

Minnesota Attorney General: Administrative Rules Proceedings

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August 20, 2018

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Earl F. Colborn, Jr.

VICE PRESIDENTS
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TREASURER
Vusumuzi Zulu

LAW OFFICES

of the

LEGAL AID SOCIETY OF MINNEAPOLIS, INC.

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Rosetta C. Hood

October 26, 1979

Commissioner Juanita R. Satterlee
Public Service Commission
160 East Kellogg Boulevard
St. Paul, Minnesota

Dear Commissioner Satterlee:

Enclosed is a copy of the comments I recently addressed to Richard Delong concerning the Public Service Commission's proposed regulations on utility shut-offs.

Though my own work involves representing exclusively Senior Citizens, our office represents low-income clients of all ages throughout North Minneapolis. These utility shut-off regulations will have a profound effect on many of our clients. The comments I have prepared are equally applicable to these persons.

I urge you to become actively involved in insuring that the final utility regulations approved by the PSC reflect a sensitivity to the needs of the poor in Minnesota--particularly, the elderly poor. Thank you for your attention and the time you spend reading and considering the enclosed comments.

Sincerely,

Francesca Chervenak

M. Francesca Chervenak
Attorney at Law
Senior Citizens' Law Project

MFC:cn

Attach.

PRESIDENT
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October 29, 1979

Richard DeLong
Office of the Hearing Examiner
1745 University Avenue, Room 300
St. Paul, Minnesota 55104

Dear Mr. DeLong:

I am a staff attorney with the Legal Aid Society of Minneapolis. As part of our Senior Citizens Law Project, I represent a group known as the United Seniors. This is an organization of senior citizens based in North Minneapolis. As part of my representation of these clients, I would like to comment on the utility shut-off regulations proposed by the Public Services Commission. Many of the members of United Seniors are elderly with very low income and few resources. They, in particular, will be greatly affected by any regulations governing utility shut-offs. As their advocate, I would like to call your attention to a few of the major trouble spots in the regulations presently being considered.

One large gap in these proposed rules is the complete lack of due process provisions in the section dealing with the creation of payment agreements [see Part C(2)]. There are a number of ideal standards of reasonableness listed, yet there is no enforcement mechanism to ensure that payment agreements will, in fact, be reasonable. As the rules are now written, a resident could have his or her utilities disconnected for failure to comply with the payment agreement--whether that agreement is reasonable or not.

We have two proposals in response to this gap in due process procedures. The first is that the regulations be amended to contain definitive procedures for a formal hearing by an impartial arbitrator in those situations where the reasonableness of the proposed payment agreement is in dispute. This would be the ideal mechanism for protecting the interests of tenants and residential homeowners.

If such a formal hearing procedure is viewed as unfeasible, our second proposal is that the PSC adopt a procedure similar to that found in PSC Rule 303. Rule 303 is the current rule governing disputes in billing and service, and provides for the payment of the

disputed amount into an escrow account pending an informal investigation by the PSC. Under the proposed shut-off regulations, the utility is to offer the customer a specific plan called a "deferred payment plan" in which the customer would have to make an initial payment, and then make equal monthly payments sufficient to cover the past due amount plus estimated usage during the payment period. The payment period covers seven months--that is, from October through April. We suggest the money to be deposited in escrow be 1/7 of this amount, in other words, the amount of the first monthly payment. If the informal procedures of the PSC determine that the payment agreement is a reasonable one, the amount in escrow would then be given to the utility. This procedure could be implemented quite well, while still protecting the rights of the utility company during the continuation of utility services. The customer is assured that the utility will not discontinue his/her services during the course of the dispute, while the escrow account assures the utility will receive its money if the payment schedule is found acceptable. Variations on this scheme could be worked out in those cases where the dispute lasts longer than one month.

As the proposed regulations now stand, there are no due process protections available. The Commission should implement definitive standards to assure residents are adequately protected in their dealings with public utilities. A formal hearing is the most desirable solution--however, even the informal procedures of PSC Rule 303 would be better than the present proposed regulations.

The second major problem with the proposed rules is the procedures which govern the discontinuing of services to "occupied residential units". Part F outlines the steps the utility must follow in order to cut off services because of the tenant's or residential owner's failure to enter into a payment agreement. Part F allows the utilities to place the burden on the local welfare agency to make personal contact with the residential occupant. The agency is given ten days to make such a contact before utilities are cut off.

Such a procedure is grossly inadequate and particularly insensitive to the needs of elderly residents. Many of these elderly live alone and may become ill or unable to care for themselves and their affairs. In addition, many elderly residents have hearing or visual impairments that limit their ability to communicate. These occupants may have failed to enter into the payment agreement because of illness or some other legitimate reason. The county welfare department is already overworked, and it moves at the same snail's pace and with the same extensive amounts of red tape that encumber all governmental agencies. It is not reasonable to place on the welfare agency this additional burden of contacting residents whose utilities are scheduled to be cut off. Giving the agency only ten days to make a contact is even more unreasonable and exhibits a marked lack of familiarity with the slow pace of the welfare bureaucracy. As it is now, The Hennepin County Welfare Department uniformly advises all of its clients that benefit checks will <u>normally</u> be three days to a week late.

A better procedure would be to place the burden on the public utility to make a personal contact with the residential occupant before services are cut off. This "personal contact by the utility" is a procedure provided for in Part D which deals with residences "believed to be unoccupied". Such a procedure is even more imperative in a case of occupied premises where the situation is likely to be life-threatening. We believe a personal contact with the resident is absolutely necessary before the utility cut-off can occur. The welfare department could be a support agency in helping to reach the customer, but the main responsibility should rest on the utility intending to discontinue service.

There is a simple way to make the present proposed regulations implement this requirement of personal contact. That is, the regulations could state that occupied premises would be residences "believed to be unoccupied", if the welfare department fails to make contact within ten days. This would then kick-in the procedures for personal contacts by the utilities before a shut-off of services can occur. In connection with this, it would be possible to forbid shut-offs unliess supervised by local fire, police or public safety officials. This would not only assure that shut-offs were mechanically safe, but these individuals would have authority to enter and inspect the dwelling assuring the safety of its occupants.

We believe these suggested changes would be of great benefit to the clients I represent--both in terms of their physical safety and their legal rights. Thank you for the time you spend reading and considering these comments. I hope they will be of some help to you.

Sincerely yours,

Francesca Chervenak

M. Francesca Chervenak
Attorney at Law
Senior Citizens Law Project

SENIOR CITIZEN COALITION

of Northeastern Minnesota
206 West 4th Street, Duluth, Minnesota 55806
Telephone (218) 727-0207

Oct. 25, 1979

Commissioner Juanita Satterlee
7th Floor, American Center Bldg.
150 E. Kellogg Blvd.
St. Paul, MN 55101

Dear Ms Satterlee:

Enclosed is the Senior Citizen Coalition's remarks on the proposed Cold Weather Rule (PSC 299).

Thank you for your consideration.

Sincerely,

Geo Sundstrom ICD

George B. Sundstrom
Chairman, Utilities Committee
Senior Citizen Coalition of NE Minn.

cc

SENIOR CITIZEN COALITION
of Northeastern Minnesota
206 West 4th Street, Duluth, Minnesota 55806
Telephone (218) 727-0207

October 12, 1979

COMMENTS ON PROPOSED PSC RULE 299 (COLD WEATHER RULE)

The Senior Citizen Coalition represents over 10,000 low and moderate income senior citizens belonging to our 68 affiliate senior clubs. We have been involved with utility rates and other energy problems affecting people with fixed incomes for several years. We have some strong reservations about the proposed "cold weather rule". It does not appear to us to do enough to protect people from the potentially hazardous consequences of being unable to pay their utility bills.

Applicability. The term "affects the primary heat source" needs to be clarified. In most cases, electricity is not the primary heat source. However, most furnaces have electric fans or motors, and will not function properly without them. The rule should clearly prohibit electric disconnections altogether in the winter months.

Minimum Temperature Restriction. While it is clearly an improvement over the old rule, the minimum temperature restriction of 32° F is still too low. Severe health problems can occur at temperatures well over freezing, especially for the elderly or chronically ill. We suggest that 55° or 60° F would be more reasonable.

Notification of Welfare Agency. We are afraid that merely notifying a welfare or social service agency of an impending shutoff does not guarantee crisis intervention. Poor people often do not understand the workings of bureaucracies, and while under threat of disconnection might very well be confused. Unfortunately, having the agency informed does not guarantee a timely response.

Payment Agreements. More often than not the failure to pay a bill is due to inability rather than unwillingness. The consumer who finds himself in such a situation might not be helped even by what appears to be a reasonable repayment plan. Signing such an agreement may just put him deeper in the hole--some peoples' energy bills exceed their monthly social security allowances, and it's often difficult to pay for arrears along with present consumption when you couldn't afford the original bill. Fuel assistance programs, unfortunately, are not always timely and adequate. While we can't deny the importance of bills being paid, people's safety needs to be the top priority.

Tenant protection. While the proposed rule reasonably assumed a landlord able to pay, it does not appear to give the tenant any protection in the event that the landlord does not pay. Tenants should not be penalized for their landlord's inaction.

Summary. Although the proposed rule is a definite improvement over the previous rule, it falls way short of what we believe is needed. Rather than a set of guidelines for disconnections, we propose a rule that first prohibits winter disconnections, period. Only when people are guaranteed safety should the other problems be addressed.

MINNESOTA POWER & LIGHT COMPANY
30 WEST SUPERIOR STREET, DULUTH, MINNESOTA 55802
PHONE (AREA 218) 722-2641

KIRK O. KUWITZKY
ATTORNEY

RECEIVED
OCT 30 1979
OFFICE OF HEARING EXAMINERS

October 29, 1979

Mr. Richard DeLong
Office of Hearing Examiners
1745 University Avenue
St. Paul, MN 55104

Dear Mr. DeLong:

Please find enclosed Minnesota Power & Light Company's final comments regarding the "Proposed Rule Governing Disconnection of Service During Periods of Cold Weather."

Yours truly,

Kirk O. Kuwitzky

KOK:fvs
Enclosure

STATE OF MINNESOTA

OFFICE OF HEARING EXAMINERS

FOR THE PUBLIC SERVICE COMMISSION

RECEIVED
OCT 30 1979
OFFICE OF HEARING EXAMINERS

In the Matter of the Proposed Adoption of a Rule by the Public Service Commission Governing Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather and Repeal of PSC 299 Cold Weather Rule.

FINAL COMMENTS OF MINNESOTA POWER & LIGHT COMPANY

The following comments will address those issues which were raised by the Hearing Examiner, Commissioners, Commission staff or members of the public during the public hearings held regarding the captioned matter. Minnesota Power & Light Company will attempt to clarify and respond to criticisms of its testimony made by members of the public and Commission staff. However, MP&L recognizes a certain difficulty in trying to respond to criticisms that were all so obviously founded on an unwillingness by the staff, who professed otherwise, and certain members of the public to consider alternatives other than the proposed rule or more restrictive versions thereof.

SUBSTANTIAL CHANGE

Staff showed great concern about whether any change in the proposed rule might indeed be substantial enough to require reconvening of the hearing pursuant to the Administrative Procedures Act and the Rules of the Office of the Hearing Examiners. To that end, staff and in particular staff's attorney, persisted in soliciting an opinion as to what constituted "substantial change" from any person willing to render one. MP&L submits that such an inquiry is a legal issue which is more properly decided by the Chief Hearing Examiner who is charged with that responsibility (9MCAR §2.111). Staff was also overly preoccupied with extolling the virtues its own proposed cold weather rule due to the proximity of the winter heating season. They repeatedly warned that if their rule was not adopted, it was

doubtful that any similar rule could be adopted prior to next spring. MP&L is sorely disappointed that staff found it necessary to resort to such tactics. MP&L and other utilities were repeatedly told by staff that these hearings were to have taken place last spring or summer. Timely action by the Commission, as promised, would easily have avoided the possibility of not having a quality cold weather disconnect rule adopted prior to the next heating season. MP&L recognizes the woeful inadequacy of the present cold weather rule and recommends its rescission. However, MP&L cannot support the proposed rule in its present form simply to avoid reconvening the hearing. MP&L agrees with the Commission that a cold weather disconnect rule is a necessity for this state, however, MP&L cannot and will not accept responsibility for the Commission's failure to act on this issue in a timely and responsible manner.

FAILURE TO SATISFY "PURPA" REQUIREMENTS

MP&L once again submits that the Commission cavalierly rejected the standards established in §115 (g) of PURPA and proposes to allow all utility customers to take advantage of a rule which will impact on MP&L as if it was a disconnect moratorium. Section 115(g) expressly authorizes state regulatory agencies to establish termination procedures based on three factors which are mutually inclusive. A customer must be given reasonable prior notice of disconnection, disconnection must be especially dangerous to health and the customer must have established that he is unable to pay or can pay only in installments. The statute goes on to state that "such procedures shall take into account the need to include reasonable provisions for elderly and handicapped consumers." It is obvious the Commission either cannot or will not establish a rule incorporating the PURPA guidelines and has decided that a more satisfactory approach to the problem is to shift the burden to MP&L and other utilities. MP&L strongly supports a rule which will help those who truly need help whether they are elderly, handicapped or low income. The proposed rule should have established income guidelines or age limits below which utility services could not be terminated. In §2 of PURPA the Congress found a necessity to act for the protection of the public health, safety and welfare of its citizens. However, §115(g) expressly limits the findings of §2 to the low income, elderly or handicapped. MP&L believes that if it can propose a rule which more closely satisfies PURPA the Commission certainly has a higher obligation to develop a rule according to federal law rather than dismiss it as being "too cumbersome."

COLD WEATHER MONTHS

The Commission went to great lengths in its Statement of Need to factually document the need to establish cold weather months from November 1 to March 31. MP&L has no reason to doubt that the average temperature data submitted for these months is accurate. However, the staff presented no facts as required by law to substantiate the need for including the last fifteen days of October or the first fifteen days of April in the "cold weather months." In fact in its Statement of Need the staff resorted to a legal justification for including these dates because both time periods are reasonably proximate to periods where the average temperature is less than 32°F. Staff also admitted during the hearing that it looked at data for the time periods in question but had not submitted it in its Statement nor at the hearing. As facts justifying the inclusion of October 15-31 and April 1-15 were not presented, MP&L requests that the Hearing Examiner recommend that the "cold weather months" be shortened to November 1 - March 31.

FINANCIAL IMPACT OF COLD WEATHER RULE

Apparently much to staff's surprise, MP&L did not argue that the effect of last year's moratorium was financially devastating. Instead MP&L agreed and continues to agree that a new cold weather rule is necessary and for that reason proposed a rule that would require very few changes to the rule proposed by the Commission. Simply put, MP&L believes its rule is superior to the "scatter gun" approach proposed by the staff. The prevailing attitude of Commission staff and the Minnesota Public Interest Research Group is that if the utilities cannot prove (beyond a reasonable doubt) that they will be financially crippled by this rule, they have no justification for opposing the rule. It is unlikely that MP&L has or will suffer irreparably from whatever rule is imposed. Whatever the financial impact of this rule or similar shutoff moratorium may be, it is, to use an old adage, the ratepayers who will bear the burden.

MPIRG once again proved that statistics can be used to prove anything, particularly if data is misconstrued or omitted. The MPIRG representative claimed that neither NSP nor Minnegasco incurred arrearages any larger than in prior years. However, she failed to cite MP&L data submitted to the Commission on April 12, 1979, which does indicate that arrearages as a percent of sales for last February and March were inordinately high when compared to prior years. (See Attachment A) MP&L cannot conclusively state that this increase is solely attributable to last year's moratorium, however, Attachment A indicates the moratorium did impact at least partially on these figures. In broader terms the data might reflect the general state of the economy and people's inability to pay bills of any kind.

MPIRG continued to abuse the use of statistics when it claimed that many utilities, including MP&L, showed no unusual increases in bad write-offs since the expiration of the shutoff moratorium. These statistics were apparently taken from

reports prepared and filed pursuant to PSC Docket No. A8117-27 filed by MP&L with the Commission on August 15, 1979. (See Attachment B) For the year 1979 MP&L supplied data regarding bad debt write-offs for the period January-May. When compared to the same periods for 1975, 1976, 1977 and 1978 the numbers do show that greater amounts were written off in the first five months of this year than for any of the same months in prior years. Apparently MPIRG chose to compare the year end balances for prior years against the five month period for 1979. This approach somehow does not seem accurate and at a minimum is misleading.

The report generated pursuant to and in the form mandated by the PSC contains several other deficiencies which limit its usefulness for any purpose. These factors are itemized in MP&L's letter to the Commission dated August 15, 1979. (See Attachment B) Additionally, this data does not account for the individual business practices of Minnesota utilities. For example, for all practical purposes MP&L has not written off any bad debts since April of 1979. The reason for this is the Commission's decision in MP&L's most recent rate case which will result in a refund to its customers. Bad debt write-offs will not be made until the refund is completed. In general the refund will result in write-offs not being as high as they would have been without a refund.

Both the staff and MPIRG were very concerned that MP&L did not generate a "special study" which revealed the true impacts of last year's moratorium. Unfortunately, this is easier said than done. Even if MP&L had the personnel and computer capability available, which it does not, generating such a report would be extremely difficult. Without requiring its customers who are paying delinquent bills to give reasons for such late payment there is virtually no means available to acquire reliable data. Despite the fact that demanding this information from customers smacks of an invasion of privacy, MP&L anticipates its cashiers would

receive considerable verbal abuse if required to ask, "And why haven't you been paying your electric bill?"

WILLINGNESS TO PAY BILLS

A major issue of the hearing was the willingness of people to pay utility bills even if the utilities were stripped of the power to disconnect service during the winter months. Staff queried virtually every social services worker and senior citizen about the willingness of people to pay bills, and not surprisingly everyone of them said utility bills have been and will continue to be paid if at all possible. MP&L is in agreement with this claim. MP&L's experience has been that as a class senior citizens will make every effort to pay utility bills; oftentimes at the expense of other necessities. The only explanation for such an attitude is that this is the way most of these people were raised. MP&L's collection troubles occur with financially overextended families, students, transients, welfare recipients and other customers who do have the ability to pay utility bills but refuse to do so. The problem is that these customers are not endowed with the same values of the senior citizens and consequently, could care less if they pay their bills. It is these types of customers MP&L should be allowed to disconnect for nonpayment, not the senior citizens who admittedly struggle against large odds to pay their bills. It is in this respect that the proposed rule contains its most glaring deficiencies by failing to focus on those customers who need the safeguards of a cold weather disconnect rule.

CONCLUSION

MP&L has proposed, what it believes to be, reasonable and necessary amendments to one of the most complex customer service rules the Commission has ever proposed. The staff's apparent inability to understand the rationale of MP&L's earlier testimony is a true reflection of MP&L's attempts to decipher the proposed rule and the accompanying voluminous State of Need. MP&L is simply trying to work with what it was given by the Commission. MP&L believes that its recommendations will not work to the undue hardship of any customer who cannot pay for utility services. MP&L's proposal will weed out those customers who can pay.

A concern often repeated and usually demanded by both consumer advocates and the staff was that they needed flexibility to deal with the difficult problem of consumers inability to pay increasing utility bills. Apparently these parties believe that this flexibility should only flow in one direction and that it is necessary to prescribe in exhaustive detail every permissible action a utility may take while working with customers to assist them in making arrangements to pay utility bills. Only for the sake of uniformity could a rule be proposed and in all likelihood adopted which could conceivably force some of the state's smaller utilities out of business. MP&L and other utilities also need a certain degree of flexibility to adequately and fairly administer a cold weather disconnect rule. MP&L believes that its proposal provides this freedom where the Commission's proposed rule fails.

Comparison of Delinquent Residential* Service Accounts to Total Sales

Month & Year	Sales		60 Days Arrears				90 Days Arrears				
	Current Month	Inc. Over Last Year	No. of Customers	Current Month	Inc. Over Last Year	Pct. of Sales	No. of Customers	Current Month	Inc. Over Last Year	Pct. of Sales	% Inc. Over Last Year
Nov. 76	2,072,600	295,300	1,682	42,800	10,400	2.1	250	6,500	(2,600)	.3	
Dec. 76	2,385,100	434,300	2,074	47,400	1,500	2.0	281	5,900	(3,900)	.2	
Jan. 77	2,807,800	533,200	2,000	54,300	13,400	1.9	319	6,600	(2,500)	.2	
Feb. 77	2,699,500	475,100	2,079	62,500	18,700	2.3	356	9,300	(1,000)	.3	
Mar. 77	1,914,700	282,800	1,954	46,100	14,700	2.4	263	5,600	(100)	.3	
Nov. 77	2,236,900	361,400	2,092	52,700	9,900	2.4	382	10,100	3,600	.5	55%
Dec. 77	2,445,500	60,400	2,456	57,600	10,200	2.4	441	10,100	4,200	.4	71%
Jan. 78	2,885,100	77,300	2,120	62,600	8,300	2.2	456	12,700	6,100	.4	92%
Feb. 78	2,890,700	191,200	2,065	61,900	(600)	2.1	442	13,700	4,400	.5	47%
Mar. 78	2,776,800	862,100	2,117	63,100	17,000	2.3	373	13,100	7,500	.5	134%
Nov. 78	2,456,300	219,400	1,696	49,400	(3,300)	2.0	289	8,200	(1,900)	.3	(19%)
Dec. 78	2,914,400	468,900	2,521	75,900	18,300	2.6	434	12,400	2,300	.4	23%
Jan. 79	3,612,300	727,200	2,967	94,100	31,500	2.6	833	30,100	17,400	.8	137%
Feb. 79	3,400,800	510,100	3,445	123,400	61,500	3.6	1,156	46,500	32,800	1.4	239%
Mar. 79	3,088,000	311,200	3,954	149,600	86,500	4.8	1,378	64,700	51,600	2.1	394%

* Dollar figures were obtained by adjusting those found in the comparison of Delinquent Service Accounts to Total Sales (Exclusive of Large Power) Reports. Dollar amounts were adjusted by the percentage of residential sales as compared to total sales found in the aforementioned reports. Customer figures were adjusted by the percentage of residential customers as compared to total customers covered in aforementioned reports.

