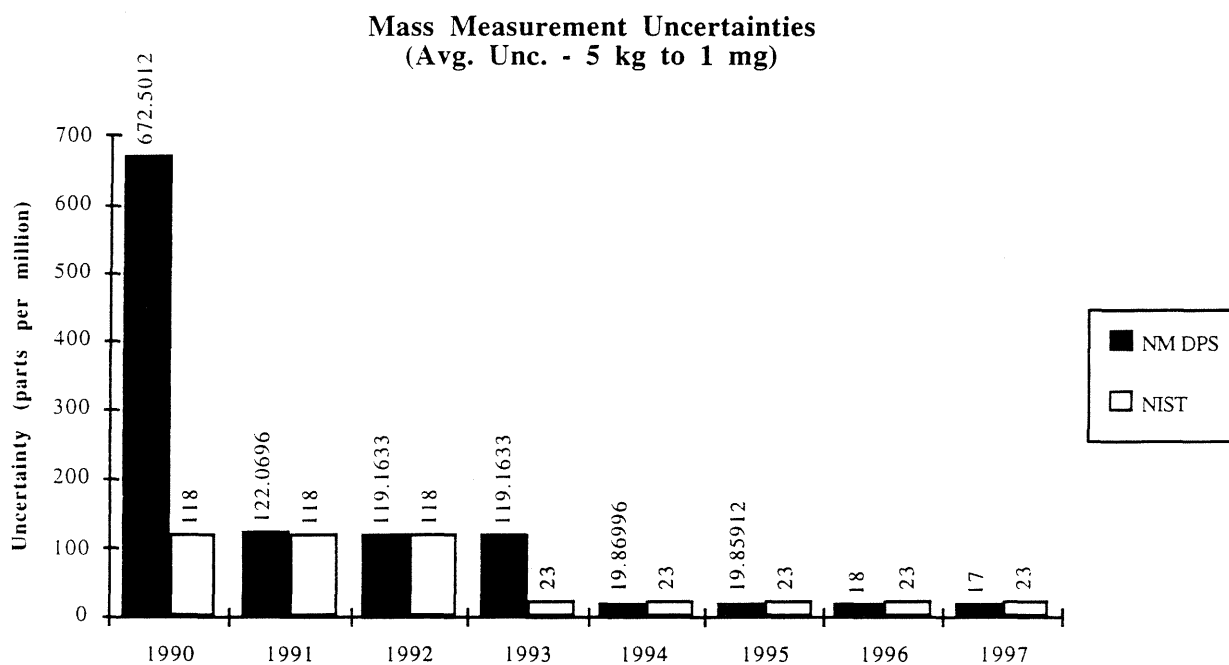
Under a statutory mandate, the Division's metrology laboratory must become registered as a qualified ISO 9000 service provider. Outcome will be measured by achieving and maintain ISO 900 registration

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>2000</u>
NIST/OWM	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Military Standard 45662A	No	No	Yes	Yes	Yes	Yes	Yes
NIST/NVLAP (ISO 9000)	No	No	No	No	No	Yes	Yes

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

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

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



DEFINITION, RATIONALE, DATA SOURCE:

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

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

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

ISO 9000 registration will allow the metrology laboratory to provide "one-stop" measurement services to businesses that export products to European Economic Community nations. Under ISO 9000 requirements, any manufacturing process that involves a measurement of mass, dimension, volume, temperature or density must be verified by an unbroken chain of

AGENCY: Public Service, Department of:
PROGRAM: Weights and Measures

1994 Annual Performance Report

calibrations tracing back to national standards. The metrology laboratory will provide this service without the need for expensive, time consuming audits performed by the client.

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

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

OTHER FACTORS AFFECTING PERFORMANCE:

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

OBJECTIVE #2:

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

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

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

	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>2000</u>
Gasoline Pumps in Use	20,000	22,000	25,000	30,000	34,000	35,000	40,000
% Inspected	100%	100%	80%	75%	59%	57%	50%
Compliance	92%	92%	93%	94%	94%	94%	93%
Retail Scales in Use	8,000	10,000	10,000	12,000	12,000	13,000	15,000
% Inspected	100%	100%	100%	100%	100%	90%	80%
Compliance	92%	93%	94%	93%	94%	94%	93%
LPG Meters in Use	1,100	1,200	1,200	1,200	1,300	1,400	1,500
% Inspected	80%	80%	80%	75%	75%	70%	60%
Compliance	60%	65%	75%	70%	70%	70%	70%
Vehicle Scales in Use	2,800	2,900	3,000	3,200	3,400	3,500	3,500
% Inspected	80%	95%	100%	100%	100%	90%	90%
Compliance	85%	87%	90%	90%	90%	87%	87%

Measure (B): Financial losses to consumers and businesses will be limited by improved compliance.