RECEIVED
OCT 30 1979
OFFICE OF HEARING EXAMINERS

MINNESOTA POWER & LIGHT COMPANY
30 WEST SUPERIOR STREET. DULUTH. MINNESOTA 55802
PHONE (AREA 218) 722-2641

September 14, 1979

Ms. Mary L. Harty, Secretary
Minnesota Public Service Commission
7th Floor, American Center Building
160 East Kellogg Boulevard
St. Paul, MN 55101

Dear Ms. Harty:

RE: Docket No. A 8117-27

On August 15, 1979, I submitted Minnesota Power & Light Company's response to the Commission's order in this matter to Mr. Stephan A. Finn. Since that time certain errors in the data submitted have been noted and I am enclosing corrected data with this letter.

For your convenience, I am enclosing only those portions of the original document that contained errors. Additionally, I have indicated the corrections in pencil directly adjacent to the original data. I have done this to allow your review of only the corrections which should preclude the necessity to peruse our complete filing.

Should you have any questions regarding this matter, please advise.

Sincerely,

Larry M. Esko

Larry M. Esko
Customer Program Coordinator

LME:lka

Enclosures

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

r	Month	1A Number of Terminations Customer Class Res.	Comm.	Ind.	1A Number of Del. Acc'ts.	1B Acc'ts. Rec. ($)
5	Jan.	10	0	0	2,234	6,917,148.26
	Feb.	9	1	0	2,236	7,079,536.58
	Mar.	10	0	0	2,683	7,055,889.33
	Apr.	4	0	0	Not Available	7,115,628.07
	May	13	2	0	2,491	Not Available
	June	7	0	0	2,360	7,099,775.64
	July	6	0	0	Not Available	6,981,420.57
	Aug.	14	0	0	2,245	7,527,014.23
	Sept.	4	0	0	1,912	7,288,557.89
	Oct.	13	0	0	1,943	6,941,522.70
	Nov.	11	0	0	1,966	7,511,665.17
	Dec.	4	0	0	2,362	7,725,113.53
L:		105	3	0	22,432	79,243,271.97

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	
Jan.	~~321~~ 53	2,488.75	
Feb.	~~445~~ 94	2,356.28	
Mar.	~~465~~ 107	~~2,881.23~~	3,662.16
Apr.	~~429~~ 60	~~1,774.93~~	1,574.54
May	~~387~~ 56	~~1,690.73~~	1643.21
June	~~338~~ 92	~~2,706.64~~	2,519.34
July	~~356~~ 36	3,907.63	
Aug.	~~433~~ 63	58,025.05	
Sept.	~~473~~ 61	2,268.05	
Oct.	~~527~~ 130	5,747.24	
Nov.	~~488~~ 85	3,503.01	
Dec.	~~505~~ 209	9,892.25	
AL:	~~5,167~~ 1,046	~~97,241.79~~	97,587.51

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

	2A			2B			2C			2D
	Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heating Degree Days
onth	Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
an.	2,080,161.64;	1,372,962.91;	3,551,873.20	59,152,551;	36,499,363;	231,869,961	3.5	3.8	1.5	1,713
eb.	1,997,203.15;	1,354,477.41;	3,597,630.94	56,092,498;	37,515,181;	232,686,447	3.6	3.6	1.5	1,479
lar.	1,896,749.72;	1,314,992.02;	3,535,897.97	52,542,721;	35,409,900;	227,471,483	3.6	3.7	1.6	1,447
pr.	1,905,357.61;	1,320,269.87;	3,773,851.31	52,149,037;	35,772,754;	243,702,228	3.7	3.7	1.5	1,013
lay	1,745,479.19;	1,231,695.23;	3,861,905.70	45,654,185;	31,827,860;	245,139,806	3.8	3.9	1.6	358
June	1,837,884.63;	1,231,839.29;	3,888,726.89	43,420,863;	32,055,458;	246,270,624	4.2	3.8	1.6	226
July	1,680,296.96;	1,246,803.08;	3,834,374.45	43,647,811;	32,343,290;	219,637,516	3.8	3.9	1.7	46
Aug.	1,749,014.82;	1,331,554.01;	4,087,577.95	45,807,300;	36,282,275;	242,892,424	3.8	3.7	1.7	129
Sept.	1,697,859.44;	1,265,558.25;	4,024,268.50	44,011,651;	32,947,476;	239,797,179	3.9	3.8	1.7	418
Oct.	1,710,787.59;	1,243,332.87;	4,119,361.98	44,542,134;	32,325,790;	240,174,738	3.8	3.8	1.7	561
Nov.	1,734,991.82;	1,284,319.37;	4,084,083.33	45,213,192;	33,740,157;	234,996,952	3.8	3.8	1.7	1,003
Dec.	2,015,787.62;	1,412,807.02;	4,162,261.10	54,751,476;	38,105,444;	243,978,892	3.7	3.7	1.7	1,642
:	22,051,574.19;	15,610,611.33;	46,521,813.32	586,985,419;	414,824,948;	2,848,618,250	~~45.2~~ 3.8	~~45.2~~ 3.8	~~19.5~~ 1.6	10,035

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Month	1A Number of Terminations Customer Class Res.	Comm.	Ind.	1A Number of Del. Accounts	1B Accounts Rec. ($)
Jan.	11	1	0	2,127	8,429,697.40
Feb.	19	0	1	2,291	8,638,741.12
Mar.	39	0	0	2,017	8,055,674.32
Apr.	58	2	0	2,182	7,988,359.69
May	43	2	0	2,113	8,839,198.42
June	24	2	0	2,244	8,769,111.57
July	29	1	0	2,277	8,678,283.27
Aug.	24	0	0	Not Available	8,921,674.34
Sept.	37	4	0	1,822	9,334,757.05
Oct.	44	1	0	1,905	10,056,134.52
Nov.	21	2	0	1,899	11,178,910.05
Dec.	4	0	0	Not Available	12,469,550.01
	353	15	1	20,877	111,360,091.76

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78 4/1/79 moratorium
Jan.	None	None
Feb.	~~252~~ 141	~~18,950.11~~ 19,240.30
Mar.	~~311~~ 192	~~1,851.99~~ 1,987.57
Apr.	~~477~~ 76	~~4,044.88~~ 4,226.14
May	~~437~~ 88	6,766.41
June	~~394~~ 69	~~18,697.48~~ 27,991.27
July	~~453~~ 75	3,510.93
Aug.	~~446~~ 95	9,995.15
Sept.	~~480~~ 56	2,180.85
Oct.	~~89~~ 46	~~1,024.32~~ 1,258.79
Nov.	~~478~~ 114	5,576.47
Dec.	~~487~~ 29	990.10
L:	~~4,304~~ 981	~~73,588.69~~ 83,723.98

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

	2A			2B			2C			2D
	Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heating Degree Days
Month	Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
Jan.	2,299,479.90;	1,533,726.09;	4,332,877.01	65,133,740;	41,536,111;	~~244,125,040~~ 246,545,040	~~3.5~~	~~3.7~~	~~1.8~~	1,867
Feb.	2,245,487.82;	1,546,306.22;	4,519,856.82	62,779,685;	42,207,670;	~~251,225,428~~ 256,095,428	~~3.6~~	~~3.7~~	~~1.8~~	1,279
Mar.	2,075,605.27;	1,490,798.59;	4,511,179.60	56,067,561;	39,809,291;	~~245,369,607~~ 249,853,609	~~3.7~~	~~3.7~~	~~1.8~~	1,325
Apr.	~~1,991,916.31;~~ 1,940,611.68	~~1,466,693.35;~~ 1,427,998.40	~~4,526,503.37~~ 4,399,492.53	50,432,533;	37,385,792;	~~246,069,324~~ 250,639,324	~~3.9~~ 3.8	~~3.9~~ 3.8	~~1.8~~	667
May	~~1,912,049.86;~~ 1,826,912.15	~~1,381,193.54;~~ 1,316,986.00	~~5,284,745.49~~ 5,093,996.75	47,214,719;	34,507,267;	~~252,020,120~~ 256,360,120	~~4.0~~ 3.9	~~4.0~~ 3.8	~~2.1~~ 2.0	440
June	~~1,966,400.99;~~ 1,748,327.70	~~1,408,235.63;~~ 1,409,461.25	~~5,394,563.88~~ 5,074,706.63	44,129,532;	35,887,939;	~~269,976,135~~ 274,496,135	~~4.5~~ 4.3	~~3.9~~ 3.8	~~2.0~~ 1.9	101
July	~~1,818,557.29;~~ 1,738,846.11	~~1,462,431.67;~~ 1,491,734.01	~~5,248,568.53~~ 5,409,325.30	44,434,301;	37,246,537;	~~247,354,220~~ 251,564,220	~~4.1~~ 3.9	~~3.9~~ 3.8	~~2.1~~ 2.0	35
Aug.	~~1,850,071.89;~~ 1,763,759.40	~~1,575,616.11;~~ 1,355,397.75	~~5,682,678.10~~ 5,849,272.59	44,158,529;	38,377,370;	~~282,331,085~~ 286,291,085	~~4.2~~ 3.9	~~4.1~~ 3.9	~~2.0~~ 1.9	112
Sept.	~~1,842,779.36;~~ 1,820,283.65	~~1,414,991.30;~~ 1,422,763.90	~~6,044,895.37~~ 6,052,034.40	45,043,360;	38,078,665;	~~301,173,583~~ 305,823,583	~~4.1~~ 3.9	~~3.7~~ 3.6	~~2.0~~ 1.9	31
Oct.	~~1,921,535.38;~~ 1,911,755.10	~~1,499,124.00;~~ 1,491,382.02	~~6,302,695.36~~ 6,930,694.32	46,379,181;	37,006,525;	304,112,578	~~4.1~~ 3.9	~~4.1~~ 3.8	~~2.1~~ 2.0	860
Nov.	~~2,072,000.15;~~ 2,213,569.16	~~1,618,232.59;~~ 1,625,976.00	~~7,327,400.43~~ 7,521,839.68	49,182,435;	39,943,428;	332,301,714	~~4.2~~ 3.9	~~4.1~~ 3.7	~~2.2~~ 2.1	1,280
Dec.	~~1,478,529.12;~~	~~1,071,697.47;~~	~~5,702,156.69~~	59,099,072;	43,537,204;	325,495,551	~~2.5~~ 3.7	~~2.5~~ 3.7	~~1.8~~ 2.3	1,871
L:	23,474,413.48;	17,468,983.56;	64,878,122.65	614,054,648;	465,523,799;	~~3,301,568,385~~ 3,339,558,385	~~46.4~~ 3.8	~~45.3~~ 3.8	~~23.5~~ 1.9	9,868

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Month	1A Number of Terminations Customer Class Res.	Comm.	Ind.	1A Number of Del. Accounts	1B Acc'ts. Rec. ($)
Jan.	9	1	0	2,265	12,700,947.00
Feb.	24	4	0	2,350	13,047,583.88
Mar.	37	2	0	2,210	9,407,134.38
Apr.	39	3	0	1,911	12,246,685.38
May	31	2	0	2,205	13,409,243.36
June	32	1	0	2,247	15,509,213.06
July	37	2	0	2,302	15,436,912.07
Aug.	43	4	0	2,323	11,218,533.69
Sept.	50	0	0	2,172	12,316,123.39
Oct.	41	0	0	2,325	10,566,958.25
Nov.	56	3	0	395	10,527,307.89
Dec.	15	3	0	2,778	12,087,252.34
AL:	414	25	0	25,483	148,473,894.69

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

r	Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium
7	Jan.	~~520~~ 167	10,260.39
	Feb.	~~267~~ 15	~~820.16~~ 1524.83
	Mar.	None	None
	Apr.	None	None
	May	~~834~~ 29	~~1,592.43~~ 6,475.38
	June	~~436~~ 140	7,346.54
	July	~~455~~ 135	4,859.34
	Aug.	~~683~~ 156	~~8,965.84~~ 8,998.69
	Sept.	~~419~~ 137	9,413.11
	Oct.	~~545~~ 109	5,256.87
	Nov.	~~603~~ 165	~~22,220.44~~ 26,260.76
	Dec.	~~478~~ 196	10,995.34
AL:		~~4,940~~ 1,249	~~81,738.46~~ 91,391.25

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

		2A			2B			2C			2D
		Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heating Degree Days
ar	Month	Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
77	Jan.	2,532,916.19;	1,755,701.65;	7,091,699.36	71,011,426;	47,835,364;	324,349,995	3.6	3.7	2.2	2,017
	Feb.	2,399,741.75;	1,681,843.44;	7,097,381.72	65,857,166;	44,872,808;	345,483,964	3.6	3.7	2.1	1,334
	Mar.	2,257,671.06;	1,679,600.01;	7,866,130.08	58,265,075;	41,965,685;	345,674,557	3.9	4.0	2.3	1,033
	Apr.	2,095,109.16;	1,642,397.08;	8,542,294.66	51,731,554;	37,747,702;	371,245,536	4.0	4.4	2.3	612
	May	1,888,994.11 ~~1,929,287.73;~~	1,465,590.80 ~~1,487,562.12;~~	9,510,145.37 ~~9,823,640.51~~	45,708,004;	35,996,819;	365,798,271	4.1 ~~4.2~~	4.1	2.6 ~~2.7~~	242
	June	2,130,729.33 ~~2,337,775.88;~~	1,549,669.55 ~~1,628,002.90;~~	10,196,716.07 ~~11,372,157.76~~	44,716,039;	37,345,115;	415,881,370	4.8 ~~5.2~~	4.1 ~~4.4~~	2.6 ~~2.7~~	170
	July	1,916,345.56 ~~2,192,174.15;~~	1,510,189.03 ~~1,596,939.29;~~	10,510,747.15 ~~11,105,656.90~~	44,713,025;	36,980,124;	391,007,981	4.4 ~~4.9~~	4.1 ~~4.3~~	2.9 ~~2.8~~	46
	Aug.	1,983,318.88 ~~2,194,048.19;~~	1,538,116.49 ~~1,626,296.35;~~	7,199,809.59 ~~7,424,030.30~~	46,345,912;	38,032,486;	151,210,832	4.3 ~~4.7~~	4.0 ~~4.3~~	4.8 ~~4.9~~	196
	Sept.	1,993,511.38 ~~2,213,527.93;~~	1,512,041.83 ~~1,594,002.96;~~	6,482,424.53 ~~6,633,004.22~~	45,359,010;	36,829,022;	97,637,161	4.4 ~~4.9~~	4.1 ~~4.3~~	6.6 ~~6.8~~	347
	Oct.	2,091,820.82 ~~2,314,295.62;~~	1,546,619.86 ~~1,629,720.31;~~	6,413,513.26 ~~6,565,143.96~~	48,206,921;	37,563,052;	98,566,194	4.4 ~~4.8~~	4.1 ~~4.3~~	6.5 ~~6.7~~	636
	Nov.	2,016,223.15 ~~2,236,921.70;~~	1,498,846.80 ~~1,566,873.23;~~	6,305,116.03 ~~6,466,742.84~~	47,656,839;	38,306,004;	103,269,491	4.2 ~~4.7~~	3.9 ~~4.1~~	6.1 ~~6.3~~	1,101
	Dec.	2,222,199.83 ~~1,698,203.25;~~	1,564,584.58 ~~1,398,089.43;~~	7,293,403.57 ~~2,271,326.68~~	57,991,005;	43,929,105;	212,406,205	3.8 ~~2.9~~	3.6 ~~3.2~~	3.4 ~~4.1~~	1,662
TAL:		25,599,631.62 ~~26,404,672.62;~~	18,925,201.17 ~~19,287,028.17;~~	95,149,409.39 ~~92,259,208.39~~	627,561,976;	477,403,286;	3,222,531,557	4.1 ~~4.4~~	4.0 ~~4.8~~	3.0 ~~4.2~~	9,396

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Month	1A Number of Terminations Customer Class			1A Number of Del. Accounts	1B Acc'ts. Rec. ($)
	Res.	Comm.	Ind.		
Jan.	22	0	0	2,396	14,113,566.14
Feb.	59	3	0	2,334	15,701,166.24
Mar.	52	4	0	2,394	16,563,451.39
Apr.	66	1	0	2,449	17,216,301.11
May	73	4	0	2,720	16,349,780.67
June	69	2	0	2,575	15,205,968.63
July	109	1	0	2,543	16,333,494.04
Aug.	75	5	0	1,691	13,051,947.19
Sept.	59	3	0	1,070	18,828,072.61
Oct.	45	4	0	1,493	18,275,050.96
Nov.	39	5	0	1,918	18,804,049.06
Dec.	2	0	0	2,847	21,497,242.75
:	670	32	0	26,430	201,940,090.79

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium
Jan.	~~469~~ 156	~~Not available~~ 13,272.43
Feb.	~~541~~ 82	5,928.49
Mar.	None	None
Apr.	None	None
May	None	None
June	None	None
July	None	None
Aug.	None	None
Sept.	None	None
Oct.	None	None
Nov.	~~668~~ 214	19,571.88
Dec.	~~482~~ 442	20,298.66
AL;	~~2,130~~ 894	~~45,799.03~~ 59,071.46

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

		2A			2B			2C			2D
		Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heating Degree Days
r	Month	Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
8	Jan.	2,739,720.31;	1,755,057.15;	8,520,855.66	71,488,819;	47,222,136;	367,454,764	3.8	3.7	2.3	1,852
	Feb.	2,752,689.80;	1,903,685.64;	9,589,408.38	66,384,329;	48,735,165;	370,257,980	4.1	3.9	2.6	1,520
	Mar.	2,653,834.68;	1,850,477.35;	11,047,436.97	58,919,276;	43,620,679;	405,171,528	4.5	4.2	2.7	1,212
	Apr.	2,651,620.00;	1,862,174.82;	11,311,950.28	55,254,790;	41,183,902;	369,764,444	4.8	4.5	3.1	794
	May	2,305,526.67;	1,651,327.51;	11,195,021.27	49,559,841;	38,117,215;	401,592,558	4.7	4.3	2.8	324
	June	2,249,563.67;	1,610,569.22;	10,127,253.79	47,854,045;	40,670,395;	443,414,465	4.7	4.0	2.3	176
	July	2,108,859.69;	1,655,079.66;	11,843,928.99	47,203,376;	39,639,819;	411,347,492	4.5	4.2	2.9	71
	Aug.	1,636,088.41;	1,598,555.95;	15,058,028.86	47,647,171;	43,438,699;	426,614,080	3.4	3.7	3.5	99
	Sept.	2,397,347.89;	2,023,169.06;	13,840,000.75	47,842,386;	42,764,678;	450,962,596	5.0	4.7	3.1	262
	Oct.	2,396,390.26;	1,988,450.95;	13,947,554.03	48,473,460;	40,241,480;	425,772,272	4.9	4.9	3.3	615
	Nov.	2,456,303.17;	1,997,815.27;	14,215,333.07	49,557,829;	42,895,202;	447,021,928	5.0	4.7	3.2	1,159
	Dec.	2,913,989.36;	2,200,999.79;	15,415,422.32	59,481,414;	46,606,124;	489,866,424	4.9	4.7	3.1	1,699
AL:		29,261,933.94;	22,097,362.37;	116,112,194.37	649,666,736;	515,135,494;	5009,240,531	4.5 ~~4.3~~	4.3 ~~4.5~~	2.9 ~~3.9~~	9,783

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Month	1A Number of Terminations Customer Class Res.	Comm.	Ind.	1A Number of Del. Accounts	1B Accounts Rec. ($)
Jan.	0	1	0	3,348	22,213,989.10
Feb.	0	2	0	3,903	22,313,759.67
Mar.	0	0	0	4,463	22,524,304.80
Apr.	193	7	0	3,833	22,880,222.19
May	197	1	0	2,724	21,843,917.08
June	193	6	0	2,748	22,710,816.70
July	17	2	0		
Aug.					
Sept.					
Oct.					
Nov.					
Dec.					
L:	538	19	0	21,019	134,487,009.54

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium
Jan.	~~526~~ 449	24,106.85
Feb.	~~580~~ 196	15,073.45
Mar.	~~685~~ 148	6,318.87
Apr.	~~786~~ 113	5,075.17
May	None	None
June	~~107~~ 20	966.46
July	~~514~~	Not Available
Aug.		
Sept.		
Oct.		
Nov.		
Dec.		
AL:	~~3,178~~ 926	51,540.80

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

		2A			2B			2C			2D
		Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heating Degree Days
		Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
r	Month										
9	Jan.	3,612,276.10;	2,550,339.61;	15,818,102.91	73,384,822;	52,905,982;	468,447,812	4.9	4.8	3.4	1,999
	Feb.	3,400,802.37;	2,456,334.39;	15,555,194.84	68,010,829;	51,123,290;	434,304,016	5.0	4.8	3.6	1,679
	Mar.	3,083,498.65;	2,324,818.91;	16,336,455.22	60,436,452;	46,923,192;	472,331,446	5.1	5.0	3.5	1,293
	Apr.	3,017,188.50;	2,361,984.79;	16,589,306.39	57,884,619;	47,211,396;	462,298,292	5.2	5.0	3.6	910
	May	2,713,734.36;	2,166,763.35;	16,068,143.21	52,140,354;	42,410,798;	450,247,643	5.2	5.1	3.6	341*
	June	2,736,037.90;	2,094,405.27;	16,986,605.46	48,225,468;	41,320,949;	519,965,022	5.7	5.1	3.3	172
	July										
	Aug.										
	Sept.										
	Oct.										
	Nov.										
	Dec.										
'AL:		18,563,537.88;	13,954,646.32;	97,353,808.03	360,082,544;	281,895,607;	2,807,594,231	~~31.4~~ 5.2	~~29.8~~ 5.0	~~21~~ 3.5	6,394