Inaccuracy causes financial losses to businesses or 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 business owner. 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 favor the buyer. The Division treats all of these errors as losses without regard for the direction of the error.

	Actual				Objectives		
	1990	1991	1992	1993	1994	1995	2000
Petro (gals x 1000)		3,200,000	3,232,000	3,264,000	3,296,000	3,301,000	3,466,000
Estimated Loss in gal.		1,440,000	1,454,400	1,468,800	1,236,000	1,236,000	1,039,800
Estimated Loss at 1994							
Prices in 1994 Dollars		\$1,584,000	\$1,599,840	\$1,615,680	\$1,359,600	\$1,359,600	\$1,143,780
Grain (but x 1000)	2,557,000	2,894,000	3,040,000	2,150,000	3,560,000	3,701,000	4,021,000
Estimated Loss	\$7,282,000	\$5,891,000	\$6,327,000	\$3,468,000	\$5,737,000	\$5,551,000	\$5,629,000
LPG (gals x 1000)		278,000	292,000	307,000	322,000	338,000	507,000
Estimated Loss		\$2,910,000	\$2,610,000	\$2,760,000	\$2,400,000	\$2,028,000	\$3,042,000
Fertilizer (tons)	2,070,000	2,100,000	2,231,000	2,355,000	2,675,000	2,815,000	3,023,000
Estimated Loss	\$1,451,000	\$1,585,000	\$1,395,000	\$1,259,000	\$1,175,000	\$1,095,000	\$1,038,000

DEFINITION, RATIONALE, DATA SOURCE:

Definition: Annual inspection is the unannounced inspection and test of every commercial weighing and measuring device in Minnesota. Compliance rates represent the percentage of weighing and measuring equipment that is found to be accurate and correct upon inspection. Financial losses are estimated by multiplying the absolute value of the cumulative errors of a specific type equipment by the approximate total value of the product sold annually through the equipment.

Rationale: The purpose of the program is to protect business and consumers from financial loss caused by inaccurate weighing or measuring. This goal is most easily achieved by frequent testing and inspection to ensure that weighing and measuring equipment is accurate.

Data Source: Weights and Measures Division inspection records.

OTHER FACTORS AFFECTING PERFORMANCE:

Factors Beyond Agency's Control that Affect Performance: Commercial weighing and measuring equipment has a practical performance limit. Accuracy and loss reduction cannot improve beyond this limit.

Inflation, or other uncontrollable factors that increase prices, will increase financial losses even if accuracy remains stable or improves.

OBJECTIVE #3:

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

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

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

	Actual				Yes		
	1990	1991	1992	1993	1994	2000	2000
Samples Tested	6,000	6,000	6,000	7,000	7,000	8,000	9,000
Compliance	97%	97%	97%	98%	99%	99%	99%
Oxy Gasoline (x 1000)	n/a	n/a	293,000	320,000	323,000	1,320,000	2,421,500
Compliance			99%	99.5%	99.5%	99.5%	99.5%
Octane Tests	0	135	700	1,000	1,500	2,000	2,000
Compliance		73%	90%	95%	99%	99%	99%
Consumer Loss		\$62,208,000	\$23,270,400	\$11,751,552	\$2,397,552	\$2,421,527	
Tank Inspections	3,000	3,500	4,000	4,500	5,000	5,000	5,000
Compliance	78%	80%	80%	85%	90%	95%	97%

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

- Testing samples of motor and heating fuels in the Division's central laboratory. The goal is to ensure that contaminated fuels are not sold in Minnesota.
- Testing gasoline octane, oxygenation and volatility in gasoline stations by on-site spectrophotometric methods. The goals are to ensure that consumers receive adequate octane, to ensure that state and federal air quality goals are met, and to take immediate enforcement action when problems are found.
- Inspecting petroleum storage tanks at wholesale and retail petroleum outlets. The goal is to ensure that predicts are not contaminated with water.
- Providing a quality control service to petroleum distributors. The goals are to assist distributors in meeting federal standards, and to encourage distributors to maintain product quality by providing laboratory tests paid for by distributors at their request.