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1A Number of Terminations Customer Class Res.	Comm.	Ind.	1A Number of Del. Accounts	1B Acc'ts. Rec. ($)
1977	Jan.	9	1	0	2,265	12,700,947.00
	Feb.	24	4	0	2,350	13,047,583.88
	Mar.	37	2	0	2,210	9,407,134.38
	Apr.	39	3	0	1,911	12,246,685.38
	May	31	2	0	2,205	13,409,243.36
	June	32	1	0	2,247	15,509,213.06
	July	37	2	0	2,302	15,436,912.07
	Aug.	43	4	0	2,323	11,218,533.69
	Sept.	50	0	0	2,172	12,316,123.39
	Oct.	41	0	0	2,325	10,566,958.25
	Nov.	56	3	0	395	10,527,307.89
	Dec.	15	3	0	2,778	12,087,252.34
TOTAL:		414	25	0	25,483	148,473,894.69

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium
1977	Jan.	520	10,260.39
	Feb.	267	820.16
	Mar.	None	None
	Apr.	None	None
	May	834	1,592.43
	June	436	7,346.54
	July	455	4,859.34
	Aug.	683	8,965.84
	Sept.	119	9,413.11
	Oct.	545	5,256.87
	Nov.	603	22,228.44
	Dec.	478	10,995.34
TOTAL:		4,940	81,738.46

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

		2A			2B			2C			2D
		Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heat Degr Days
Year	Month	Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
1977	Jan.	2,532,916.19;	1,755,701.65;	7,091,699.36	71,011,426;	47,835,364;	324,349,995	3.6	3.7	2.2	2,
	Feb.	2,399,741.75;	1,681,843.44;	7,097,381.72	65,857,166;	44,872,808;	345,483,964	3.6	3.7	2.1	1,
	Mar.	2,257,671.06;	1,679,600.01;	7,866,130.08	58,265,075;	41,965,685;	345,674,557	3.9	4.0	2.3	1,
	Apr.	2,095,109.16;	1,642,397.08;	8,542,294.66	51,731,554;	37,747,702;	371,245,536	4.0	4.4	2.3	
	May	1,929,287.73;	1,487,562.12;	9,823,640.51	45,708,004;	35,996,819;	365,798,271	4.2	4.1	2.7	
	June	2,337,775.88;	1,628,002.30;	11,372,157.76	44,716,039;	37,345,115;	415,881,370	5.2	4.4	2.7	
	July	2,192,174.15;	1,596,939.29;	11,105,656.90	44,713,025;	36,980,124;	391,007,981	4.9	4.3	2.8	
	Aug.	2,194,048.19;	1,626,296.35;	7,424,030.30	46,345,912;	38,032,486;	151,210,832	4.7	4.3	4.9	
	Sept.	2,213,527.93;	1,594,002.96;	6,633,004.22	45,359,010;	36,829,022;	97,637,161	4.9	4.3	6.8	
	Oct.	2,314,295.63;	1,629,720.31;	6,565,143.36	48,206,921;	37,563,052;	98,566,194	4.8	4.3	6.7	
	Nov.	2,236,921.70;	1,566,873.23;	6,466,742.84	47,656,839;	38,306,004;	103,269,491	4.7	4.1	6.3	1,
	Dec.	1,698,203.25;	1,398,089.43;	2,271,326.68	57,991,005;	43,929,105;	212,406,205	2.9	3.2	1.1	1,
TOTAL:		26,401,672.62;	19,287,028.17;	92,259,208.39	627,561,976;	477,403,286;	3,222,531,557	51.4	48.8	42.9	9,

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

		2A			2B			2C			2D
		Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heating Degree Days
Year	Month	Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
1977	Jan.	2,532,916.19;	1,755,701.65;	7,091,699.36	71,011,426;	47,835,364;	324,349,995	3.6	3.7	2.2	2,
	Feb.	2,399,741.75;	1,681,843.44;	7,097,381.72	65,857,166;	44,872,808;	345,483,964	3.6	3.7	2.1	1,
	Mar.	2,257,671.06;	1,679,600.01;	7,866,130.08	58,265,075;	41,965,685;	345,674,557	3.9	4.0	2.3	1,
	Apr.	2,095,109.16;	1,642,397.08;	8,542,294.66	51,731,554;	37,747,702;	371,245,536	4.0	4.4	2.3	
	May	1,929,287.73;	1,487,562.12;	9,823,640.51	45,708,004;	35,996,819;	365,798,271	4.2	4.1	2.7	
	June	2,337,775.88;	1,628,002.30;	11,372,157.76	44,716,039;	37,345,115;	415,881,370	5.2	4.4	2.7	
	July	2,192,174.15;	1,596,939.29;	11,105,656.90	44,713,025;	36,980,124;	391,007,981	4.9	4.3	2.8	
	Aug.	2,194,048.19;	1,626,296.35;	7,424,030.30	46,345,912;	38,032,486;	151,210,832	4.7	4.3	4.9	
	Sept.	2,213,527.93;	1,594,002.96;	6,633,004.22	45,359,010;	36,829,022;	97,637,161	4.9	4.3	6.8	
	Oct.	2,314,295.63;	1,629,720.31;	6,565,143.36	48,206,921;	37,563,052;	98,566,194	4.8	4.3	6.7	
	Nov.	2,236,921.70;	1,566,873.23;	6,466,742.84	47,656,839;	38,306,004;	103,269,491	4.7	4.1	6.3	1,
	Dec.	1,698,203.25;	1,398,089.43;	2,271,326.68	57,991,005;	43,929,105;	212,406,205	2.9	3.2	1.1	1,
TOTAL:		26,401,672.62;	19,287,028.17;	92,259,208.39	627,561,976;	477,403,286;	3,222,531,557	51.4	48.8	42.9	9,

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1A Number of Terminations Customer Class Res.	Comm.	Ind.	1A Number of Del. Accounts	1B Accounts Rec. ($)
1976	Jan.	11	1	0	2,127	8,429,697.40
	Feb.	19	0	1	2,291	8,638,741.12
	Mar.	39	0	0	2,017	8,055,674.32
	Apr.	58	2	0	2,182	7,988,359.69
	May	43	2	0	2,113	8,839,198.42
	June	24	2	0	2,244	8,769,111.57
	July	29	1	0	2,277	8,678,283.27
	Aug.	24	0	0	Not Available	8,921,674.34
	Sept.	37	4	0	1,822	9,334,757.05
	Oct.	44	1	0	1,905	10,056,134.52
	Nov.	21	2	0	1,899	11,178,910.05
	Dec.	4	0	0	Not Available	12,469,550.01
TOTAL:		353	15	1	20,877	111,360,091.76

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78 4/1/79 moratorium
1976	Jan.	None	None
	Feb.	252	18,950.11
	Mar.	311	1,851.99
	Apr.	477	4,044.88
	May	437	6,766.41
	June	394	18,697.48
	July	453	3,510.93
	Aug.	446	9,995.15
	Sept.	480	2,180.85
	Oct.	89	1,024.32
	Nov.	478	5,576.47
	Dec.	487	990.10
TOTAL:		4,304	73,588.69

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1A Number of Terminations Customer Class Res.	Comm.	Ind.	1A Number of Del. Accounts	1B Accounts Rec. ($)
1979	Jan.	0	1	0	3,348	22,213,989.10
	Feb.	0	2	0	3,903	22,313,759.67
	Mar.	0	0	0	4,463	22,524,304.80
	Apr.	193	7	0	3,833	22,880,222.19
	May	197	1	0	2,724	21,843,917.08
	June	193	6	0	2,748	22,710,816.70
	July	17	2	0		
	Aug.					
	Sept.					
	Oct.					
	Nov.					
	Dec.					
TOTAL:		538	19	0	21,019	134,487,009.54

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium
1979	Jan.	526	24,106.85
	Feb.	580	15,073.45
	Mar.	685	6,318.87
	Apr.	766	5,075.17
	May	None	None
	June	107	966.46
	July	514	Not Available
	Aug.		
	Sept.		
	Oct.		
	Nov.		
	Dec.		
TOTAL:		3,178	51,540.80

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

		2A			2B			2C			2D
		Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heatin Degree Days
Year	Month	Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
1979	Jan.	3,612,276.10;	2,550,339.61;	15,818,102.91	73,384,822;	52,905,982;	468,447,812	4.9	4.8	3.4	1,99
	Feb.	3,400,802.37;	2,456,334.39;	15,555,194.84	68,010,829;	51,123,290;	434,304,016	5.0	4.8	3.6	1,67
	Mar.	3,083,498.65;	2,324,818.91;	16,336,455.22	60,436,452;	46,923,192;	472,331,446	5.1	5.0	3.5	1,29
	Apr.	3,017,188.50;	2,361,984.79;	16,589,306.39	57,884,619;	47,211,396;	462,298,292	5.2	5.0	3.6	91
	May	2,713,734.36;	2,166,763.35;	16,068,143.21	52,140,354;	42,410,798;	450,247,643	5.2	5.1	3.6	34
	June	2,736,037.90;	2,094,405.27;	16,986,605.46	48,225,468;	41,320,949;	519,965,022	5.7	5.1	3.3	17
	July										
	Aug.										
	Sept.										
	Oct.										
	Nov.										
	Dec.										
TAL:		18,563,537.88;	13,954,646.32;	97,353,808.03	360,082,544;	281,895,607;	2,807,594,231	31.1	29.8	21	6,3

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1A Number of Terminations Customer Class Res.	Comm.	Ind.	1A Number of Del. Accounts	1B Acc'ts. Rec. ($)
1978	Jan.	22	0	0	2,396	14,113,566.14
	Feb.	59	3	0	2,334	15,701,166.24
	Mar.	52	4	0	2,394	16,563,451.39
	Apr.	66	1	0	2,449	17,216,301.11
	May	73	4	0	2,720	16,349,780.67
	June	69	2	0	2,575	15,205,968.63
	July	109	1	0	2,543	16,333,494.04
	Aug.	75	5	0	1,691	13,051,947.19
	Sept.	59	3	0	1,070	18,828,072.61
	Oct.	45	4	0	1,493	18,275,050.96
	Nov.	39	5	0	1,918	18,804,049.06
	Dec.	2	0	0	2,847	21,497,242.75
TOTAL:		670	32	0	26,430	201,940,090.79

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium
1978	Jan.	469	Not available
	Feb.	511	5,928.49
	Mar.	None	None
	Apr.	None	None
	May	None	None
	June	None	None
	July	None	None
	Aug.	None	None
	Sept.	None	None
	Oct.	None	None
	Nov.	668	19,571.88
	Dec.	482	20,298.66
TOTAL;		2,130	45,799.03

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

		2A			2B			2C			2D
		Revenues Customer Class			KWH Sales Customer Class			Avg. Cost Per Unit Sold Customer Class			Heating Degree Days
Year	Month	Res.	Comm.	Ind.	Res.	Comm.	Ind.	Res.	Comm.	Ind.	
1978	Jan.	2,739,720.31;	1,755,057.15;	8,520,855.66	71,488,819;	47,222,136;	367,454,764	3.8	3.7	2.3	1,852
	Feb.	2,752,689.80;	1,903,685.64;	9,589,408.38	66,384,329;	48,735,165;	370,257,980	4.1	3.9	2.6	1,520
	Mar.	2,653,834.68;	1,850,477.35;	11,047,436.97	58,919,276;	43,620,679;	405,171,528	4.5	4.2	2.7	1,212
	Apr.	2,651,620.00;	1,862,174.82;	11,311,950.28	55,254,790;	41,183,902;	369,764,444	4.8	4.5	3.1	794
	May	2,305,526.67;	1,651,327.51;	11,195,021.27	49,559,841;	38,117,215;	401,592,558	4.7	4.3	2.8	324
	June	2,249,563.67;	1,610,569.22;	10,127,253.79	47,854,045;	40,670,395;	443,414,465	4.7	4.0	2.3	176
	July	2,108,859.69;	1,655,079.66;	11,843,928.99	47,203,376;	39,639,819;	411,347,492	4.5	4.2	2.9	71
	Aug.	1,636,088.41;	1,598,555.95;	15,058,028.86	47,647,171;	43,438,699;	426,614,080	3.4	3.7	3.5	99
	Sept.	2,397,347.89;	2,023,169.06;	13,840,000.75	47,842,386;	42,764,678;	450,962,596	5.0	4.7	3.1	262
	Oct.	2,396,390.26;	1,988,450.95;	13,947,554.03	48,473,460;	40,241,480;	425,772,272	4.9	4.9	3.3	615
	Nov.	2,456,303.17;	1,997,815.27;	14,215,333.07	49,557,829;	42,895,202;	447,021,928	5.0	4.7	3.2	1,159
	Dec.	2,913,989.36;	2,200,999.79;	15,415,422.32	59,481,414;	46,606,124;	489,866,424	4.9	4.7	3.1	1,699
TOTAL:		29,261,933.94;	22,097,362.37;	146,112,194.37	649,666,736;	515,135,494;	5009,240,531	54.3	51.5	34.9	9,783

MINNESOTA POWER & LIGHT COMPANY

ELECTRIC SERVICE

Year	Month	1C Number of Accounts Written off which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium	1C Amounts Written Off ($) which reflect the impact of the Commission's 12/15/78-4/1/79 moratorium
1975	Jan.	321	2,488.75
	Feb.	445	2,356.28
	Mar.	465	2,881.23
	Apr.	429	1,774.93
	May	387	1,690.73
	June	338	2,706.64
	July	356	3,907.63
	Aug.	433	58,025.05
	Sept.	473	2,268.05
	Oct.	527	5,747.24
	Nov.	488	3,503.01
	Dec.	505	9,892.25
TOTAL:		5,167	97,241.79

MINNESOTA POWER & LIGHT COMPANY
30 WEST SUPERIOR STREET, DULUTH, MINNESOTA 55802
PHONE (AREA 218) 722-2641

August 15, 1979

RECEIVED
Customer Services Department
AUG 15 1979
File
Contract
Technical
Other

Mr. Stephen A. Finn, Acting Secretary
Minnesota Public Service Commission
7th Floor, American Center Building
160 East Kellogg Boulevard
St. Paul, Minnesota 55101

Dear Mr. Finn:

RE: Docket No. A 8117-27

In compliance with the Commission's Order to Produce Special Report, dated July 26, 1979, attached hereto please find two (2) copies of Minnesota Power & Light Company's response.

The data included in this response is as complete and accurate as possible, but must be qualified in the following areas:

1. All information given in all categories is for firm and interruptible combined. Minnesota Power & Light has only one (1) interruptible industrial customer, and segregating the data for that one account would not serve any purpose in regard to this special report.

2. Separate data for buildings with units which are master-metered is not available.

3. The number of Terminations for 1975 is not complete. Records for all offices are not available.

4. The number of Delinquent Accounts is not identifiable by customer class. For purposes of this report, data supplied could be allocated by customer mix (i.e. Residential, 89%; Commercial, 10.5%; Industrial, .5%). Minnesota Power & Light considers any account in arrears more than sixty (60) days to be delinquent and subject to disconnection.

5. The number of Accounts Receivable is not available.

6. The Accounts Receivable ($) is not identifiable by customer class. Dollar amounts shown represent that amount due MP&L for electric service as of the end of each month listed.

STATE OF MINNESOTA

OFFICE OF HEARING EXAMINERS

FOR THE PUBLIC SERVICE COMMISSION

In the Matter of the Proposed Adoption of a Rule by the Public Service Commission Governing Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather and Repeal of PSC 299 Cold Weather Rule.

TESTIMONY OF
MINNESOTA POWER & LIGHT COMPANY

Minnesota Power & Light Company submits the following comments and proposed revisions to the Cold Weather Rule developed by the Public Service Commission. MP&L believes that adoption of these revisions will result in a Cold Weather Rule which truly protects those customers who need assistance in paying utility bills during Minnesota winters.

I. GENERAL ARGUMENT

A. The proposed rule fails to assist customers in meeting rapidly accelrating utility costs.

In the PSC Statement of Need and Reasonableness (herein after "Statement"), the Commission recites the geometrically rising cost of utility service which, when coupled with inflation, places a crippling financial burden on many Minnesota citizens. However, the Commission does not demonstrate what "need" this rule is attempting to satisfy. It is unclear whether the Commission intends to protect customers against disconnection of service because of their inability to pay the <u>increase</u> in utility bills or because of their inability to pay <u>any</u>

utility bills. Harsh winters are not new to Minnesota, nor are utility bills. Obviously the discovery of these two facts did not precipitate the proposed rule. Rather, the proposed rule is deemed necessary because of the increased cost of utility service during cold weather periods. Yet the rule does not provide that utility customers must pay for service during cold weather periods at a minimum level; perhaps a level established at a date prior to current inflationary trends.

The rule effectively establishes a blanket prohibition or moratorium on the disconnection of utility service for a six month period from October 15 to April 15. This moratorium has nothing whatsoever to do with increased costs of utility services. The position of the Commission, as evidenced by the proposed rule, is that because of rapidly accelerating utility costs, utility customers need not pay for service during six months of cold weather.

B. The proposed rule fails to identify the customers who need the protection of a cold weather rule by defining the class of customers based upon their ability to pay utility bills.

Sections 115(g) (Electric) and 304(a) (Gas) of the Public Utilities' Regulatory Policy Act of 1978 (PURPA) state that there shall be no terminations of service once a customer establishes he or she is unable to pay the utility bill. The Commission cavalierly rejected this PURPA "inability to pay" standard as "too cumbersome" and opted for imposing a cumbersome Cold Weather Rule on utilities with an across the board minimum temperature restriction. This proposed rule fails to properly identify and protect that class of customers which the federal legislation intended to protect.

The adoption of a 32 degree minimum temperature restriction which prohibits termination of utility service for all customers (without any regard to their

ability to pay) underscores the rule's total failure to deal with the class of people who might indeed need the protection of such a rule. MP&L can only speculate the Commission is recognizing that many other costs, including food and clothing, have also increased because of the current inflation and therefore intends to provide relief through the one service it can control. The responsibility of the Commission is to provide some relief to customers who demonstrate an inability to pay winter utility bills and not to free all customers from utility bill payments six months of every year.

C. The proposed rule fails to require customers to make regular payments during cold weather periods.

A stated purpose of the rule, repeated many times in the Statement of Need, is to compel customers to make regular payments in order to decrease the likelihood that they will have an unmanageable bill at the close of a heating season because no payments have been made. However, because of the across the board, blanket moratorium, there is no incentive on the part of customers to make regular payments during the cold weather. This proposed rule neither compels a customer to enter into a payment arrangement nor compels him to make payments once an arrangement is made. In fact, it does not even provide an incentive for the customer to enter into, or make payments under, a payment arrangement. To the contrary, the six month moratorium invites people to have "unmanageable bills" at the end of the heating season by placing no obligation upon the customers to either prove they are unable to pay all or part of their bills or to make payments. In actual operation, the only incentive to enter into a payment arrangement occurs near the end of the moratorium.

The proposed rule also invites those who are able to pay for utility service not to do so during the moratorium period. Since the Utility is not given

any leverage under the proposed rule to insure either full or partial payments from nonpaying customers there is nothing that can compel the customer to make regular payments which is something the Commission said was so important. As the Commission noted, "If delinquent customers are not compelled to pay, all ratepayers would have to bear the burden." (Statement, p. 10).

D. The proposed rules permit customers to carry arrears from one cold weather period into the next.

The proposed rule provides for a six month moratorium on utility payments, provides no incentive on the part of the customer to either enter into a payment arrangement or to make payments, and finally allows customers up to twelve months to repay accumulated arrears. These rules permit a customer to carry outstanding balances from one moratorium period into the next moratorium period.

Under the proposed rule, delinquent customers will often be expected to fully satisfy twelve months worth of utility bills in a six month period. If a person has not paid for utility services during one moratorium then there will be little incentive to pay during a second moratorium when there is no threat of termination of services. What will probably happen is that such people will be turned off at the end of the moratorium and, faced with very large balances, they will never again be able to get utility services. If such customers are unable to get financial assistance to erase the past due balances, the customer will be forced to resort to name changes, falsification of applications or other fraudulent methods to obtain utility service.

The proposed rule does not provide for the satisfaction of all arrears prior to the beginning of the next cold weather period. MP&L considers this an unacceptable solution for both the Company and its customers. If all arrears

are not satisfied before the commencement of the next cold weather period, the customer's overlapping debt will have a pyramiding effect, making it very difficult, if not impossible, for him to ever catch up. Any proposed rule must require that all arrears be satisfied before the commencement of the next cold weather period. Any proposed rule must obligate customers to make payments against utility bills during the winter period thus reducing the size of the liabilities which ultimately must be satisfied. To that end, MP&L will offer changes in the proposed rule which permit a Utility to terminate the service of a customer who refuses to enter or defaults on a deferred payment arrangement.

E. MP&L characterizes the proposed rule as moratorium because the 32°F temperature restriction and the inability to disconnect customers who refuse to enter into or comply with a payment agreement will effectively prohibit disconnections during proposed "cold weather months." Temperature data received from the National Weather Service in Duluth, which will be submitted with this testimony, reveals that there were only a handful of days MP&L could have performed disconnections under the terms of the proposed rule during the "cold weather months" during last year's heating season. Not surprisingly all of these days were in mid-October and April. Consequently a rule which prohibits all disconnections any time the temperature falls below 32°F, particularly in northern Minnesota, is in reality a complete moratorium.

F. MP&L once again submits that the only solution to customers' inability to pay utility bills is for governmental units to provide financial assistance to those people who have demonstrated an inability to pay. MP&L supports the action taken by both the federal and state governments to provide funds to needy individuals so that utility bills can be paid.

G. The Commission asserts that a dispute procedure distinct from PSC 303 is necessary. If the Commission's proposed rule is adopted verbatim

there is little doubt the Commission will become involved in numerous disputes regarding application of the rule. In all likelihood a dispute will not arise out of the application of the rule but will center around the amount of the initial payment and the subsequent monthly installment payments. Consequently PSC 299 G. must include parameters regarding the time period for resolving a dispute involving PSC 299 so that both MP&L and the customer can plan accordingly.

II. THE UTILITIES PROPOSED RULE

As discussed in the previous Section, not only has the proposed rule failed to identify a need and failed to identify and protect a class of customers, it has also totally failed to serve the purpose for which it was proposed. MP&L offers a cold weather rule based upon the rule proposed by the Commission. This rule meets the requirements of PURPA and better serves Minnesota utility customers who are unable to pay for the increased cost of utility service during the winter months.

While all the changes are made based upon the rationale set forth in Section I, for ease of understanding those sections of the Utilities' cold weather rule which vary from the Commission's proposed rule will be discussed individually below.

B. 4. "Deferred payment period" means the ~~12-month-period-commencing with-the-first-day-of-the-period-covered-by-an-outstanding-bill~~. remaining months prior to the start of the cold weather months as defined in PSC 299 B2.

The difficulty here is the length of time for payment under any payment agreement. The original provision permits a customer to carry outstanding balances

from one cold weather period into the next. Under the Utilities' proposal, customers are required to have paid the full amount of any arrears prior to the start of the next cold weather period. This eliminates pyramiding of past due bills. The arrears could still be paid in installments over the non-moratorium period and the customer would be current at the start of each cold weather period. This helps customers avoid unmanageable arrears and minimizes the amount of uncollectibles which must be borne by all ratepayers.

D. Disconnection restrictions for occupied residential units. ~~Notwithstanding the provisions of any other customer service rule, no utility shall disconnect service to an occupied residential unit for any reason, except the safety of the occupants or the public as provided in PSC 298 B.2, if the disconnection affects the primary heat source of the residential unit and if the minimum temperature restriction or the payment agreement restriction set forth below applies.~~ Except as provided in PSC 298B or the payment agreement restriction set forth below, no utility shall disconnect service to an occupied residential unit if the disconnection affects the primary heat source and if the minimum temperature restriction applies.

The Commission's proposed rule permits utilities to disconnect service where public safety is jeopardized pursuant to PSC 298 B.2. This provision should be expanded to permit disconnection when there is unauthorized use of utility services or tampering with the utility's equipment as provided in PSC 298 B.1. It is inconceivable that the Commission believes utilities should be prevented from disconnecting service to a customer who has illegally diverted utility services. The utilities believe that this omission can only have been inadvertent as an intentional omission of PSC 298 B.1 would be tantamount to sanctioning the theft of utility service.

This provision has also been changed to allow disconnection for failure to enter into or comply with a payment agreement regardless of weather. MP&L opposes an across the board minimum temperature restriction since it provides an opportunity for customers who are able to pay their utility bills to avoid doing so. The Commission has recognized this difficulty. Its Statement at p. 15 recites: "If utilities are denied termination rights, there must be a guarantee of payment for past due bills." The Commission has not in this proposed rule, nor can it in any rule, guarantee such payment. Failing to do so, it should not deny utilities termination rights.

The situation of greatest concern to all is when the customer is unable to meet the minimum payment required under any such installment agreement. Either before or after entering into an installment agreement, the customer may seek the help of local governmental and private assistance agencies in securing payment of the utility bills. Without exception, all assistance agencies have qualified personnel who can confidentially review the financial status of each customer (something no utility is qualified to do) and determine the customer's inability to pay either the full amount of monthly utility bills or the monthly installment required by the utility. These public and private assistance agencies are <u>already</u> capable of determining a customer's ability to pay utility bills. After making such a determination, the agency could inform the utility that it is working with the customer and thus avert any shut-off. The agency would then either provide the necessary assistance or direct the customer to another agency which could provide the assistance.

This procedure meets the standards and intent of PURPA moratorium recommendation. It also has the distinct advantage of eliminating those customers who can pay their utility bills but choose not to do so. In addition, the

MP&L's proposal provides inducement for all customers, with or without public assistance, to keep abreast of their utility bills and thus avoid the huge arrearages and spring shut-offs which many customers faced last year and would again face under the Commission's proposed rule.

C. 1. Minimum temperature restriction.
Disconnection shall not take place if the predicted 24 hour ~~(12 a.m. to 12 p.m.)~~ (6 a.m. to 6 a.m.) temperature as reported by the National Weather Service at its first order station nearest the dwelling unit is to be 32 degrees Fahrenheit (0 degrees Celsius) or lower.

This change is merely a correction of the proposed rule. The National Weather Service reports temperatures on a 24 hour basis from 6 a.m. to 6 a.m., not a twelve hour period from 12 a.m. to 12 p.m. as presently written.

C. 2. Payment agreement restriction.
No utility shall terminate residential service during cold weather months unless:

a. the utility has made a written offer, or an oral offer confirmed in writing within 72 hours, for a deferred payment agreement; and

b. the customer has failed to enter into ~~or comply with~~ such an agreement ~~or an alternative payment agreement~~, or failed to comply with the terms of such an agreement. The customer shall have ~~five days after receipt of the utility's written offer~~.

~~(1) to deposit in the mail, or otherwise deliver to the utility or its agent, written acceptance of the offer, or~~

~~(2) to enter into an alternative payment agreement.~~
eight calender days after mailing of the utility's written offer for his or her response to be received at the utility's business offices;

c. for purposes of determining the reasonableness of the amount of the initial payment under a payment agreement, the parties shall consider:

(1) the size of the delinquent account;

(2) the customer's ability to pay (if the customer is a landlord and the service is to a tenant, the landlord shall be presumed to be able to pay the bill);

(3) the customer's payment history;

(4) the length of time that the debt has been outstanding;

(5) the reasons why the debt is outstanding;

(6) the customer's annual consumption of utility services; and

(7) any other relevant factors concerning the circumstances of the customer.

d. billing statements to customers receiving service under payment agreements shall contain, in addition to the information required by PSC 313, the following information:

(1) the actual charges incurred for usage during the billing period; and

(2) the billing amount due and payable for the billing period pursuant to the terms of the payment agreement.

MP&L's proposal makes several minor changes to Section C.2 which are self-explanatory. One, however, bears brief comment.

Section C.2.b. has been rewritten to increase the time period for the entering into a payment agreement, from five to eight days, to allow additional time for mailing the documents. Also, in order to avoid disputes, the time period commences upon the MP&L's mailing the written offer and the time period ends upon receipt of the document at MP&L offices rather than with the mailing of the document by the customer. This increased time period allows adequate time for the customer to receive, consider and mail back the utility's proposed payment agreement.

D. Disconnection restriction for unoccupied residential units.

1. No utility shall disconnect service to the primary heat source of a residential dwelling unit during cold weather months, which it believes to be unoccupied, prior to conducting an on-site inspection of such residential unit and attempting to make direct personal contact with any occupants therein. The utility shall first attempt to contact the occupants by first class mail. If there is no response from occupants of a residential dwelling unit the utility shall include ~~at least~~ one visit to the residential unit by field personnel ~~during normal working hours; and in the event that personal contact is not achieved, another on-site visit during non-business hours~~. In the event personal contact is not made, the utility shall leave a written notice advising any occupants that service will be discontinued if the occupant does not contact the Utility within 5 calendar days.

2. If the field personnel are unable to make direct personal contact with any occupants, ~~and if it reasonably appears from the on-site inspection the residential unit is unoccupied~~, there is no response from the occupants within 5 days following the Utility's leaving a written notice at the residential unit, then service may be disconnected pursuant to the procedures and requirements of PSC 298, 300 and 301.

3. (All of subsection 3 through a. is stricken and will be replaced by the following:)

If, following termination of service to an unoccupied residential unit, such residential unit is then found to be occupied, service must be reconnected if:

1. the occupant makes proper application for service;
2. occupant agrees to pay for past utility service while he or she occupied the premises;
3. the utility has not satisfied the requirements and procedures of the payment agreement restriction section.

The utility shall not charge the customer for reconnection of service pursuant to this section.

As proposed by the Commission, this provision would have required a Utility to conduct on-site inspections to determine if apparently unoccupied dwellings or apartments were occupied before termination of service. The rule would require a company to make expensive investigatory visits both during and after normal working hours. The proposed rule ignores the fact that customers must at some time take responsibility for the payment of utility services received by them.

MP&L recommends the following procedures to protect customers while at the same time requiring that customers be responsible for their consumption. First, the Utility would send a first class letter to the occupant of the dwelling or apartment requesting that said occupant apply for service and contact the individual Utility to discuss recent consumption, if any. If there were no response, a visit would be made to the residence and attempts would be made to notify the resident(s) that if application for service were not made within a period of time, utility services would be terminated. If no one were personally contacted, a second warning letter or card would be left. If within 5 days of this visit to

the residence, no communication were received from an occupant of the residence, utility services would be terminated. Follow up visits to the residence after the termination would not be necessary. Following contact from the occupants, MP&L would gladly reconnect service following proper application for service, and arrangements for payment of arrears, if any.

If a customer fails to notify a Utility and apply for service following a first class mailing, a personal visit to the premises and/or delivery of a notice to the residence, then the Utility must be permitted to terminate service pursuant to the PSC rules and regular utility procedures. A utility should only be required to do so much for a customer who does not want to accept responsibility for utility services being consummed but not paid for.

E. Payment agreements.

1. A deferred payment agreement shall state immediately preceding the space provided for the customer's signature and in bold face print at least two sizes larger than any other used thereon: "~~IF-YOU-ARE-NOT-SATISFIED-WITH-THIS AGREEMENT,-DO-NOT-SIGN~~. DO NOT SIGN THIS AGREEMENT UNTIL YOU READ AND UNDERSTAND ITS TERMS. IF YOU DO SIGN THIS AGREEMENT, YOU AGREE THAT YOU OWE THE AMOUNT STATED TO BE YOUR OUTSTANDING BILL AND YOU AGREE TO MAKE PAYMENTS IN ACCORDANCE WITH THIS PLAN."

Even though the failure to read a contract before signing it does not legally excuse a person from that obligation, MP&L agrees that a warning concerning the obligation created by a payment agreement is necessary. However, the proposed warning is inadequate for the intended purpose. According to the proposed warning, the Commission would have customers refuse to enter into a payment agreement where they were simply dissatisfied. It is extremely doubtful that any customer who cannot pay his current utility bills will be satisfied with any payment agreement proposed by a Utility. The warning should simply encourage the customer to read the agreement and understand its terms before signing.

F. Termination for failure to enter into or comply with payment agreement. If a customer has failed to enter into or comply with the terms of a payment agreement, the utility shall have the right to disconnect pursuant to the procedures and requirements of PSC 298, 300 and 301. ~~but subject to the restrictions contained in the minimum temperature restriction~~. If the utility has offered a deferred payment agreement and the customer has failed to enter into such agreement within the time provided herein, or if the customer has failed to comply with a payment agreement, then the utility shall notify the local welfare agency ~~orally, followed by a written notice within five days~~, of their intent to discontinue service; the name and address of the customer, and telephone number if known. ~~the name and address of any tenant occupying the residential unit if such tenant is not the customer of the utility, and telephone number of the tenant if known, and a statement of the amount then due and payable~~. The utility shall not terminate service until 10 days after the written notice is given to the local welfare agency.

As previously discussed, a customer who refuses to enter into a payment agreement or fails to comply with the terms of that agreement may be terminated without regard to the minimum temperature restriction. Therefore, the provision, "but subject to the restrictions contained in the minimum temperature restriction" has been stricken.

While MP&L agrees it is appropriate to notify the local welfare agency of an impending termination, the requirements of the proposed rule are unduly burdensome. MP&L submits it is more efficient to allow individual utilities to establish whatever method of communicating with the local welfare agency which is acceptable to both parties. This notification should be limited to information about the utility's customer only.

G. Disputes.

If a dispute arises concerning the reasonableness, application or performance of any payment agreement or modification of a payment agreement under this rule, the utility shall provide the customer with a copy of the Commission's customer service rules and the telephone number of the Department of Public Service together with a statement that the customer may call the Department for information and assistance. The Commission may resolve any such dispute which cannot be resolved by the Department on an informal basis. <u>All disputes shall be resolved by the Commission within 30 days of receipt of a complaint by the Department of Public Service or the Commission</u>.

Disputes not involving a payment agreement shall be governed by PSC 303.

By limiting the time period for resolving a dispute, the right of a utility to pursue other means of collecting debts will not be denied. Imposition of a 30 day time limit will result in both the customer and the utility knowing the latest date in which it can anticipate the resolution of a dispute by the Commission.

~~H.--Exemptions.--The-Commission-may-grant-variances-from-this-rule upon-a-showing-of-good-cause,-and-may-suspend-part-or-all-of-this-rule-in-order to-comply-with-federal-regulations.~~

B. 2. "Cold weather months" means the period of time beginning on October 15 and terminating on April 15 following. ~~The-Commission-shall-vary the-period-for-a-given-year-if-the-National-Weather-Services-reports-temperature variation-of-extreme-amounts.~~

PSC 299 H. and B.2. Adoption of these sections would allow the Commission to adopt, amend or rescind the cold weather rule on its own initiative. The result would be to allow circumvention of the procedure established by law in M.S.A. §15.0412, subd. 4 and 9 MCAR §2.101-111. "No rule shall be adopted by any agency unless the agency first holds a public hearing thereon, affording all affected interests an opportunity to participate..." M.S.A. §15.0412, subd. 4. Suffice it to say that these proposed sections are of questionable legality and should be eliminated from any cold weather rule which may be adopted. For further information see "In the Matter of an Investigation into the Need for the Issuance of an Order Prohibiting Termination of Utility Service of Residential Customers by Regulated Minnesota Gas and Electric Utilities During the 1978-79 Heating Season", Report of Hearing Examiner, PSC-79-076-MB; PSC Docket No. G&E/N-78-1208.

APRIL 1979
DULUTH, MINNESOTA
NATIONAL WEATHER SERVICE OFC
INTERNATIONAL AIRPORT

Local Climatologic l Data

MONTHLY SUMMARY

LATITUDE 46° 50 'N LONGITUDE 92° 11 'W ELEVATION (GROUND) 1428 FT. STANDARD TIME USED: CENTRAL WBAN #14913

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT	DEGREE DAYS BASE 65° HEATING (SEASON BEGINS WITH JULY)	COOLING (SEASON BEGINS WITH JAN.)	WEATHER TYPES ON DATES OF OCCURRENCE 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW, ICE PELLETS OR ICE ON GROUND AT 0BAM IN.	PRECIPITATION WATER EQUIVALENT IN	SNOW, ICE PELLETS IN.	AVG. STATION PRESSURE IN. ELEV. 1417 FEET M.S.L.	WIND RESULTANT DIR.	RESULTANT SPEED M.P.H.	AVERAGE SPEED M.P.H.	FASTEST MILE SPEED M.P.H.	FASTEST MILE DIRECTION	SUNSHINE MINUTES	PERCENT OF POSSIBLE	SKY COVER TENTHS SUNRISE TO SUNSET	SKY COVER TENTHS MIDNIGHT TO MIDNIGHT	DATE
1	32	22	27	-5	19	38	0	1 6	17	0	0	28.64	09	10.8	10.8	17	E	247	32	10	9	1
2	36	20	28	-4	19	37	0	6	16	0	0	28.47	33	9.5	10.4	19	NW	398	52	10	8	2
3	33	15	24	-8	10	41	0		16	0	0	28.66	30	7.2	7.6	11	N	767	99	3	2	3
4	38	9	24	-8	16	41	0		16	T	T	28.44	18	4.7	8.9	17	SE	517	66	8	7	4
5	32	8	20	-14	12	45	0	9	16	.09	.9	28.22	29	14.0	16.3	34	NE	331	42	9	7	5
6	24	2*	13*	-21	- 7	52	0		17	0	0	28.73	29	11.8	12.8	25	NW	744	95	1	2	6
7	26	21	24	-11	11	41	0		16	T	T	28.80	10	14.5	15.0	25	NE	0	0	10	10	7
8	31	23	27	-8	21	38	0	1 6	16	.12	1.3	28.40	07	10.0	11.7	18	NE	0	0	10	10	8
9	30	8	19	-17	14	46	0	2	17	T	T	28.47	08	4.0	5.8	10	SE	732	92	2	3	9
10	36	12	24	-12	11	41	0		16	0	0	28.54	08	6.6	10.1	19	NE	786	96	9	6	10
11	39	24	32	-5	21	33	0		16	0	0	28.48	09	16.0	16.1	33	NE	269	34	10	9	11
12	36	32	34	-3	31	31	0	2 4 6	15	.34	1.2	28.08	08	16.1	18.3	33	NE	0	0	10	10	12
13	37	33	35	-3	31	30	0	2 8	14	.01	.1	28.05	16	8.1	11.1	17	S	0	0	10	10	13
14	40	33	37	-1	30	28	0	1	13	.02	.2	28.19	26	10.5	11.9	20	W	82	10	10	10	14
15	46	33	40	1	28	25	0		12	0	0	28.51	28	12.1	12.4	16	W	434	53	6	7	15
16	52	25	39	0	25	26	0		11	0	0	28.73	35	4.1	4.3	13	N	818	100	4	4	16
17	52	24	38	-2	26	27	0		9	0	0	28.82	08	6.1	8.1	15	E	821	100	2	2	17
18	50	34	42	2	28	23	0		7	0	0	28.77	11	11.3	11.5	18	E	684	83	9	7	18
19	60	39	50*	10	33	15	0		6	T	0	28.61	11	12.3	12.5	16	E	621	75	6	7	19
20	47	38	43	2	39	22	0	2	2	.41	0	28.47	10	3.4	8.4	18	NW	0	0	10	10	20
21	59	37	48	7	34	17	0		1	T	0	28.64	30	7.3	8.8	13	SW	611	73	7	6	21
22	60*	35	48	6	36	17	0		T	.09	0	28.70	30	6.4	7.5	17	W	805	96	5	5	22
23	55	32	44	2	32	21	0		T	T	0	28.86	10	9.4	9.9	25	E	463	55	10	9	23
24	50	36	43	1	34	22	0	1 8	T	.01	0	28.44	10	13.4	13.5	22	NE	32	4	10	10	24
25	51	36	44	1	38	21	0	2	T	.01	0	28.21	30	9.1	10.5	17	W	47	6	10	9	25
26	49	34	42	-1	28	23	0		0	T	T	28.30	35	7.3	11.1	17	NW	458	57	7	8	26
27	48	30	39	-4	27	26	0		0	T	T	28.42	35	5.7	8.3	13	E	362	42	9	8	27
28	46	28	37	-7	29	28	0	2	0	.05	.5	28.51	07	3.3	5.9	15	NE	388	46	8	7	28
29	47	28	38	-6	24	27	0		0	0	0	28.44	08	12.9	13.4	24	NE	724	84	8	8	29
30	45	29	37	-7	21	28	0		0	0	0	28.57	09	10.6	10.9	17	E	786	91	3	3	30
	SUM 1287	SUM 780				TOTAL 910	TOTAL 0	NUMBER OF DAYS		TOTAL 1.15	TOTAL 4.2	FOR THE MONTH: 28.49	07	3.2	10.9	24	NW	TOTAL 12907	% FOR POSSIBLE MONTH	SUM 226	SUM 213	
	AVG. 42.9	AVG. 26.0	AVG. 34.5	DEP. -4.1	AVG. 24	DEP. 118	DEP. 0	PRECIPITATION .01 INCH 10		DEP. -1.40						DATE: 05		24478	53	AVG. 7.5	AVG. 7.1	
						SEASON TO DATE TOTAL 9786	SEASON TO DATE TOTAL 0	SNOW, ICE PELLETS ≥ 1.0 INCH 2 / THUNDERSTORMS 0		GREATEST IN 24 HOURS AND DATES PRECIPITATION .41	19-20	SNOW, ICE PELLETS 1.3	8	GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE 17	9+					
NUMBER OF DAYS MAXIMUM TEMP. ≥ 90°	≤ 32°	MINIMUM TEMP. ≤ 32°	≤ 0°	DEP. 708	DEP. 0	HEAVY FOG 6																
0	6	19	0			CLEAR 5	PARTLY CLOUDY 6	CLOUDY 19														

APRIL 1979 DULUTH, MINNESOTA

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON AN EARLIER DATE, OR DATES.
HEAVY FOG: - VISIBILITY 1/4 MILE OR LESS.
FIGURES FOR WIND DIRECTIONS ARE TENS OF DEGREES CLOCKWISE FROM TRUE NORTH. 00 = CALM. DATA IN COLS. 6 AND 12-15 ARE BASED ON 7 OR MORE OBSERVATIONS PER DAY AT 3-HOUR INTERVALS. FASTEST MILE WIND SPEEDS ARE FASTEST OBSERVED ONE-MINUTE VALUES WHEN DIRECTIONS ARE IN TENS OF DEGREES. THE / WITH THE DIRECTION INDICATES PEAK GUST SPEED.
ANY ERRORS DETECTED WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL SUMMARY