Rationale: The purpose of this program is to protect businesses and consumers from poor quality 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. To improve compliance, the Division leverages its minimal staff resources by using

AGENCY: Public Service, Department of:
PROGRAM: Weights and Measures

1994 Annual Performance Report

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 regularly inspecting all petroleum storage tanks throughout the state.

One of the Division's non-traditional approaches to enforcement involves the use of immediate enforcement actions. This method provides a strong impetus to maintain product quality because the immediate penalty, temporary cessation of business, is very costly. Division inspectors have authority to shut down equipment and prohibit sale of a 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 education and encouragement to assist them in meeting federal gasoline standards relating to air quality standards.

Data Source: Weights and Measures Division inspection records.

Factors Beyond Agency's Control That Affect Performance: Extreme weather conditions can increase water contamination in storage tanks. Conflicting federal standards can hinder compliance efforts -- under some conditions it may be impossible for a distributor to meet all federal standards for a specific petroleum product.

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1994)

(\$ in Thousands)

General Fund:	\$1,454	15% of department's budget
Special Revenue:	\$43	
Federal Fund:	<u>\$113</u>	
Total Expenditures:	\$1,610	
Revenue:*		
Number of FTE Staff:	27.7	20% of department's staff

*Approximately 80% of General Fund costs are recovered as indirect costs allocated to the Energy, Telecommunications, and Weights and Measures programs. The 80% estimate is based on the actual amount recovered in FY93. The actual percent for FY94 cannot be determined until the assessment is finalized in November of 1994.

PROGRAM GOALS:

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

DESCRIPTION OF SERVICES:

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

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

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

OBJECTIVE #1:

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

Measure: Number of publications distributed per year.

	<u>F.Y. 1990</u>	<u>F.Y. 1991</u>	<u>F.Y. 1992</u>	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>
Number of Publications distributed per year	175,505	184,687	178,990	163,477	173,004

DEFINITION, RATIONALE, DATA SOURCE:

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

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

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

DISCUSSION OF PAST PERFORMANCE:

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

PLAN TO ACHIEVE TARGETS:

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

OTHER FACTORS AFFECTING PERFORMANCE:

Factors Beyond Agency's Control that Affect Performance: The agency cannot control attendance at builders shows, retailers conventions and the state fair, which constitute the major distribution sites for DPS publications.

Process Used: The DPS keeps an inventory record of publications printed and distributed to the public. These records document the number of publications distributed to consumers, schools and local community energy groups.

OBJECTIVE #2:

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

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

	<u>F.Y. 1993</u>	<u>F.Y. 1994</u>
Number of Print Media Contacts	15,176,632	20,366,470

DEFINITION, RATIONALE, DATA SOURCE:

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

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

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

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

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

DISCUSSION OF PAST PERFORMANCE:

Issued news release on all major DPS actions and interventions. Actively participate in answering Minneapolis Star Tribune Fixit Column letters in addition to distributing the Energy Tip of the Month to news media statewide.

PLAN TO ACHIEVE TARGETS:

Communications staff will continue to distribute advisories and releases about DPS activity. Will continue to monitor through subscription to 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, Department of

PROGRAM: Information and Operations Management

1994 Annual Performance Report

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

SUMMARY

EXPENDITURES AND STAFFING (F.Y. 1994)

(\$ in Thousands)

General Fund:	\$2,784	49% of department's budget
Special Revenue:	\$1,849	
Federal Fund:	\$441	
LCMR	<u>\$230</u>	
Total Expenditures:	\$5,304	
Revenue Deposited FY 94*	\$3,752	
Number of FTE Staff:	50.6	37% of department's staff

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

PROGRAM GOALS:

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

- protect consumers from unreasonable or unfair utility rates and practices through intervention and advocacy before the Minnesota Public Utilities Commission (PUC).
- ensure that gas and electric utility companies provide adequate and reliable services to their customers.
- provide fair and non-discriminatory treatment for residential, commercial and industrial utility customers.
- avoid unnecessary power plant construction with its high cost and adverse environmental effects by investigating and intervening in electric supply plans, focusing on such topics as: the achievable amounts of conservation and load management; the implementation of renewable resources; the accuracy of forecasted customer demand; and the reliability and cost-effectiveness of proposed supply-side resources, such as new power plants and life-extension of existing plants.
- mandate appropriate utility investment in Conservation Improvement Programs (CIP).
- assure the state's ability to cope with supply and price issues by actively monitoring and maintaining statewide data on energy supplies, demand, price, forecasts, trends and technologies.

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

- enable consumers to use energy economically by providing unbiased, accurate information on energy use and by providing guidance and technical assistance to local governments, community organizations, utilities and others in designing conservation and other energy programs.
- ensure that Minnesota consumers receive the benefits of new technologies improving the efficient use of energy, including renewable sources.
- ensure that Minnesotans benefit from efficient and safe building construction by training the professionals who implement these technologies and by designing and enforcing energy codes, lighting standards, and insulation product standards.
- provide financial assistance through state and federal programs to encourage schools, hospitals, cities and counties to become more energy-efficient.
- intervene on the state's behalf in energy matters at the federal level with Congress and agencies such as the U.S. Department of Energy, the Federal Energy Regulatory Commission and the Nuclear Regulatory Commission. This advocacy role is carried out in coordination with the Public Utilities Commission (PUC), the Minnesota Attorney General's Office, the Environmental Quality Board (EQB), and other state agencies both within and outside Minnesota.
- provide a healthy economic environment for utility companies so that they may obtain financing for needed equipment and plant improvement to provide adequate and reliable service at reasonable rates of interest.

DESCRIPTION OF SERVICES:

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

BACKGROUND INFORMATION:

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

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

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

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.

OBJECTIVE #1:

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

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

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

Measure:

	1994	1995	1996	1997	1998	1999	2000
Avg. Rate/KwH in MN							
Avg. Rate/KwH in Border States							
Avg. Annual % increase in MN							
Avg. Annual % increase in Border States							
	1994	1995	1996	1997	1998	1999	2000
Avg. Rate/Mcf in MN							
Avg. Rate/Mcf in Border States							
Avg. Annual % increase in MN							
Avg. Annual % increase in Border States							

DEFINITION, RATIONALE, DATA SOURCE:

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

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

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

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

DISCUSSION OF PAST PERFORMANCE:

We do not yet have data for calendar year 1994. Consequently, we cannot yet discuss our past performance.

PLAN TO ACHIEVE TARGETS:

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

OTHER FACTORS AFFECTING PERFORMANCE:

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

OBJECTIVE #2:

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

Measure: Gross renewable energy consumption in BTUs.

MN Renewable Energy Production (in trillions)	1992 Btu	1994 Btu	1996 Btu	2000 Btu	2010 Btu	2020 Btu
Actual	78					
Goal	65	69	74	82	103	130

DEFINITION, RATIONALE, DATA SOURCE:

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

Rationale: Each energy source, though measured in different physical units -- gallons or kilowatt hours -- can be converted to BTUs. Once converted to these units, equitable comparison such as percent of energy use and price per unit can be more accurately compared. The DPS in the 1992 *Energy Policy Report* set out a goal of doubling renewable energy use by the year 2020.

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

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

DISCUSSION OF PAST PERFORMANCE:

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.

PLAN TO ACHIEVE TARGETS:

Use of externalities in future resource acquisitions should create more renewable energy production. Continued funding of demonstration projects in wind, biomass and photovoltaics. Including renewable resource projects as a component of regulated utilities' CIP programs. Ensuring that NSP develops 475 MW of wind power. Promotion of 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: Certainly 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.

Process Used: Prior to developing the *1992 Energy Policy Report* and after its publication, the Department held public meetings to receive citizen and industry input on state energy policy. While some people and groups disagreed with the specific doubling goal, all parties agreed that increasing renewable energy use was in the best interest of the state and that it was important to use a quantifiable measurement of progress toward that goal.

OBJECTIVE #3:

Stabilize per capita energy consumption at 1990 levels. This level compares to a 25 percent increase in per capita energy consumption by 2020 under baseline forecasts.

Measure: BTUs per person.

Per Capita Energy Consumption MBTU/person	1988	1989	1990	1991	1992	1993
Actual	257.1	257.7	257.1	263.6	261.8	
Baseline Forecast	257.1	257.7	257.1	249.6	247.8	250.8

DEFINITION, RATIONALE, DATA SOURCE:

Definition: BTU stands for British Thermal Unit and is a recognized standard of energy measurement. If we divide the state's total energy use by the state's population, we get per capita energy use.