SUMMARY BY HOURS

HOUR LOCAL TIME	AVERAGES SKY COVER TENTHS	STATION PRESSURE IN.	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	RELATIVE HUMIDITY %	WIND SPEED M.P.H.	RESULTANT WIND DIRECTION	RESULTANT WIND SPEED M.P.H
00	7	28.50	31	29	24	74	8.7	07	3.2
03	7	28.49	29	27	23	78	8.9	06	1.9
06	7	28.50	29	27	23	77	9.8	05	3.2
09	8	28.50	35	31	25	80	12.1	07	3.9
12	8	28.49	39	34	25	69	12.3	06	2.0
15	7	28.47	40	34	25	68	13.5	07	3.3
18	7	28.48	39	33	24	68	11.9	07	3.8
21	6	28.49	34	31	23	86	10.0	07	4.2

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DATE	A. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
1																									1
2																									2
3																									3
4																		T	T	T		T	T		4
5											T	.01	.01	.03	.03	.01									5
6																									6
7																				T	T				7
8	T	T	.01	.02	.02	.02	T	T	.01	T	T	T	T				T	T	.01	T	.01	T	.01	.01	8
9	T																								9
10																									10
11																									11
12			.02	.08	.03	.07	.05	.01	.02	.02		T	T	T		T	T			.02	.01	.01	T	T	12
13	T	T				T	T	T	T	T	T	T		T	T	T	T	T			T	T	T	.01	13
14	T	T	T	T	.01	.01	T	T	T	T	T								T						14
15																									15
16																									16
17																									17
18																									18
19																								T	19
20	T				.06	.09	T	T		.07	.03	.02	.01	.04	.02	.02	.02	.02	T	.01					20
21																							T	T	21
22	T	T	.04	.04	.01			T																	22
23																									23
24																				.01	T	T	T	T	24
25		T	.01	T	T	T	T	T							T	T							T	T	25
26			T	T	T																				26
27	T	T												T	T	T									27
28									T	T				.04	.01		T								28
29																									29
30																									30

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Daniel B. Mitchell
DIRECTOR, NATIONAL CLIMATIC CENTER

USCOMM--NOAA--ASHEVILLE 05/21/79 375

OBSERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER TENTHS	CEILING HNDS.OF FT.	VISIBILITY WHOLE MILES	VISIBILITY TENTHS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	REL. HUM. %	WIND DIR	WIND SPEED KNOTS
DAY 01											
00	10	130	15			23	21	15	71	09	11
03	10	100	15			23	21	15	71	05	10
06	8	UNL	15			22	20	15	74	08	9
09	10	250	15			25	23	18	78	10	14
12	10	250	15			30	27	20	66	09	7
15	10	250	15			30	27	22	72	08	10
18	10	UNL	15			28	27	21	72	09	9
21	3	UNL	15			25	24	21	85	08	6
DAY 02											
00	10	UNL	15			23	23	22	96	06	3
03	9	UNL	15			21	21	18	92	33	9
06	10	8	15			24	23	20	85	34	10
09	10	15	15			30	27	22	72	35	15
12	10	22	15			32	28	25	68	32	14
15	10	UNL	15			35	30	20	54	33	14
18	10	UNL	15			35	29	18	46	30	8
21	0	UNL	15			30	25	13	48	30	3
DAY 03											
00	0	UNL	15			25	21	11	55	31	5
03	0	UNL	15			21	18	08	57	30	7
06	0	UNL	15			18	15	11	81	31	6
09	0	UNL	15			22	19	09	57	33	10
12	10	UNL	15			27	22	08	44	30	10
15	0	UNL	15			32	26	12	43	28	10
18	0	UNL	15			31	25	11	43	26	5
21	0	UNL	15			25	21	11	55	00	0
DAY 04											
00	0	UNL	15			18	16	10	71	00	0
03	4	UNL	15			09	09	06	87	36	4
06	0	UNL	15			17	15	08	68	11	7
09	7	UNL	15			26	23	14	60	12	13
12	10	UNL	15			34	28	18	52	18	13
15	10	250	15			37	31	21	52	18	8
18	10	28	10		SW	34	30	24	67	25	10
21	10	17	7			33	30	26	79	24	7
DAY 05											
00	9	35	10			31	30	27	85	24	9
03	10	85	10			24	22	15	68	28	14
06	10	UNL	10			20	18	13	74	27	9
09	10	17	10			22	20	15	74	23	10
12	10	15	4		S	22	21	18	78	26	11
15	10	30	0	6	SWBS	19	17	11	71	32	22
18	8	36	8		BS	18	16	04	64	31	20
21	2	UNL	10			12	09	-02	53	31	18
DAY 06											
00	0	UNL	15			08	06	-07	50	31	19
03	0	UNL	15			05	03	-08	52	30	15
06	0	UNL	15			02	01	-08	59	31	10
09	0	UNL	15			10	07	-07	46	27	8
12	0	UNL	15			18	13	-06	34	27	13
15	0	UNL	15			21	16	-04	33	27	13
18	0	UNL	15			23	17	-07	26	30	6
21	0	UNL	15			23	17	-08	25	23	5
DAY 07											
00	10	80	15			23	19	07	50	12	4
03	10	100	15			22	18	10	60	11	9
06	10	47	15			21	18	08	57	11	10
09	10	40	15			23	19	07	50	11	15
12	10	44	15			25	21	08	48	10	16
15	10	40	15			26	22	12	55	09	16
18	10	50	15			25	22	15	68	08	18
21	10	36	10			24	22	18	78	08	16
DAY 08											
00	10	35	15			25	23	18	78	08	13
03	10	7	2	8	SF	24	23	20	85	08	19
06	10	8	1	8	ZLSF	24	23	20	85	08	11
09	10	8	3		ZLSF	24	23	20	85	05	11
12	10	16	10		SF	26	24	20	78	02	7
15	10	25	7			30	27	20	68	01	11
18	10	8	2		S	25	25	23	88	09	5
21	10	7	3		S	25	24	22	88	09	8
DAY 09											
00	10	7	7		S	24	23	21	88	08	6
03	10	UNL	0	8	SF	16	16	13	88	00	0
06	10	UNL	10			16	16	13	88	01	4
09	10	UNL	10			25	22	15	66	36	7
12	10	UNL	15			29	25	17	61	11	4
15	10	UNL	15			28	25	14	53	11	10
18	10	UNL	15			26	24	13	51	12	7
21	10	UNL	15			26	21	09	50	09	3
DAY 10											
00	0	UNL	15			23	19	06	48	09	4
03	0	UNL	15			15	13	06	67	01	3
06	3	UNL	15			19	16	07	58	12	3
09	10	UNL	15			28	23	11	48	08	10
12	10	UNL	15			34	27	14	44	08	8
15	8	UNL	15			35	28	16	46	08	12
18	10	UNL	15			33	28	15	45	08	12
21	4	UNL	15			28	24	13	51	08	13
DAY 11											
00	8	UNL	15			26	24	18	72	09	9
03	9	UNL	15			25	23	17	72	09	7
06	10	UNL	15			26	23	17	69	09	12
09	10	180	15			33	28	19	56	09	16
12	10	130	15			37	32	23	57	09	20
15	10	75	15			37	32	25	62	08	19
18	10	38	15			36	32	26	70	08	17
21	10	33	10			36	31	25	68	08	24
DAY 12											
00	10	30	10			34	30	24	67	09	23
03	10	24	7		ZR	33	30	26	75	09	15
06	10	3	0	12	S	33	32	30	88	08	15
09	10	0	0	4	SF	33	32	31	92	09	16
12	10	0	0	7	LF	35	34	32	89	07	18
15	10	3	3		F	36	35	34	92	08	18
18	10	2	2	8	F	36	34	33	92	08	14
21	10	2	1		LF	35	35	34	96	08	15
DAY 13											
00	10	1	0	1	LF	34	34	33	96	09	8
03	10	0	0	1	F	33	33	32	96	10	12
06	10	18	3		LF	35	33	31	85	14	8
09	10	14	5		H	36	34	31	82	16	10
12	10	8	7			36	34	30	79	19	12
15	10	19	4		SW	36	34	30	79	21	14
18	10	28	7			37	34	29	73	19	7
21	10	32	10		SW	36	33	28	76	20	6
DAY 14											
00	10	4	3		SW	33	33	30	88	20	7
03	10	4	3		SF	33	32	30	88	21	8
06	10	4	2	8	LF	33	32	30	88	25	6
09	10	7	6		SF	35	33	30	82	26	11
12	10	11	7			37	35	31	79	28	15
15	10	23	10			36	34	30	79	27	12
18	10	27	10			35	31	29	85	28	12
21	10	32	10			37	34	29	75	29	12
DAY 15											
00	10	26	15			36	33	29	76	29	10
03	10	11	15			36	34	30	79	29	10
06	10	11	15			38	33	29	76	29	13
09	10	28	15			38	34	29	79	28	10
12	10	28	15			40	35	27	80	28	16
15	0	UNL	15			42	36	27	75	26	10
18	0	UNL	15			46	37	24	64	26	9
21	0	UNL	15			40	34	25	75	28	8
DAY 16											
00	5	UNL	15			33	30	24	70	34	3
03	9	UNL	15			27	26	24	88	00	0
06	5	UNL	15			27	25	22	81	01	5
09	6	UNL	15			41	35	26	56	32	7
12	8	UNL	15			48	40	28	56	36	4
15	0	UNL	15			50	38	26	48	35	7
18	0	UNL	15			51	40	25	46	34	4
21	0	UNL	15			38	33	24	66	00	0
DAY 17											
00	2	UNL	15			31	29	24	75	33	3
03	0	UNL	15			27	26	23	85	35	5
06	0	UNL	15			26	25	21	81	36	4
09	0	UNL	15			47	38	28	48	08	8
12	0	UNL	15			50	40	28	45	08	8
15	3	UNL	15			51	41	28	41	09	9
18	5	UNL	15			48	38	26	41	10	12
21	1	UNL	15			41	35	26	55	09	8
DAY 18											
00	1	UNL	15			37	33	26	69	09	8
03	0	UNL	15			35	31	24	64	10	8
06	4	UNL	15			38	32	25	64	10	9
09	10	UNL	15			46	38	30	56	11	11
12	10	250	15			47	40	31	54	13	10
15	10	100	15			48	40	31	52	11	12
18	10	250	15			46	38	29	52	10	10
21	10	110	15			42	37	29	60	11	12
DAY 19											
00	10	130	15			40	35	29	65	12	12
03	10	110	15			38	35	30	70	13	9
06	9	130	15			38	35	30	70	11	10
09	5	UNL	15			50	43	34	64	11	11
12	8	80	15			51	43	34	62	10	12
15	2	UNL	15			50	48	38	48	11	13
18	3	UNL	15			51	43	35	54	10	12
21	10	33	15			47	41	34	61	10	8
DAY 20											
00	10	26	15		BW	43	39	34	71	11	8
03	10	23	15		BW	43	38	34	71	11	11
06	10	15	2		BWF	43	41	36	68	12	9
09	10	0	0		F	45	42	42	96	12	5
12	8	2	0	1	LF	48	44	44	96	12	5
15	2	2	0	6	RF	48	44	44	96	12	5
18	3	6	6		L	43	42	40	88	32	12
21	10	3	10			40	38	38	93	31	10
DAY 21											
00	3	UNL	15			38	37	36	93	31	8
03	0	UNL	15			37	36	35	92	31	8
06	10	15	15			38	36	34	88	32	7
09	10	13	15			38	36	33	82	33	8
12	0	UNL	15			48	42	34	66	30	6
15	7	UNL	15			56	46	33	38	25	8
18	10	250	15			56	46	33	42	24	8
21	9	95	15			48	43	37	66	32	6
DAY 22											
00	10	44	15			43	41	38	86	29	5
03	10	32	15		BW	43	42	40	89	27	4
06	8	40	7			41	41	40	96	26	4
09	2	UNL	15			48	45	42	77	32	6
12	5	UNL	15			56	46	36	47	30	11
15	8	UNL	15			60	47	32	35	27	11
18	2	UNL	15			58	46	30	35	33	7
21	0	UNL	15			42	38	27	55	02	4
DAY 23											
00	0	UNL	15			35	32	28	75	05	3
03	8	100	15			34	32	28	82	00	0
06	8	130	15			40	36	30	68	11	8
09	10	44	15			48	41	33	56	11	8
12	10	90	15			51	43	33	50	12	9
15	10	90	15			46	42	35	61	11	10
18	10	120	15			46	41	33	56	08	15
21	9	120	15			43	39	33	68	08	16
DAY 24											
00	10	110	15			40	38	31	70	09	14
03	10	110	15			37	35	31	78	10	12
06	10	13	10			37	35	33	89	10	14
09	10	6	10			38	36	34	88	10	14
12	10	8	7			47	42	37	88	11	10
15	10	44	7			45	39	38	73	10	10
18	10	40	5		H	42	38	38	78	11	10
21	10	13	6		F	38	37	36	86	10	10
DAY 25											
00	10	1	1		F	38	38	37	96	00	0
03	10	1	0	2	LF	47	46	46	96	21	8
06	10	13	9		F	47	46	45	93	32	13
09	10	11	10			42	41	39	86	31	11
12	10	15	10			42	39	36	79	29	14
15	10	23	15		BW	46	41	35	66	30	13
18	10	40	15			42	38	34	73	31	8
21	8	55	15			40	36	31	70	29	6
DAY 26											
00	4	UNL	15			37	34	30	76	30	7
03	10	8	10		SW	35	33	31	89	33	11
06	10	9	15			34	32	30	85	33	14
09	10	14	15			38	34	29	70	32	13
12	5	UNL	15			46	37	25	46	01	10
15	5	UNL	15			47	37	23	38	05	9
18	8	75	15			46	37	27	48	11	10
21	10	44	15			40	35	28	65	07	3
DAY 27											
00	10	25	15		SW	38	34	28	67	01	9
03	10	40	15			36	31	24	62	32	6
06	9	80	15			33	29	22	64	32	7
09	8	65	15			41	35	27	58	36	8
12	9	40	15			44	36	25	47	35	10
15	10	70	10		SW	42	37	30	63	15	8
18	9	40	15			40	35	29	65	02	5
21	5	UNL	15			35	33	30	82	35	5
DAY 28											
00	10	4	10			32	31	28	85	00	0
03	9	1	0	4	F	30	28	27	89	33	3
06	9	42	10			30	28	26	85	01	3
09	10	22	10		SW	36	34	32	85	34	7
12	7	35	15			42	36	27	55	05	5
15	7	70	7			38	36	36	88	06	9
18	9	80	15			38	34	29	70	13	7
21	10	80	15			34	30	24	67	11	7
DAY 29											
00	10	75	15			32	29	24	72	11	8
03	9	UNL	15			29	27	21	72	10	6
06	8	UNL	15			29	26	18	66	09	9
09	7	UNL	15			36	33	25	60	11	12
12	7	UNL	15			45	37	27	49	07	14
15	10	250	15			46	38	28	51	08	15
18	8	UNL	15			40	33	23	51	07	16
21	5	UNL	15			34	30	22	62	07	13
DAY 30											
00	10	15	15			33	30	25	72	07	7
03	3	UNL	15			31	28	23	72	09	8
06	10	UNL	15			32	28	20	61	07	10
09	2	UNL	15			37	31	22	55	09	8
12	2	UNL	15			43	35	24	47	11	11
15	1	UNL	15			42	33	18	38	10	13
18	0	UNL	15			42	32	13	31	11	10
21	0	UNL	15			33	28	19	56	10	9

STATION

DULUTH MINN

YEAR & MONTH

79 04

NOTES

CEILING

UNL INDICATES UNLIMITED

WEATHER

+	TORNADO
T	THUNDERSTORM
Q	SQUALL
R	RAIN
RW	RAIN SHOWERS
ZR	FREEZING RAIN
L	DRIZZLE
ZL	FREEZING DRIZZLE
S	SNOW
SP	SNOW PELLETS
IC	ICE CRYSTALS
SW	SNOW SHOWERS
SG	SNOW GRAINS
IP	ICE PELLETS
A	HAIL
F	FOG
IF	ICE FOG
GF	GROUND FOG
BD	BLOWING DUST
BN	BLOWING SAND
BS	BLOWING SNOW
BY	BLOWING SPRAY
K	SMOKE
H	HAZE
D	DUST

WIND

DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS. INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. ENTRY OF 00 IN THE DIRECTION COLUMN INDICATES CALM.

SPEED IS EXPRESSED IN KNOTS; MULTIPLY BY 1.15 TO CONVERT TO MILES PER HOUR.

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM-210

U.S.MAIL
FIRST CLASS

LCD-21-14913-PD-7912

MINNESOTA POWER & LIGHT CO
CUSTOMER SERVICES DEPT.
30 WEST SUPERIOR STREET
DULUTH, MN 55802

MARCH 1979
DULUTH, MINNESOTA
NATIONAL WEATHER SERVICE OFC
INTERNATIONAL AIRPORT

Local Climatologic[illegible] Data

MONTHLY SUMMARY

LATITUDE 46° 50 'N LONGITUDE 92° 11 'W ELEVATION (GROUND) 1428 FT. STANDARD TIME USED: CENTRAL WBAN #14913

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT	DEGREE DAYS BASE 65° HEATING (SEASON BEGINS WITH JULY)	COOLING (SEASON BEGINS WITH JAN.)	WEATHER TYPES ON DATES OF OCCURRENCE (1 FOG, 2 HEAVY FOG, 3 THUNDERSTORM, 4 ICE PELLETS, 5 HAIL, 6 GLAZE, 7 DUSTSTORM, 8 SMOKE, HAZE, 9 BLOWING SNOW)	SNOW, ICE PELLETS OR ICE ON GROUND AT 0BAM IN.	PRECIPITATION WATER EQUIVALENT IN	SNOW, ICE PELLETS IN.	AVG. STATION PRESSURE IN. ELEV. 1417 FEET M.S.L.	WIND RESULTANT DIR.	RESULTANT SPEED M.P.H.	AVERAGE SPEED M.P.H.	FASTEST MILE SPEED M.P.H.	FASTEST MILE DIRECTION	SUNSHINE MINUTES	SUNSHINE PERCENT OF POSSIBLE	SKY COVER TENTHS SUNRISE TO SUNSET	SKY COVER TENTHS MIDNIGHT TO MIDNIGHT	DATE
1	17	10	14	-3	9	51	0	1 9	25	.03	.4	28.54	09	13.5	13.8	23	NE	0	0	10	10	1
2	29	16	23	6	18	42	0	23 6	25	.33	1.7	28.46	10	7.9	7.6	10	E	0	0	10	10	2
3	30	26	28	11	25	37	0	2 6	28	.37	3.7	28.42	02	5.5	6.3	17	N	0	0	10	10	3
4	31	23	27	9	19	38	0	1 9	32	.24	2.4	28.30	36	14.9	15.2	19	N	0	0	10	10	4
5	37	16	27	9	10	38	0		32	0	0	28.43	34	6.5	9.8	18	NW	678	100	1	1	5
6	30	15	23	4	15	42	0		30	.11	1.5	28.23	24	4.2	7.8	15	NW	240	35	7	6	6
7	27	10	19	0	14	46	0	1 8	30	.03	.3	28.46	01	7.9	12.1	17	NW	411	60	9	9	7
8	23	9	16	-4	11	49	0	1	28	.11	1.1	28.39	11	11.2	11.5	17	SE	0	0	10	10	8
9	25	0	13	-7	8	52	0	1 6	28	.01	.2	28.30	28	13.2	15.1	24	NW	553	80	2	8	9
10	10	-8*	1*	-20	-13	64	0		29	T	T	28.42	29	14.7	14.8	20	W	424	61	4	5	10
11	32	8	20	-1	8	45	0		29	.01	.1	28.37	29	10.2	12.1	22	NW	627	90	1	4	11
12	28	9	19	-2	11	46	0		28	0	0	28.44	11	2.7	8.8	17	E	186	26	9	8	12
13	35	18	27	5	19	38	0	1	25	.02	.2	28.05	32	3.5	10.2	22	W	33	5	10	9	13
14	22	1	12	-10	-3	53	0		25	.01	.1	28.54	30	16.1	16.4	26	NW	612	86	3	4	14
15	23	-7	8	-15	-6	57	0		25	0	0	28.81	25	9.9	12.2	20	SW	712	100	0	1	15
16	44*	14	29	6	20	36	0	8	25	0	0	28.57	22	14.4	14.5	26	SW	715	100	0	2	16
17	38	35	37	13	31	28	0	2 8	23	.06	0	28.51	15	9.8	10.4	16	SE	0	0	10	10	17
18	38	35	37	13	35	28	0	2	22	.58	0	28.46	10	11.9	12.2	23	NE	0	0	10	10	18
19	40	33	37*	12	36	28	0	2	18	.21	.1	28.34	11	11.4	12.8	20	NE	0	0	10	10	19
20	33	31	32	7	28	33	0	1	17	T	T	28.46	21	10.4	11.4	16	S	0	0	10	10	20
21	37	30	34	8	27	31	0		16	T	T	28.59	24	10.8	11.1	17	SW	2	0	10	10	21
22	35	33	34	8	31	31	0	2 4	17	.78	4.6	28.47	03	3.4	6.3	9	NW	0	0	10	10	22
23	34	21	28	1	26	37	0	1	18	.04	.4	28.21	34	15.4	15.5	26	N	0	0	10	10	23
24	25	13	19	-8	5	46	0		17	0	0	28.29	36	16.6	16.7	24	N	234	32	7	7	24
25	20	3	12	-16	-3	53	0		17	0	0	28.42	06	9.7	11.8	17	E	517	69	6	5	25
26	24	8	16	-12	8	49	0		17	T	.1	28.54	05	2.1	7.1	12	NW	300	40	9	8	26
27	32	3	18	-11	7	47	0		17	T	T	28.63	19	6.2	8.9	17	SW	644	86	7	5	27
28	33	28	31	2	27	34	0	2 6	17	.07	.1	28.21	14	6.0	9.8	15	S	0	0	10	10	28
29	32	25	29	-1	24	36	0	1 4 6 8	16	.21	T	28.41	09	13.7	14.2	26	NE	34	5	10	10	29
30	34	27	31	0	28	34	0	1 4 6	17	.38	T	28.27	36	7.4	12.7	17	NW	31	4	10	10	30
31	32	10	21	-10	16	44	0	6	17	0	0	28.74	08	6.3	8.1	17	E	765	100	2	2	31
	SUM	SUM				TOTAL	TOTAL			TOTAL	TOTAL	FOR THE MONTH:						TOTAL	%	SUM	SUM	
	931	495				1293	0	NUMBER OF DAYS		3.58	17.0	28.43	36	1.4	11.5	26	NE	7718	FOR	227	230	
	AVG.	AVG.	AVG.	DEP.	AVG.	DEP.	DEP.	PRECIPITATION		DEP.						DATE:	28+	POSSIBLE	MONTH	AVG.	AVG.	
	30.0	16.0	23.0	-0.5	16	6	0	.01 INCH	19	1.82								22167	35	7.3	7.4	

SEASON TO DATE

NUMBER OF DAYS MAXIMUM TEMP. ≥ 90°	MAXIMUM TEMP. ≤ 32°	MINIMUM TEMP. ≤ 32°	MINIMUM TEMP. ≤ 0°	TOTAL DEP.	TOTAL DEP.
0	19	27	3	590	0

SNOW, ICE PELLETS	
≥ 1.0 INCH	6
THUNDERSTORMS	1
HEAVY FOG	7
(CLEAR 7 PARTLY CLOUDY 5 CLOUDY 19	

GREATEST IN 24 HOURS AND DATES			GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE	
PRECIPITATION	SNOW, ICE PELLETS			
.80	22-23	4.6	22	32 5

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON AN EARLIER DATE, OR DATES.
HEAVY FOG: - VISIBILITY 1/4 MILE OR LESS.
FIGURES FOR WIND DIRECTIONS ARE TENS OF DEGREES CLOCKWISE FROM TRUE NORTH. 00 = CALM. DATA IN COLS. 6 AND 12-15 ARE BASED ON 7 OR MORE OBSERVATIONS PER DAY AT 3-HOUR INTERVALS. FASTEST MILE WIND SPEEDS ARE FASTEST OBSERVED ONE-MINUTE VALUES WHEN DIRECTIONS ARE IN TENS OF DEGREES. THE / WITH THE DIRECTION INDICATES PEAK GUST SPEED.
ANY ERRORS DETECTED WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL SUMMARY

SUMMARY BY HOURS

HOUR (LST)	AVERAGES SKY COVER TENTHS	STATION PRESSURE IN.	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	DEW PT. °F	RELATIVE HUMIDITY %	WIND SPEED M.P.H.	RESULTANT WIND DIRECTION	RESULTANT WIND SPEED M.P.H.
00	8	28.43	22	21	15	78	11.6	01	1.0
03	7	28.41	21	19	15	79	10.9	30	.9
06	7	28.42	19	18	14	80	10.2	01	1.4
09	8	28.44	22	20	15	75	11.4	01	2.0
12	8	28.43	25	23	17	71	12.1	02	1.7
15	7	28.41	27	25	18	69	13.2	01	1.3
18	7	28.43	26	24	17	69	11.5	36	1.5
21	7	28.44	24	22	15	72	11.2	01	1.7

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DATE	A. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
1	.01	.01	T	T	T	T	T	T	T	.01	T	T	T	T	T	T	T	T	T						1
2							T	T	.01	.01	.05	.03	.03	.02	.01	T	T	.09	.04	.02	.01	T	.01	T	2
3	T	.02	.04	.02	.03	.05	.03	.03	.02	.01	.01	.01	T	T	.02	T	.01	.01	.03	.01	.01	.01	T	T	3
4	.01	.01	.03	.03	.08	.04	.02	.01	.01	T	T	T	T	T	T	T									4
5																									5
6															T	T	T	.01	T	.02	.02	.01	.03	.02	6
7	T	.01	.01	T												T		T	T	T	T	T	.01		7
8	T	.01	T	T	T	T	T	T	T	T	T	T	T		T	T	.01	.04	.02	.02	.01	T	T	T	8
9			T	T	T	T	.01	T	T	T															9
10																								T	10
11	T	.01	T	T	T	T																			11
12																									12
13										T			T	T	.02	T	T	T							13
14				T	.01	T	T																		14
15																									15
16																									16
17													T		T	T	T	T	T	.01	.01	.01	.02	.01	17
18	T	T	.01	T	.01	.01	T	T	T	T	T	.06	.01	T	.04	.01	.01	.02	.03	.08	.10	.08	.08	.03	18
19	.05	.04	.02	T	.02	.01	.02	T	T	T	.01	.01	T	.01	.01	T	T	T	T	T	T	T	.01	T	19
20	T		T	T	T			T									T	T	T						20
21											T	T													21
22	T	.02	.03	.03	.04	.04	.02			T	T	.01	.01	.02	.06	.03	.08	.05	.08	.06	.06	.06	.07	.05	22
23	.02	.02	T	T								T	T	T	T										23
24																									24
25																									25
26							T	T	T	T	T	T	T	T	T										26
27																							T	T	27
28	T		T	T	T	T	T	T	T	.01	.01	T	.02	T	.01	.01	T	.01	T	T	T	T			28
29																						.02	.12	.07	29
30	.13	.10	.08	.04	.01	T	T	T	T	T															30
31																									31

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noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / ENVIRONMENTAL DATA AND INFORMATION SERVICE

Daniel B. Mitchell
DIRECTOR, NATIONAL CLIMATIC CENTER

USCOMM--NOAA--ASHEVILLE 04/25/79 375

MARCH 1979 DULUTH, MINNESOTA

OBSERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER TENTHS	CEILING HNDS. OF FT.	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	REL. HUM. %	WIND DIR	WIND SPEED KNOTS
DAY 01											
00	10	7	1	8	SFBS	12	11	08	84	09	18
03	10	8	1		SFBS	12	11	07	80	09	15
06	10	6	2		SF	11	10	06	80	08	13
09	10	12	4		S	11	10	06	80	09	13
12	10	9	3		S	14	13	09	80	10	10
15	10	8	4		S	15	14	10	80	11	10
18	10	6	4		SF	15	14	11	84	11	9
21	10	2	1	8	F	16	15	12	84	11	8
DAY 02											
00	10	3	4		F	17	16	13	84	10	11
03	10	2	2	8	F	17	16	13	84	10	7
06	10	2	0	8	F	17	17	14	88	11	5
09	10	3	1	4	ZLF	20	18	16	84	11	5
12	10	13	2		SRF	21	20	17	84	08	5
15	10	2	1		ZRF	24	23	21	88	09	8
18	10	1	0	6	TSF	24	24	22	92	11	6
21	10	2	0	8	ZLSF	27	26	24	88	12	6
DAY 03											
00	10	1	0	4	ZLF	26	26	26	92	12	4
03	10	2	0	8	SF	26	26	26	92	00	0
06	10	2	0	8	SF	26	26	26	92	00	0
09	10	5	2		SF	30	29	27	88	00	0
12	10	6	0	8	SF	29	29	27	92	36	8
15	10	9	1		SF	28	28	25	85	04	8
18	10	2	0	8	SF	27	26	23	85	01	10
21	10	2	1		SF	26	25	22	85	02	13
DAY 04											
00	10	16	7		S	26	24	20	78	01	13
03	10	15	2		S	24	23	20	85	02	13
06	10	10	1		SBS	24	23	20	85	36	16
09	10	4	0	8	SBS	24	23	19	81	36	14
12	10	18	6		S	24	23	19	81	36	12
15	10	28	4		SF	28	26	22	78	36	12
18	10	30	15			30	26	17	58	34	11
21	10	UNL	15			27	24	15	61	34	15
DAY 05											
00	5	UNL	15			23	20	12	63	33	15
03	2	UNL	15			19	17	10	68	36	12
06	2	UNL	15			18	15	09	74	34	12
09	1	UNL	15			23	19	08	52	36	9
12	0	UNL	15			31	24	09	40	35	4
15	0	UNL	15			34	27	14	44	26	6
18	0	UNL	15			31	25	11	43	12	7
21	0	UNL	15			24	20	08	53	23	3
DAY 06											
00	0	UNL	15			22	19	09	57	19	6
03	0	UNL	15			20	17	09	62	22	8
06	0	UNL	15			18	16	09	68	19	8
09	2	UNL	15			22	19	12	65	16	6
12	9	100	15			27	24	15	61	00	0
15	10	26	10		S	30	27	20	66	24	7
18	10	30	2	8	S	29	28	25	85	31	7
21	10	23	1		S	27	26	23	85	32	12
DAY 07											
00	10	15	1	8	S	27	26	24	88	34	12
03	10	9	7		S	22	21	18	89	33	12
06	10	10				20	19	16	81	34	12
09	9	65	10			17	16	10	74	35	12
12	10	19	15			20	18	10	65	36	10
15	10	8	10			18	17	14	84	11	10
18	9	9	5		SH	14	13	10	84	08	8
21	10	7	4		SF	12	12	09	88	09	8
DAY 08											
00	5	2			SF	10	10	09	92	09	12
03	3	2			SF	10	10	07	88	10	11
06	3	1	8		SF	09	09	07	81	10	11
09	2	2			SF	11	10	07	84	10	12
12	4	5			SF	15	14	11	84	13	7
15	7	4			S	17	16	13	84	12	13
18	5	0	12		S	18	18	15	84	12	8
21	15	5			S	20	19	16	84	13	8
DAY 09											
00	8	2			F	23	22	20	88	21	7
03	4	2			ZLF	24	24	22	92	22	13
06	6	5			SF	24	23	20	85	26	12
09	8	8				23	22	20	88	30	12
12	75	10				17	15	09	71	26	9
15	30	10				25	22	14	63	14	7
18	15	15				28	24	18	61	11	11
21	15	15				24	21	14	66	10	15
DAY 10											
00	80	15				00	00	-12	58	28	13
03	UNL	15				-06	-06	-16	61	30	14
06	UNL	15				-08	-08	-17	64	30	12
09	100	15				-07	-07	-18	58	29	14
12	100	15				01	00	-15	48	28	14
15	UNL	15				06	06	-10	41	30	14
18	UNL	15				06	06	-09	43	29	11
21	UNL	15				07	05	-09	47	28	11
DAY 11											
00	14	1	8		S	08	06	-06	52	26	12
03	25	6			S	09	08	01	70	24	10
06	15	10				10	08	00	64	27	11
09	2	UNL	15			15	13	06	67	31	10
12	0	UNL	15			24	21	12	60	34	14
15	0	UNL	15			30	25	13	49	31	14
18	0	UNL	15			29	24	11	47	31	7
21	0	UNL	15			22	19	08	55	31	8
DAY 12											
00	0	UNL	15			17	15	07	69	30	6
03	0	UNL	15			15	13	07	70	31	6
06	0	UNL	15			08	08	06	84	31	4
09	2	UNL	15			17	15	09	71	26	5
12	10	75	10			25	22	14	63	14	7
15	10	30	10			26	22	14	63	14	7
18	8	UNL	15			28	24	18	61	11	11
21	8	UNL	15			24	21	14	66	10	15
DAY 13											
00	10	16	10			19	18	14	81	12	10
03	10	11	2	8	F	20	19	17	88	12	7
06	10	2	1	8	F	21	21	19	92	16	4
09	10	15	2	8	F	26	26	24	92	22	4
12	10	9	4		RSF	34	32	28	82	30	7
15	10	15	5		S	27	26	20	75	34	15
18	5	UNL	10			25	23	18	69	32	14
21	2	UNL	10			23	21	14	68	31	10
DAY 14											
00	85	15				22	20	13	68	30	10
03	110	15				14	12	06	70	30	14
06	26	7			S	11	08	02	67	31	14
09	21	7				08	06	-07	60	31	17
12	UNL	15				09	06	-11	59	32	18
15	UNL	15				12	08	-10	56	29	15
18	UNL	15				11	08	-10	58	31	14
21	UNL	15				06	04	-10	67	29	12
DAY 15											
00	UNL	15				01	00	-11	56	30	10
03	UNL	15				-01	-02	-12	58	30	13
06	UNL	15				-04	-04	-12	68	29	8
09	UNL	15				04	02	-09	64	26	7
12	UNL	15				16	13	-01	67	32	10
15	UNL	15				22	17	00	58	31	13
18	UNL	15				20	16	00	61	24	14
21	UNL	15				16	13	-01	67	22	12
DAY 16											
00	UNL	15				14	12	03	81	23	14
03	UNL	15				15	14	09	77	21	11
06	UNL	15				16	15	11	81	22	8
09	UNL	8			H	26	23	18	75	22	12
12	UNL	10				37	33	27	67	22	18
15	UNL	15				43	37	30	60	22	16
18	UNL	15				39	36	31	75	22	13
21	28	10				38	36	31	78	21	11
DAY 17											
00	36	10				38	35	30	73	17	7
03	40	10				37	34	29	73	17	11
06	40	10				37	33	28	70	18	11
09	38	7				38	34	27	65	14	10
12	15	6			H	36	34	31	82	15	6
15	8	2	8		LFH	36	35	35	89	18	11
18	2	0	12		LF	36	35	34	92	14	9
21	2	0	2		LF	36	35	34	96	11	8
DAY 18											
00	2	0	2		LF	35	34	34	96	12	7
03	2	0	2		LF	35	34	33	92	12	9
06	1	0	2		LF	35	34	33	92	11	10
09	0	0	1		LF	35	35	34	96	10	8
12	0	0	1		RF	36	36	36	100	10	10
15	1	0	2		RF	37	37	36	96	08	10
18	2	0	2		RF	37	37	36	96	09	16
21	2	0	4		RF	38	38	37	96	09	15
DAY 19											
00	3	0	8		RF	38	38	37	96	10	15
03	2	0	4		RF	38	38	37	96	11	13
06	0	0	1		LF	38	38	37	96	10	14
09	0	0	1		LF	38	38	38	100	09	10
12	0	0	2		LF	38	38	38	100	09	13
15	0	0			LF	38	38	38	100	14	8
18	14	6			F	36	34	32	85	18	8
21	9	5			LF	34	33	31	88	19	8
DAY 20											
00	4	2			LSF	33	32	31	92	17	10
03	7	3			SF	33	32	31	92	20	11
06	5	6			F	32	31	30	92	19	12
09	8	7				32	31	28	85	21	10
12	12	10				32	30	27	82	22	12
15	14	10				33	30	28	78	24	11
18	15	7			S	32	30	28	79	25	7
21	18	15				31	28	26	82	23	6
DAY 21											
00	15	15				31	28	25	78	24	12
03	12	10				30	28	25	82	26	14
06	16	10				31	28	25	78	22	8
09	15	10				32	30	26	78	25	11
12	14	7				35	31	28	82	24	10
15	18	7				35	32	28	78	24	10
18	10	7				37	34	29	73	24	8
21	UNL	10				34	32	29	82	22	6
DAY 22											
00	75	10				33	31	29	85	29	5
03	4	1	8		SF	33	32	31	92	32	6
06	3	2			LSF	33	32	31	92	12	3
09	2	0	2		F	33	32	31	92	10	6
12	5	4			RSF	34	33	32	92	06	7
15	4	2	8		RSF	34	33	32	92	06	7
18	2	0	12		SF	33	33	32	96	36	6
21	2	1	8		SF	33	33	32	96	36	7
DAY 23											
00	3	2			SF	33	33	32	96	35	8
03	4	2			SF	33	33	32	96	36	9
06	7	7			F	33	32	31	92	35	12
09	6	5			F	33	32	31	92	33	16
12	8	6			SF	33	31	29	85	34	16
15	14	7				30	28	24	78	35	17
18	250	10				27	24	18	68	34	14
21	130	15				23	20	13	65	36	16
DAY 24											
00	130	15				21	18	10	62	35	16
03	130	15				19	18	07	58	36	14
06	120	15				18	14	06	62	36	15
09	250	15				16	13	03	66	36	16
12	250	15				22	18	04	46	36	19
15	250	15				24	20	08	50	36	16
18	120	15				23	18	05	46	34	12
21	65	10				18	13	-05	36	36	12
DAY 25											
00	UNL	15				13	10	-05	44	02	12
03	UNL	15				09	07	-08	50	02	9
06	UNL	15				04	02	-08	57	36	7
09	UNL	15				12	08	-07	62	08	12
12	80	15				16	12	-04	61	07	12
15	250	15				18	14	-01	63	08	12
18	250	15				18	15	06	69	10	10
21	80	15				17	14	02	91	08	8
DAY 26											
00	100	15				16	14	09	82	12	8
03	80	15				15	13	08	87	12	4
06	80	15				14	13	07	74	03	3
09	14	2	8		S	16	15	10	77	08	8
12	20	4			S	19	17	11	71	14	5
15	35	15				23	19	08	52	34	11
18	UNL	15				23	19	08	52	31	7
21	UNL	15				15	13	08	87	29	3
DAY 27											
00	UNL	15				08	07	03	80	29	5
03	UNL	15				08	06	-02	83	29	3
06	UNL	15				04	03	-07	80	32	3
09	UNL	15				21	17	08	82	12	4
12	UNL	15				27	23	11	81	18	12
15	120	15				31	26	15	81	18	13
18	65	10				30	25	16	86	19	11
21	44	10				28	24	18	81	16	11
DAY 28											
00	8	4			F	31	30	28	88	01	4
03	9	4			F	29	28	26	88	00	0
06	18	7				27	26	23	85	09	10
09	15	10				25	24	21	85	10	13
12	10	7				27	26	23	85	09	18
15	11	7				28	28	24	82	10	15
18	4	4			F	27	26	24	88	09	20
21	4	3			F	27	26	24	88	09	18
DAY 29											
00	3	2			ZRIPF	30	29	28	92	09	13
03	2	2			ZRF	30	29	28	92	10	10
06	2	2			ZRF	31	30	28	89	08	8
09	5	5			ZRF	32	31	30	92	34	10
12	10	5			F	31	30	27	85	33	12
15	15	6			F	32	31	28	85	36	12
18	26	7				33	31	28	85	32	10
21	26	15				32	29	25	79	32	13
DAY 30											
00	3	2			ZRIPF	30	29	28	92	09	13
03	2	2			ZRF	30	29	28	92	10	10
06	2	2			ZRF	31	30	28	89	08	8
09	5	5			ZRF	32	31	30	92	34	10
12	10	5			F	31	30	27	85	33	12
15	15	6			F	32	31	28	85	36	12
18	26	7				33	31	28	85	32	10
21	26	15				32	29	25	79	32	13

STATION

DULUTH MINN

YEAR & MONTH

79 03

NOTES

CEILING
UNL INDICATES UNLIMITED

WEATHER

* TORNADO
T THUNDERSTORM
Q SQUALL
R RAIN
RW RAIN SHOWERS
ZR FREEZING RAIN
L DRIZZLE
ZL FREEZING DRIZZLE
S SNOW
SP SNOW PELLETS
IC ICE CRYSTALS
SW SNOW SHOWERS
SG SNOW GRAINS
IP ICE PELLETS
A HAIL
F FOG
IF ICE FOG
OF GROUND FOG
BD BLOWING DUST
BN BLOWING SAND
BS BLOWING SNOW
BY BLOWING SPRAY
K SMOKE
H HAZE
D DUST

WIND

DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS. INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. ENTRY OF 00 IN THE DIRECTION COLUMN INDICATES CALM.

SPEED IS EXPRESSED IN KNOTS; MULTIPLY BY 1.15 TO CONVERT TO MILES PER HOUR.