Rationale: To examine how efficiently energy is used as a society, we must use an indicator of gross energy use. One common societal basis is a per capita consumption comparison. By using a per capita test, we can see the energy use effects caused by growing or declining population that are hidden in gross energy consumption numbers.

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

DISCUSSION OF PAST PERFORMANCE:

The actual per capita use in 1991 and 1992 was slightly above our goal. It also exceeded our baseline forecast. However, we will not be able to assess our performance until we receive data for the years beyond 1992 -- when we first established our goal.

PLAN TO ACHIEVE TARGETS:

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

OTHER FACTORS AFFECTING PERFORMANCE:

Factors Beyond Agency's Control that Affect Performance: Statewide population trends are outside the control of the department.

Process Used: Prior to developing the *1992 Energy Policy Report* and after its publication, the Department held public meetings to receive citizen and industry input on state energy policy. While some people and groups disagreed with the specific stabilizing goal, all parties agreed that reducing per-capita energy use was in the best interest of the state and that it was important to use a quantifiable measurement of progress toward that goal.

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

OBJECTIVE #4:

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

Measure: BTUs per real dollar of gross state product.

Energy Use per GSP in thousand BTU/dollar	1988	1989	1990	1991	1992	1993
Actual	11.651	11.443	11.384	11.701	11.294	
Baseline Forecast	11.651	11.443	11.384	11.240	10.506	10.447

DEFINITION, RATIONALE, DATA SOURCE:

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

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

Data Source: The Department collects energy use data from several sources including annual utility reports, annual reports from the petroleum industry, petroleum tax records, and the U.S. DOE. This information is collected, processed and entered into a historical database. This database, maintained for over 15 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:

The Minnesota economy was healthier than anticipated in 1991 and 1992, which resulted in actual energy use per GSP exceeding forecasted levels. However, we will not be able to assess our performance until we receive actual data beyond 1992 -- when we first established our goals.

PLAN TO ACHIEVE TARGETS:

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

OTHER FACTORS AFFECTING PERFORMANCE:

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

OBJECTIVE #5:

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

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

	1991	1992	1993	1994	1995	1996
	\$(000,)'s	\$(000,)'s	\$(000,)'s	\$(000,)'s	\$(000,)'s	\$(000,)'s
Required utility CIP investment	0	24,284	26,593	28,901	31,209	
Actual utility CIP investments	21,976	41,569	48,942			

DEFINITION, RATIONALE, DATA SOURCE:

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 probably most importantly, the ability of the program to be implemented in a cost-effective manner.

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

Data Source:

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

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

DISCUSSION OF PAST PERFORMANCE:

As shown above, the total expenditures by regulated utilities in 1992 and 1993 far exceeds the statutory requirement.

PLAN TO ACHIEVE TARGETS:

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

OTHER FACTORS AFFECTING PERFORMANCE:

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

OBJECTIVE #6:

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

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

	1991	1992	1993	1994
kWh savings	210,278,000	181,522,000	303,581,000	
kWh savings as % of sales	0.59%	0.51%	0.85%	
Mcf savings			374,365	
Mcf savings as % of sales			0.13%	

DEFINITION, RATIONALE, DATA SOURCE:

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

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

The Department, therefore, has interpreted the statutory requirement to also measure the benefits of meeting the law's spending requirements.

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 implementation of the project. Once a project has been in effect for at least one year, an evaluation is performed and estimates are recalculated to determine whether goals have been met or exceeded, and whether there are roadblocks to reaching the goals.

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

Data Source:

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

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

DISCUSSION OF PAST PERFORMANCE:

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

PLAN TO ACHIEVE TARGETS:

Continuation of diligent review of program cost effectiveness and feasibility for implementation. Increased emphasis on proportionally higher degrees of cost effectiveness within specific projects. Increased emphasis on project evaluation after completion.

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 thorough monitoring and evaluation and, therefore, will be better estimates, but will very rarely be absolute measurements. Nonetheless, the Department sees this factor as a concern, but not an overriding deficiency in our attempt to measure progress.