RECEIVED
MAY 10 1979
Commerce, Energy & Natural Resources Department
File
Contract
Technical
Other

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

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CUSTOMER SERVICES DEPT.
30 WEST SUPERIOR STREET
DULUTH, MN 55802

FEBRUARY 1979
DULUTH, MINNESOTA
NATIONAL WEATHER SERV OFC
INTERNATIONAL AIRPORT

Local Climatological Data

MONTHLY SUMMARY

LATITUDE 46° 50 'N LONGITUDE 92° 11 'W ELEVATION (GROUND) 1428 FT. STANDARD TIME USED: CENTRAL WBAN #14913

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT	DEGREE DAYS BASE 65° HEATING (SEASON BEGINS with JULY)	COOLING (SEASON BEGINS with JAN.)	WEATHER TYPES ON DATES OF OCCURRENCE 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW, ICE PELLETS OR ICE ON GROUND AT 0BAM IN.	PRECIPITATION WATER EQUIVALENT IN	SNOW, ICE PELLETS IN.	AVG. STATION PRESS. IN. ELEV. 1417 FEET M.S.L.	WIND RESULTANT DIR.	RESULTANT SPEED M.P.H.	AVERAGE SPEED M.P.H.	FASTEST MILE SPEED M.P.H.	FASTEST MILE DIRECTION	SUNSHINE MINUTES	SUNSHINE PERCENT OF POSSIBLE	SKY COVER TENTHS SUNRISE TO SUNSET	SKY COVER TENTHS MIDNIGHT TO MIDNIGHT	DATE
1	13	2	8	-1	- 1	57	0		17	.01	.1	28.85	20	2.1	5.0	11	S	0	0	10	10	1
2	13	-5	4	-5	- 3	61	0		17	.02	.3	28.57	15	1.7	3.3	6	SE	94	16	9	8	2
3	9	-20	-6	-15	- 9	71	0		17	.05	.6	28.38	22	.2	5.0	17	NE	135	23	7	7	3
4	-1	-17	-9	-19	-22	74	0		17	0	0	28.61	31	14.3	14.7	20	W	586	100	0	0	4
5	0	-19	-10	-20	-22	75	0		17	.02	.4	28.51	13	9.1	10.2	17	SE	8	1	10	9	5
6	9	0	5	-5	- 7	60	0		18	.05	1.0	28.30	08	3.8	9.1	17	NE	0	0	10	10	6
7	5	-15	-5	-15	-15	70	0		18	T	T	28.42	33	5.9	8.8	12	N	558	94	1	1	7
8	5	-18	-7	-17	-22	72	0		18	0	0	28.61	35	3.3	7.6	10	N	598	100	0	1	8
9	6	-13	-4	-14	-20	69	0		18	0	0	28.72	29	8.6	9.8	18	W	601	100	1	3	9
10	0	-20	-10	-21	-18	75	0		18	.01	.4	28.60	09	9.1	10.1	18	E	72	12	10	7	10
11	13	-1	6	-5	- 6	59	0		18	T	.2	28.70	06	1.8	6.0	14	E	248	41	10	10	11
12	6	-5	1	-10	- 9	64	0		18	.11	2.0	28.77	08	8.0	9.9	20	E	391	64	5	8	12
13	9	-15	-3	-14	-10	66	0	1 9	20	.12	1.2	28.68	09	10.8	11.5	24	E	95	15	10	9	13
14	22	9	16	4	9	49	0	1 8 9	20	.04	.4	28.31	11	5.0	7.9	17	E	0	0	10	10	14
15	18	-7	6	-6	3	59	0	1 8 9	22	.31	4.3	28.53	34	8.3	11.5	25	NW	135	22	10	9	15
16	-1	-23*	-14*	-26	-25	78	0		23	0	0	28.12	01	8.0	10.1	17	NW	623	100	5	2	16
17	-1	-18	-10	-23	-22	75	0		23	0	0	28.20	11	8.5	8.6	15	SE	626	100	5	4	17
18	10	-10	0	-13	-13	65	0		23	0	0	28.87	11	6.9	8.9	12	SE	588	93	4	4	18
19	20	-1	10	-3	- 1	55	0		23	T	T	28.54	17	7.7	8.2	14	S	384	61	9	9	19
20	26	14	20	7	15	45	0	1	23	.08	.8	28.37	10	3.4	3.5	12	E	0	0	10	10	20
21	28	22	25	11	19	40	0	1 8	24	.28	2.8	28.31	33	4.5	6.9	14	E	75	11	10	10	21
22	25	19	22	8	17	43	0	1 3 6 8 9	25	.69	7.6	28.48	09	16.8	16.8	32	NE	0	0	10	10	22
23	31	9	20	6	19	45	0	2 6 9	29	.08	.6	28.22	32	6.6	14.2	24	W	7	1	10	9	23
24	10	-3	4	-11	- 6	61	0		29	0	0	28.94	06	6.8	10.1	17	E	618	95	0	1	24
25	13	0	7	-8	- 6	58	0		28	0	0	28.95	10	8.1	8.3	12	E	554	85	3	5	25
26	32	4	18	2	4	47	0		28	0	0	28.62	13	8.4	9.6	18	S	534	82	8	7	26
27	35*	17	26*	10	13	39	0		24	0	0	28.47	20	6.4	8.6	15	SW	281	43	10	10	27
28	30	12	21	5	18	44	0	2 9	24	.03	.5	28.51	08	9.8	10.8	27	E	72	11	10	10	28

SUM	SUM				TOTAL	TOTAL		TOTAL	TOTAL	FOR THE MONTH:							TOTAL	%	SUM	SUM
382	-102				1679	0	NUMBER OF DAYS	1.89	23.3	28.62	08	2.7	9.1	32	NE	7883	FOR	195	193
AVG.	AVG.	AVG.	DEP.	AVG.	DEP.	DEP.	PRECIPITATION	DEP.						DATE:	22	POSSIBLE	MONTH	AVG.	AVG.
13.6	-3.6	5.0	-7.1	-04	198	0	>.01 INCH 15	1.04								17322	46	7.0	6.9

NUMBER OF DAYS				SEASON TO DATE	TOTAL	TOTAL
MAXIMUM TEMP.		MINIMUM TEMP.		SNOW, ICE PELLETS		
≥ 90°	≤ 32°	≤ 32°	≤ 0°	> 1.0 INCH 6	7583	0
0	27	28	19	THUNDERSTORMS 1	DEP.	DEP.
				HEAVY FOG 2	584	0
				CLEAR 6 PARTLY CLOUDY 6 CLOUDY 16		

GREATEST IN 24 HOURS AND DATES		GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE	
PRECIPITATION	SNOW, ICE PELLETS		
.74	22-23	7.7	22-23	29	24+

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON AN EARLIER DATE, OR DATES.
HEAVY FOG: - VISIBILITY 1/4 MILE OR LESS.
FIGURES FOR WIND DIRECTIONS ARE TENS OF DEGREES CLOCKWISE FROM TRUE NORTH. 00 = CALM.
DATA IN COLS. 6 AND 12-15 ARE BASED ON 7 OR MORE OBSERVATIONS PER DAY AT 3-HOUR INTERVALS.
FASTEST MILE WIND SPEEDS ARE FASTEST OBSERVED ONE-MINUTE VALUES WHEN DIRECTIONS ARE IN TENS OF DEGREES. THE / WITH THE DIRECTION INDICATES PEAK GUST SPEED.
ANY ERRORS DETECTED WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL SUMMARY

SUMMARY BY HOURS

HOUR LOCAL TIME	AVERAGES SKY COVER TENTHS	STATION PRESSURE IN.	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	DEW PT. °F	RELATIVE HUMIDITY %	WIND SPEED M.P.H.	RESULTANT WIND DIRECTION	RESULTANT WIND SPEED M.P.H.
00	7	28.62	4	3	-5	84	9.2	07	3.8
03	7	28.61	2	2	-6	87	8.1	05	2.8
06	6	28.62	1	0	-7	88	7.4	08	2.0
09	7	28.63	4	3	-5	86	8.5	08	3.0
12	7	28.63	9	8	-2	80	10.2	12	2.7
15	7	28.61	11	9	-1	79	10.8	14	2.8
18	8	28.62	8	6	-3	82	9.2	08	3.3
21	7	28.62	5	4	-5	85	9.4	07	3.8

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DATE	A. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
1	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	.01	T	1
2	T	T	T	T	T	T	T	.01	T	T	T	.01	T	T	T	T	T	T	T					T	2
3	T	T	T								T	T	T	T	T	.01	.01	.01	T	T	.01	T	.01	T	3
4																									4
5									T	T	T	T	T	T	T	T	.01	T	T	T	T	T	.01	T	5
6	.01	.01	T	.02	.01	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T			T	6
7	T	T	T																						7
8																									8
9																									9
10															T	T	T	T	T	T	T	T	.01	T	10
11	T	T	T	T	T	T	T	T	T	T	T	T	T												11
12																			T	.03	.03	.04	.01	T	12
13								T	T	T	T	T					T	T	T	.04	.02	.04	.02	T	13
14	.01	.01	T	.01	.01	T	T	T	T	T	T	T													14
15		T	.02	.04	.04	.04	.03	.04	03	.04	.02	.01	T	T	T	T									15
16																									16
17																									17
18																									18
19									T	T															19
20								T	T	T	T	T									T	.02	.04	.03	20
21	.02	.06	.05	.03	.04	.02	.03	.01	.01	T	.01	T	T	T											21
22								T	T	T	T	.02	.02	.03	.02	.04	.02	.04	.07	.01	.16	.18	.06	.02	22
23	T	T	.01	T	T	.01	T	.01	.02	T	T	T	T	T	.01	T	T	T	T	T	T	T	T		23
24																									24
25																									25
26																									26
27																									27
28																	T	T	T	.01	.01	T	T	.01	28

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DIRECTOR, NATIONAL CLIMATIC CENTER

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FEBRUARY 1979 DULUTH, MINNESOTA

OBSERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER TENTHS	CEILING HNDS. OF FT.	VISIBILITY WHOLE MILES	VISIBILITY TENTHS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	REL. HUM. %	WIND DIR	WIND SPEED KNOTS
DAY 01											
00	10	21	10		S	09	07	-01	63	33	4
03	10	21	10		S	09	07	-01	63	31	4
06	10	20	10		S	07	06	-02	66	28	4
09	10	20	10		S	05	04	-04	66	00	0
12	10	22	7		S	10	08	-03	55	18	8
15	10	25	7		S	12	10	00	58	21	7
18	8	25	7		S	09	08	00	67	12	5
21	10	70	10		S	07	06	00	73	13	3
DAY 02											
00	10	14	10		S	08	07	-01	83	14	4
03	9	UNL	7		S	04	03	-05	88	08	4
06	4	UNL	10		S	01	00	-06	72	08	4
09	10	75	2		S	05	04	-04	88	00	0
12	10	75	2		S	11	09	-02	95	17	3
15	10	75	3		S	12	10	03	87	24	4
18	9	19	10		S	11	09	02	87	22	4
21	7	UNL	15		S	01	00	-08	85	00	0
DAY 03											
00	6	90	10		S	00	00	-09	85	31	4
03	3	UNL	15			-05	-06	-14	68	34	4
06	0	UNL	15			-15	-13	-22	83	34	4
09	1	UNL	10			-08	-08	-16	87	00	0
12	10	12	3		SW	08	07	00	70	15	6
15	10	10	1		S	09	08	01	70	14	7
18	10	14	2		S	04	03	-05	68	13	4
21	10	85	5		S	03	02	-06	66	28	6
DAY 04											
00	5	UNL	10			-01	-02	-11	62	32	13
03	0	UNL	15			-06	-06	-16	61	32	15
06	0	UNL	15			-11	-11	-22	57	31	15
09	0	UNL	15			-18	-16	-26	58	31	13
12	0	UNL	15			-08	-08	-24	47	31	13
15	0	UNL	15			-06	-06	-23	47	28	13
18	0	UNL	15			-10	-10	-26	46	28	9
21	0	UNL	15			-14	-14	-27	51	30	11
DAY 05											
00	2	UNL	15			-07	-08	-28	34	30	7
03	10	70	15			-19	-19	-29	58	30	5
06	7	UNL	15			-18	-18	-29	56	26	5
09	10	60	3		S	-14	-14	-25	57	16	6
12	10	70	4		S	-08	-08	-21	52	15	10
15	10	80	2		S	-05	-05	-15	61	12	13
18	10	20	4		S	-06	-06	-14	68	10	12
21	10	29	10		S	-01	-02	-19	51	12	13
DAY 06											
00	10	12	2	8	S	00	00	-10	62	11	13
03	10	12	1	8	S	01	00	-08	66	10	11
06	10	100	3		S	01	00	-08	66	09	9
09	8	90	3		S	02	01	-08	62	06	7
12	10	17	5		S	06	04	-05	80	11	3
15	10	21	3		S	08	06	-05	59	29	7
18	10	44	4		S	07	06	-02	66	30	6
21	4	UNL	10			03	02	-07	63	31	7
DAY 07											
00	10	48	8		S	01	00	-10	98	31	11
03	0	UNL	15			-08	-06	-16	67	32	10
06	0	UNL	15			-09	-08	-19	61	34	11
09	1	UNL	15			-07	-07	-17	61	34	11
12	0	UNL	15			02	00	-13	48	25	4
15	3	UNL	15			01	00	-12	54	12	8
18	0	UNL	15			-05	-06	-15	61	00	0
21	0	UNL	15			-11	-11	-18	67	36	6
DAY 08											
00	0	UNL	15			-11	-11	-21	80	36	8
03	0	UNL	15			-14	-14	-24	80	36	7
06	0	UNL	15			-17	-17	-27	98	34	8
09	0	UNL	15			-15	-15	-26	96	36	9
12	0	UNL	15			-01	-02	-18	41	02	4
15	0	UNL	15			01	00	-16	44	19	7
18	0	UNL	15			-05	-06	-20	47	22	5
21	7	UNL	15			-11	-11	-22	87	23	5
DAY 09											
00	7	UNL	15			-06	-07	-21	47	24	4
03	10	UNL	15			-10	-10	-22	54	24	7
06	4	UNL	15			-09	-09	-20	58	27	10
09	3	UNL	15			-09	-09	-20	58	29	11
12	0	UNL	15			00	01	-17	44	29	12
15	0	UNL	15			05	02	-17	36	31	10
18	0	UNL	15			00	-01	-19	39	31	7
21	0	UNL	15			-08	-08	-22	48	34	7
DAY 10											
00	4	UNL	15			-09	-09	-22	52	08	4
03	0	UNL	15			-11	-11	-22	57	03	5
06	4	UNL	15			-20	-20	-28	65	36	3
09	10	200	15			-08	-08	-19	58	11	8
12	10	200	15			-05	-05	-15	61	10	13
15	10	18	1	4	S	-03	-04	-14	58	10	11
18	10	60	6		S	-05	-05	-15	61	09	12
21	10	60	4		S	-03	-03	-12	65	09	13
DAY 11											
00	10	44	3		S	-01	-02	-10	85	11	10
03	10	23	6		S	00	00	-08	88	10	8
06	10	18	6		S	01	00	-08	85	12	5
09	10	21	4		S	02	01	-08	88	33	3
12	10	200	10		S	07	05	-05	67	13	4
15	10	200	10			12	09	-02	93	28	8
18	10	75	10			11	08	-04	90	33	5
21	10	89	10			09	07	-04	95	36	5
DAY 12											
00	10	UNL	15			06	04	-06	87	35	7
03	10	UNL	15			02	01	-09	90	02	6
06	10	UNL	15			-02	-03	-11	86	06	6
09	9	200	10			00	00	-10	82	08	13
12	0	UNL	15			02	01	-10	87	09	14
15	0	UNL	15			04	02	-09	84	12	9
18	0	UNL	15			01	00	-10	90	10	7
21	10	6	1		S	00	00	-09	85	09	7
DAY 13											
00	10	5	10			-05	-05	-14	84	09	7
03	10	150	15			-14	-14	-24	80	36	4
06	10	110	15			-08	-08	-18	81	00	0
09	10	6	4		IC	00	00	-08	88	10	12
12	10	100	7			04	03	-04	89	10	13
15	10	100	10			06	05	-04	83	09	13
18	10	23	3		SBS	03	02	-06	88	08	17
21	10	8	1		SBS	05	04	-04	86	10	14
DAY 14											
00	10	8	3		S	08	07	-04	86	10	12
03	10	5	3		S	09	08	02	73	09	7
06	10	5	3		S	11	10	07	84	10	10
09	10	8	2	8	SF	14	13	10	84	08	5
12	10	10	2	8	F	16	17	14	84	20	8
15	10	14	2	8	H	22	20	15	74	25	8
18	10	18	3		H	22	20	15	74	10	3
21	10	14	2	8	H	18	18	14	81	10	4
DAY 15											
00	10	5	2	8	H	18	17	15	81	08	7
03	10	6	1		SF	18	17	15	81	08	8
06	10	6	1		SF	16	15	11	81	04	4
09	10	7	0	12	SF	16	15	10	77	36	4
12	10	10	1	8	SF	13	11	05	70	31	12
15	10	200	4		S	10	08	-03	55	32	13
18	10	44	8		BS	08	04	-07	55	32	15
21	2	UNL	8		BS	-03	-04	-20	43	32	17
DAY 16											
00	0	UNL	15			-07	-07	-19	85	34	15
03	0	UNL	15			-13	-13	-26	91	34	13
06	0	UNL	15			-18	-18	-29	96	34	8
09	0	UNL	15			-16	-16	-28	90	36	11
12	8	UNL	15			-05	-05	-23	41	07	5
15	9	UNL	15			-05	-06	-21	45	14	7
18	2	UNL	15			-10	-10	-26	44	10	7
21	0	UNL	15			-21	-21	-27	73	08	4
DAY 17											
00	1	UNL	15			-17	-17	-27	98	10	6
03	5	UNL	15			-17	-17	-26	82	11	5
06	5	UNL	15			-17	-17	-26	82	11	7
09	7	UNL	15			-12	-12	-22	80	10	9
12	5	UNL	15			-05	-06	-20	47	11	7
15	3	UNL	15			-02	-03	-17	48	12	10
18	8	UNL	15			-08	-08	-20	55	12	8
21	0	UNL	15			-08	-09	-19	81	10	8
DAY 18											
00	7	75	15			-09	-09	-18	84	11	11
03	7	90	15			-08	-08	-17	84	12	7
06	0	UNL	15			-08	-08	-17	84	11	8
09	6	UNL	15			-03	-03	-12	85	11	8
12	8	UNL	15			03	01	-10	84	11	9
15	10	75	15			08	07	-08	80	12	5
18	4	UNL	15			-01	-02	-12	89	11	7
21	2	UNL	15			-05	-03	-12	85	13	7
DAY 19											
00	9	130	15			-01	-02	-10	85	16	6
03	7	130	15			03	02	-07	83	20	8
06	10	UNL	15			02	01	-08	82	19	7
09	10	7	3		S	04	03	-05	86	15	6
12	9	UNL	7			13	11	00	96	17	10
15	10	250	7			18	17	09	85	18	10
18	10	110	7			16	16	08	88	16	9
21	10	20	10			10	09	04	78	12	5
DAY 20											
00	10	13	10			14	13	07	74	12	5
03	10	8	10			15	14	09	77	00	0
06	10	5	4		F	17	16	12	81	00	0
09	10	2	0	12	SF	18	18	16	88	00	0
12	8	2	2		F	22	21	17	81	10	3
15	8	2	2		F	24	23	19	81	10	3
18	9	3	3		F	24	23	20	85	08	4
21	7	3	3		SF	23	22	18	85	09	6
DAY 21											
00	10	10	3		SF	22	21	18	85	07	6
03	10	2	1		SF	22	21	18	88	02	5
06	10	2	1		SF	23	22	19	85	33	4
09	10	15	1	8	SF	23	22	19	85	32	6
12	9	13	3		SH	27	25	19	72	31	10
15	9	19	5		H	28	25	18	68	30	9
18	10	19	7			27	24	18	68	31	4
21	10	21	10			26	24	18	75	12	3
DAY 22											
00	10	21	10			25	23	18	75	09	11
03	10	22	9		H	24	23	19	81	10	12
06	10	11	7			19	18	14	81	09	11
09	10	14	4		SH	19	18	14	81	08	14
12	10	10	1	8	S	21	20	16	81	09	16
15	10	1	0	2	SBS	19	18	15	84	09	15
18	10	7	0	8	SSQFBS	20	19	17	88	10	24
21	10	8	0	8	TZLSSG	22	21	19	88	09	15
DAY 23											
00	10	5	1	8	ZLSF	25	24	22	88	09	14
03	10	1	0	8	ZLF	28	28	26	92	10	10
06	10	1	0	4	ZLF	28	28	27	92	12	4
09	10	7	2		SF	28	27	24	85	29	13
12	10	15	4		SBS	24	22	18	78	30	14
15	10	20	4		SBS	24	22	15	68	30	18
18	8	28	5		S	20	18	10	65	30	19
21	9	22	10		S	15	13	06	67	32	13
DAY 24											
00	1	UNL	15			09	08	03	76	32	10
03	0	UNL	15			03	02	-05	68	01	8
06	0	UNL	15			-02	-02	-10	68	01	7
09	0	UNL	15			04	03	-06	83	09	12
12	0	UNL	15			08	06	-05	55	08	8
15	0	UNL	15			09	07	-05	53	10	10
18	0	UNL	15			05	03	-08	54	08	7
21	2	UNL	15			02	01	-11	54	08	8
DAY 25											
00	10	75	15			02	01	-08	82	09	9
03	10	75	15			02	01	-08	82	08	7
06	4	UNL	15			00	00	-10	82	09	7
09	5	UNL	15			04	03	-07	80	10	7
12	0	UNL	15			10	08	-01	81	12	7
15	2	UNL	15			13	11	02	81	12	7
18	10	UNL	10			09	07	-06	90	10	8
21	5	UNL	10			05	03	-07	87	12	8
DAY 26											
00	5	UNL	15			04	03	-03	72	11	8
03	10	100	15			07	06	00	73	12	10
06	10	UNL	15			06	05	-01	73	12	7
09	10	UNL	15			10	08	-01	81	12	5
12	7	UNL	15			24	20	07	48	19	11
15	2	UNL	15			31	25	12	46	16	10
18	8	UNL	15			24	20	10	55	12	8
21	9	UNL	15			17	15	06	62	11	9
DAY 27											
00	10	250	15			17	15	07	85	12	6
03	7	130	15			18	16	08	82	15	7
06	9	110	15			18	16	07	84	16	7
09	10	250	15			24	20	08	83	21	6
12	10	250	15			30	25	15	84	22	11
15	10	250	15			34	28	20	87	22	12
18	10	250	15			33	28	21	81	24	6
21	10	UNL	15			30	26	19	84	27	9

STATION: DULUTH MINN

YEAR & MONTH: 79 02

NOTES

CEILING

UNL INDICATES UNLIMITED

WEATHER

- * TORNADO
- T THUNDERSTORM
- Q SQUALL
- R RAIN
- RW RAIN SHOWERS
- ZR FREEZING RAIN
- L DRIZZLE
- ZL FREEZING DRIZZLE
- S SNOW
- SP SNOW PELLETS
- IC ICE CRYSTALS
- SW SNOW SHOWERS
- SG SNOW GRAINS
- IP ICE PELLETS
- A HAIL
- F FOG
- IF ICE FOG
- GF GROUND FOG
- BD BLOWING DUST
- BN BLOWING SAND
- BS BLOWING SNOW
- BY BLOWING SPRAY
- K SMOKE
- H HAZE
- D DUST

WIND

DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS. INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. ENTRY OF 00 IN THE DIRECTION COLUMN INDICATES CALM.