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

OBJECTIVE #7:

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

Measure: Annual Energy Savings
Annual Energy Cost Savings

	1991	1992	1993	1994	1995	1996
	(000s)	(000s)	(000s)	(000s)	(000s)	(000s)
Actual Loan/\$	\$2,200	\$3,200	\$5,100	\$4,800*	NA	NA
Goal Loan/\$	\$3,000	\$3,000	\$4,000	\$5,000	\$3,000	\$3,000
Annual Energy Cost Saving	\$428	\$428	\$571	\$714	\$428	\$428
Annual Energy Saving (MMBTU)	71.300	71.300	95.166	119.0	71.4	71.4

* to date

DEFINITION, RATIONALE, DATA SOURCE:

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

Rationale: We measure the success of our energy conservation financing programs by looking for changes in the energy use patterns of the building we serve. If our loans are having their desired or expected impact, the actual energy use in the school or public facility will decrease. The best measure of this performance measure is the energy use of a building measured in BTUs per square foot. As this number gets lower, the building is becoming more efficient, cheaper to operate, and (in general) less environmentally damaging. This building measure is very similar in concept to our 1992 Energy Policy Report goal of increasing energy efficiency measure in BTUs per dollar of gross state product.

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

DISCUSSION OF PAST PERFORMANCE:

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

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

Indicator	Participant	Non-Participant	Percent 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 operation, adds air conditioning -- this will reflect in the energy use per square foot calculation and mask part of the efficiency gains achieved by our financing program. Survey research methods to eliminate this variation from program evaluation are very difficult and expensive.

OBJECTIVE #8:

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

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

Average Interest Rate Comparison	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>
MN Average Interest Rate	7.68			
National Average Interest Rate	8.32			

DEFINITION, RATIONALE, DATA SOURCE:

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

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

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

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

DISCUSSION OF PAST PERFORMANCE:

In 1994 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 needs of utilities to attract capital at reasonable rates. We will also consider the utilities' financial health when developing our energy policies.

OTHER FACTORS AFFECTING PERFORMANCE:

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

OBJECTIVE #9:

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

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

Return on Equity Comparison

Company Name and Fiscal Year	Company Requested ROE	DPS Recommended Range	PUC Approved ROE
1991			
Interstate Power	12.90 %	10.53-11.56 %	10.90 %
Western Gas	13.22 %	11.00 % *	11.00 %
Peoples Gas	13.75 %	11.5-11.7 %	11.60 %
Northwestern Wisconsin	15.39 %	14.50 %	14.50 %
1992			
Minnegasco	13.00 %	11.00-12.00 %	11.50 %
Midwest Gas	13.00 %	11.00-11.90 %	11.50 %
NSP Gas	12.50 %	10.00-12.00 %	11.47 %
NSP Electric	12.50 %	10.00-12.00 %	11.47 %

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

1993

Minnegasco	12.00 %	11.10 %	Pending
Minnesota Power	12.50 %	11.00 %	Pending

* Stipulated Settlement

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

	Actual F.Y. 1991	Actual F.Y. 1992	Actual F.Y. 1993
1) Company Requested Increase	15,520,764	162,005,000	56,722,000
2) DPS recommended \$ reductions*	(6,750,940)	(117,845,903)	34,194,877
3) \$ reductions* ordered by PUC	(5,442,108)	(85,874,000)	Pending
Reductions* sustained by PUC	80.6 %	72.8 %	--

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

Fiscal Year	Number of Rate Cases	Increase Requested	Department Recommendations	Amount Allowed
91	4	15,520,964	8,770,024	10,078,656
92	4	162,005,000	44,159,097	76,131,000
93	2	56,722,000	22,527,123	Pending

* Reductions from the level requested by the Company.

DEFINITION, RATIONALE, DATA SOURCE:

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

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

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

DISCUSSION OF PAST PERFORMANCE:

In Fiscal Year 1991 we exceeded our goal and in Fiscal Year 1992 we fell just short. We have no data yet to evaluate our performance for Fiscal Year 1993.

AGENCY: Public Service, Department of:
PROGRAM: Energy

1994 Annual Performance Report

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 control include withdrawn petitions and other legal factors, such as misconduct, which may cause the Commission to totally reject a company's case.

GLOSSARY

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

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

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

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

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

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

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

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

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

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

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

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

MBTU: One thousand BTUs.

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

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

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

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

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

Photovoltaics: An electricity generating technology that uses solar energy.

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

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

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.