SPEED IS EXPRESSED IN KNOTS; MULTIPLY BY 1.15 TO CONVERT TO MILES PER HOUR.

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC CENTER
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ASHEVILLE, N.C. 28801

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CUSTOMER SERVICES DEPT.
30 WEST SUPERIOR STREET
DULUTH, MN 55802

JANUARY 1979
DULUTH, MINNESOTA
NATIONAL WEATHER SERVICE OFC
INTERNATIONAL AIRPORT

Local Climatological Data

MONTHLY SUMMARY

LATITUDE 46° 50 'N LONGITUDE 92° 11 'W ELEVATION (GROUND) 1428 FT. STANDARD TIME USED: CENTRAL WBAN #14913

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT	DEGREE DAYS BASE 65° HEATING (SEASON BEGINS with JULY)	COOLING (SEASON BEGINS with JAN.)	WEATHER TYPES ON DATES OF OCCURRENCE 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW, ICE PELLETS OR ICE ON GROUND AT 0SAM IN.	PRECIPITATION WATER EQUIVALENT IN	SNOW, ICE PELLETS IN.	AVG. STATION PRESSURE IN. ELEV. 1417 FEET M.S.L.	WIND RESULTANT DIR.	RESULTANT SPEED M.P.H.	AVERAGE SPEED M.P.H.	FASTEST MILE SPEED M.P.H.	FASTEST MILE DIRECTION	SUNSHINE MINUTES	SUNSHINE PERCENT OF POSSIBLE	SKY COVER TENTHS SUNRISE TO SUNSET	SKY COVER TENTHS MIDNIGHT TO MIDNIGHT	DATE
1	1	2	3	4	5	6	7A	7B	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	14	-22	-13	-23	-26	78	0			14	0	0	28.70	28	8.5	10.5	17	NW	437	83	2	1	1
2	-7	-26	-17	-27	-28	82	0			14	0	0	28.50	30	9.4	9.8	15	W	407	78	2	1	2
3	1	-15	-7	-16	-18	72	0		9	13	T	T	28.48	27	11.5	11.8	22	NW	314	61	7	6	3
4	-7	-20	-14	-23	-25	79	0			13	0	0	28.62	28	13.5	13.8	20	W	520	100	0	0	4
5	-3	-22	-13	-22	-24	78	0			12	0	0	28.73	24	10.7	12.4	17	SE	479	92	0	2	5
6	8	-7	1	-6	-12	64	0			12	T	T	28.37	25	13.5	14.8	20	SE	409	78	5	4	6
7	3	-12	-5	-14	-18	70	0			12	T	T	28.54	30	8.7	8.9	19	W	524	100	3	1	7
8	8	-17	-5	-14	-15	70	0			12	.01	.1	28.38	25	11.6	11.9	18	SE	368	70	8	5	8
9	4	-15	-6	-15	-20	71	0			12	.01	.1	28.60	30	11.5	11.9	18	NW	526	100	1	2	9
10	-5	-23	-14	-23	-25	79	0			12	T	T	28.89	31	9.3	9.8	14	NW	529	100	0	1	10
11	-3	-32*	-18*	-26	-25	83	0	1		12	.01	.1	28.77	21	1.9	4.8	9	SE	19	4	9	4	11
12	11	-6	3	-5	-8	62	0			12	.01	.2	28.60	06	3.6	5.5	9	NE	356	67	9	9	12
13	6	-12	-1	-12	-14	69	0			12	T	T	28.60	33	10.3	10.6	22	NW	533	100	3	2	13
14	-7	-22	-15	-23	-26	80	0			12	0	0	28.51	29	11.9	13.1	18	SE	536	100	0	0	14
15	3	-21	-9	-17	-23	74	0			12	0	0	28.56	26	6.3	8.5	11	SE	410	76	8	3	15
16	7	-26	-10	-18	-18	75	0		9	12	.16	3.0	28.66	09	5.7	9.2	21	E	338	63	9	6	16
17	10	-6	2	-6	-7	63	0			15	.02	.4	28.47	29	7.5	10.1	17	NW	491	91	1	4	17
18	14	-21	-4	-12	-8	68	0			15	0	0	28.76	14	4.2	6.5	13	SE	428	79	7	6	18
19	21	14	18	10	13	47	0	1		16	.14	2.2	28.40	10	13.3	13.7	20	E	0	0	10	10	19
20	23	20	22*	14	17	43	0	1		17	.15	2.7	28.17	03	6.3	7.5	8	NE	0	0	10	10	20
21	22	13	18	10	14	47	0			17	.03	.5	28.13	31	11.8	11.9	20	NW	129	23	10	9	21
22	20	4	12	4	6	53	0			17	.08	.8	28.24	35	5.9	7.8	14	N	309	56	9	7	22
23	11	-3	4	-1	-5	61	0			17	.03	.4	28.28	35	10.2	10.5	15	N	452	82	9	8	23
24	12	-10	1	-7	-13	64	0			17	0	0	28.29	34	10.5	10.8	17	NW	557	100	0	0	24
25	22	-9	7	-1	-10	58	0			17	0	0	28.43	35	2.8	4.2	11	N	480	82	7	5	25
26	28*	1	14	6	2	51	0			17	T	.1	28.52	36	2.2	5.5	10	E	228	41	10	10	26
27	21	17	19	11	14	46	0			17	.10	1.0	28.38	01	7.7	8.6	11	NW	0	0	10	10	27
28	22	17	20	11	13	45	0			18	T	.2	28.43	36	6.7	8.9	10	N	0	0	10	10	28
29	20	4	12	3	8	53	0			18	.01	.1	28.53	32	7.0	7.2	11	NW	153	27	9	8	29
30	15	-2	7	-2	-3	58	0			17	T	T	28.56	33	7.1	7.3	10	NW	527	92	6	6	30
31	17	2	10	1	0	55	0			17	T	T	28.56	33	8.3	6.6	9	NW	215	38	9	9	31
	SUM 290	SUM -257				TOTAL 1999	TOTAL 0				TOTAL .76	TOTAL 11.9	FOR THE MONTH: 28.51	31	5.2	9.5	22	NW	TOTAL 10853	% FOR POSSIBLE MONTH 63	SUM 179	SUM 159	
	AVG. 9.4	AVG. -8.3	AVG. 0.6	DEP. -7.9	AVG. -0.9	DEP. 248	DEP. 0	NUMBER OF DAYS PRECIPITATION .01 INCH 13			DEP. -0.40							DATE: 15+	16789		AVG. 5.8	AVG. 5.1	
	NUMBER OF DAYS MAXIMUM TEMP. ≥ 90° 0	MINIMUM TEMP. ≤ 32° 31	≤ 32° 31	≤ 0° 22		SEASON TO DATE TOTAL 5904	TOTAL 0	SNOW, ICE PELLETS ≥ 1.0 INCH 4 THUNDERSTORMS 0			GREATEST IN 24 HOURS AND DATES PRECIPITATION .18 16-17	SNOW, ICE PELLETS 3.4 16-17						GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE 18 29+				
	DEP. 386	DEP. 0	HEAVY FOG 0	CLEAR 11	PARTLY CLOUDY 6	CLOUDY 14																	

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON AN EARLIER DATE, OR DATES.
HEAVY FOG: - VISIBILITY 1/4 MILE OR LESS.
FIGURES FOR WIND DIRECTIONS ARE TENS OF DEGREES CLOCKWISE FROM TRUE NORTH. 00 = CALM.
DATA IN COLS. 6 AND 12-15 ARE BASED ON 7 OR MORE OBSERVATIONS PER DAY AT 3-HOUR INTERVALS.
FASTEST MILE WIND SPEEDS ARE FASTEST OBSERVED ONE-MINUTE VALUES WHEN DIRECTIONS ARE IN TENS OF DEGREES. THE / WITH THE DIRECTION INDICATES PEAK GUST SPEED.
ANY ERRORS DETECTED WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL SUMMARY

SUMMARY BY HOURS

HOUR LOCAL TIME	AVERAGES SKY COVER TENTHS	STATION PRESSURE IN.	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	RELATIVE HUMIDITY %	WIND SPEED M.P.H.	RESULTANT WIND DIRECTION	RESULTANT WIND SPEED M.P.H.
00	5	28.51	-1	-1	-0	66	9.2	31	5.4
03	4	28.52	-3	-3	-11	67	9.0	31	6.0
06	4	28.51	-5	-5	-13	66	8.1	31	5.7
09	5	28.53	-1	-1	-13	64	9.2	32	5.6
12	6	28.52	5	3	-7	59	10.8	31	5.3
15	6	28.49	8	6	-5	56	11.0	29	5.4
18	5	28.51	4	3	-6	62	9.0	29	3.9
21	5	28.50	2	1	-7	65	9.7	31	5.2

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DATE	A. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
1																									1
2																									2
3							T			T	T	T		T	T	T	T		T	T					3
4																									4
5																									5
6			T	T																					6
7													T	T											7
8									T	T		T	T	.01	T					T	T	T	T		8
9		T	.01	T																			T	T	9
10	T																								10
11																				T	T	T	T	T	11
12	T	T	T	T	T	.01	T	T	T														.01	T	12
13	T																							T	13
14																									14
15																									15
16																T	.02	.04	.04	.02	.02	.01	.01	T	16
17	T	.01	T	T	.01	T	T																		17
18																									18
19				T	.02	.03	.01	.02	.02	.02	.01	T	T	T	T	T	.01	T	T	T	T	T	T	T	19
20				T	T	.01	T	T	T	T	.01	.01	.01	T	.01	.02	.02	.01	T	.01	.02	.01	.01	T	20
21	T	T	T	T	.01	T											T	T	T	T	.01	.01	.01	T	21
22																	T	.01	.01	.02	.02	.01	.01		22
23	.01	.01	.01	T	T	T	T	T	T	T															23
24																									24
25																									25
26																	T	T	T	T	T	T	T	T	26
27	.01	.01	.01	.01	.01	T	T	T	.01	T	T	T	T	T	.01	T	T	T	.01	.01	T	T	T	T	27
28	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	28
29	T	T		T	T	.01	T	T	T	T	T	T	T	T	T	T	T		T	T					29
30										T	T	T	T	T	T	T									30
31							T	T	T	T	T	T		T	T	T	T	T	T	T	T	T	T	T	31

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noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / ENVIRONMENTAL DATA AND INFORMATION SERVICE

Daniel B. Mitchell
DIRECTOR, NATIONAL CLIMATIC CENTER

USCOMM--NOAA--ASHEVILLE 05/21/79 375

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January 1979

JANUARY 1979 DULUTH, MINNESOTA

OBSERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER TENTHS	CEILING HNDS. OF FT.	VISIBILITY: SINGLE MILES	VISIBILITY: TENTHS MILE	WEATHER	TEMPERATURE: AIR °F	TEMPERATURE: WET BULB °F	TEMPERATURE: DEW PT. °F	REL. HUM. %	WIND: DIR	WIND: SPEED KNOTS
DAY 01											
00	0	UNL	15			-10	-10	-22	54	33	11
03	0	UNL	15			-17	-17	-28	56	32	13
06	0	UNL	15			-19	-19	-30	56	31	7
09	3	UNL	15			-20	-20	-32	52	26	6
12	3	UNL	15			-10	-10	-26	48	28	10
15	0	UNL	15			-08	-07	-23	42	24	9
18	0	UNL	15			-11	-11	-24	51	23	9
21	0	UNL	15			-19	-19	-27	53	27	8
DAY 02											
00	0	UNL	15			-19	-19	-30	56	26	7
03	0	UNL	15			-22	-22	-33	55	31	7
06	0	UNL	15			-25	-25	-36	54	31	7
09	3	UNL	15			-24	-24	-36	52	32	8
12	5	UNL	15			-12	-12	-34	54	31	10
15	0	UNL	15			-08	-08	-32	48	29	10
18	0	UNL	15			-11	-11	-32	57	27	8
21	3	UNL	15			-08	-08	-18	58	28	11
DAY 03											
00	10	26	15			-08	-08	-19	58	28	9
03	10	16	15			-07	-07	-18	58	28	11
06	10	16	15			-11	-11	-20	63	26	9
09	8	32	15			-15	-15	-24	63	26	8
12	7	250	15			-07	-07	-18	58	28	11
15	8	UNL	10		5	-01	-02	-12	59	25	12
18	2	UNL	10			-04	-04	-13	65	26	9
21	3	UNL	6		85	-06	-07	-20	50	29	13
DAY 04											
00	0	UNL	10			-12	-12	-24	54	28	12
03	0	UNL	15			-14	-14	-26	57	30	12
06	0	UNL	15			-17	-17	-27	58	30	10
09	1	UNL	10			-18	-18	-28	58	27	9
12	0	UNL	15			-12	-12	-27	48	30	18
15	0	UNL	15			-08	-09	-24	44	28	14
18	0	UNL	15			-11	-11	-24	51	27	11
21	0	UNL	15			-11	-11	-23	54	27	12
DAY 05											
00	0	UNL	15			-15	-15	-25	60	27	10
03	0	UNL	15			-17	-17	-27	58	27	10
06	0	UNL	15			-19	-19	-29	58	28	7
09	0	UNL	15			-20	-20	-30	58	25	9
12	0	UNL	15			-08	-08	-21	52	26	9
15	0	UNL	15			-03	-04	-19	46	23	13
18	0	UNL	15			-10	-10	-23	52	21	13
21	0	UNL	15			-10	-10	-21	57	20	15
DAY 06											
00	10	100	15		SW	-07	-07	-16	64	22	15
03	10	35	15		SW	-03	-04	-13	62	22	16
06	0	UNL	7			-03	-04	-13	62	24	12
09	5	UNL	10			-01	-02	-12	59	28	16
12	2	UNL	15			05	03	-11	47	27	14
15	5	UNL	15			08	05	-10	43	27	15
18	0	UNL	15			00	00	-10	62	25	8
21	0	UNL	15			-04	-04	-13	65	27	7
DAY 07											
00	0	UNL	15			-07	-07	-15	67	28	7
03	0	UNL	15			-10	-10	-18	67	27	6
06	0	UNL	15			-11	-11	-20	63	31	6
09	0	UNL	15			-11	-11	-20	63	31	5
12	3	UNL	15			-01	-02	-12	59	29	7
15	8	UNL	10			03	01	-18	38	31	13
18	0	UNL	15			-04	-05	-21	43	30	8
21	0	UNL	15			-07	-08	-20	52	30	10
DAY 08											
00	0	UNL	15			-11	-11	-23	54	27	8
03	0	UNL	15			-15	-15	-24	63	26	8
06	0	UNL	15			-17	-17	-25	66	25	11
09	10	11	2		5	-11	-11	-21	60	23	11
12	10	18	2		5	-02	-03	-12	62	24	15
15	5	UNL	10			04	03	-08	83	26	12
18	0	UNL	10			06	04	-05	83	25	8
21	0	UNL	7		SW	07	06	-03	86	27	8
DAY 09											
00	2	UNL	10		SW	04	03	-07	80	28	9
03	4	UNL	7		SW	-01	-03	-11	82	32	13
06	0	UNL	15			-10	-10	-20	80	30	12
09	0	UNL	15			-15	-15	-25	80	30	13
12	0	UNL	15			-09	-09	-23	78	28	9
15	0	UNL	15			-07	-08	-22	77	27	12
18	0	UNL	15			-11	-11	-24	81	28	8
21	0	UNL	15			-12	-12	-25	81	31	7
DAY 10											
00	10	40	4		SW	-11	-11	-22	67	31	10
03	0	UNL	15		SW	-15	-15	-26	66	31	11
06	0	UNL	15		SW	-18	-18	-28	66	31	10
09	0	UNL	15		SW	-18	-18	-28	66	32	10
12	0	UNL	15		SW	-09	-09	-23	68	31	8
15	0	UNL	15		SW	-05	-06	-21	66	26	9
18	0	UNL	15		SW	-10	-10	-22	84	30	5
21	0	UNL	15		SW	-17	-17	-26	82	32	5
DAY 11											
00	0	UNL	15		SW	-22	-22	-31	82	35	4
03	0	UNL	15		SW	-26	-26	-36	81	28	4
06	0	UNL	15		SW	-24	-24	-33	81	00	0
09	1	UNL	4		IF	-18	-18	-26	88	23	4
12	1	UNL	5		IF	-09	-09	-20	86	21	6
15	0	UNL	7			-09	-08	-20	87	23	8
18	0	UNL	15			-05	-05	-18	90	11	4
21	0	UNL	10			-05	-05	-14	84	12	5
DAY 12											
00	8	85	7		5	-03	-03	-12	86	12	5
03	10	75	5		5	00	00	-08	88	12	4
06	10	80	4		5	00	00	-08	86	00	0
09	7	75	7			-06	-07	-15	84	01	5
12	10	UNL	10			08	06	-03	80	07	8
15	10	80	10			10	08	-01	81	09	6
18	8	UNL	15			05	04	-04	86	36	4
21	3	UNL	15			-01	-01	-09	88	36	6
DAY 13											
00	9	UNL	15		5	-01	-02	-10	85	36	7
03	0	UNL	15			-05	-05	-13	88	34	6
06	0	UNL	15			-09	-09	-17	87	33	7
09	8	UNL	7			-09	-09	-18	84	33	7
12	5	UNL	7			00	00	-11	90	36	9
15	1	UNL	10			04	02	-12	47	32	9
18	1	UNL	15			-05	-06	-16	58	32	14
21	0	UNL	15			-08	-08	-18	61	33	15
DAY 14											
00	0	UNL	15			-12	-12	-22	60	32	13
03	0	UNL	15			-17	-17	-26	62	30	10
06	0	UNL	15			-21	-21	-31	58	30	11
09	0	UNL	15			-21	-21	-32	55	30	10
12	0	UNL	15			-13	-13	-26	54	29	12
15	0	UNL	15			-07	-08	-21	50	27	14
18	0	UNL	15			-12	-12	-26	48	24	12
21	0	UNL	15			-13	-13	-26	51	26	9
DAY 15											
00	0	UNL	15			-18	-18	-27	62	25	10
03	0	UNL	15			-18	-18	-28	58	26	8
06	0	UNL	15			-19	-19	-29	58	26	7
09	6	UNL	15			-18	-18	-28	58	25	6
12	10	UNL	15			-08	-07	-18	66	27	8
15	10	UNL	15			02	00	-14	48	27	10
18	3	UNL	15			-07	-08	-21	50	29	6
21	0	UNL	15			-10	-10	-20	60	28	4
DAY 16											
00	0	UNL	15			-17	-17	-25	66	33	7
03	0	UNL	15			-18	-18	-27	62	33	6
06	0	UNL	15			-21	-21	-30	62	00	0
09	8	UNL	15			-18	-18	-29	66	36	3
12	10	200	15			-02	-03	-12	82	11	11
15	10	32	10			01	00	-10	90	09	9
18	10	6	0	12	5	04	03	-05	86	10	13
21	10	8	1		585	06	06	-04	83	11	15
DAY 17											
00	10	18	3		5	06	05	-03	88	14	8
03	10	28	4		5	05	04	-03	88	24	5
06	0	UNL	10		5	01	00	-08	85	29	11
09	0	UNL	15			-02	-03	-10	88	30	10
12	0	UNL	15			05	03	-08	84	31	11
15	0	UNL	15			08	07	-06	90	30	13
18	4	UNL	15			05	03	-09	84	28	8
21	2	UNL	15			00	00	-10	82	31	6
DAY 18											
00	0	UNL	15			-06	-06	-15	84	32	4
03	0	UNL	15			-09	-09	-18	84	35	3
06	3	UNL	10			-08	-08	-17	84	34	5
09	3	UNL	7			-01	-02	-10	86	12	6
12	10	UNL	15			08	07	-01	83	17	9
15	10	UNL	15			13	11	02	81	14	9
18	10	UNL	15			10	08	04	80	12	6
21	10	UNL	15			13	11	02	81	14	8
DAY 19											
00	10	75	15			14	12	04	84	13	7
03	10	45	10			16	15	10	77	11	11
06	10	6	1		5	17	16	12	81	10	12
09	10	14	2		5	18	17	13	81	08	14
12	10	12	3		5	20	18	15	81	10	16
15	10	13	1	6	SF	21	20	16	81	09	14
18	10	6	3		SF	20	18	17	88	09	12
21	10	6	5		SF	20	18	17	88	07	9
DAY 20											
00	10	8	5		F	20	19	17	88	08	7
03	10	6	7		5	20	19	16	84	01	6
06	10	6	7		5	20	19	16	84	03	7
09	10	6	5		5	21	20	17	84	07	7
12	10	8	2	6	5	22	21	17	81	36	8
15	10	18	2		5	23	22	17	78	04	6
18	10	15	1	6	SF	22	21	18	85	01	6
21	10	15	1	6	SF	22	21	18	85	34	6
DAY 21											
00	10	18	9		5	22	21	18	85	33	7
03	10	55	7		5	20	19	16	84	32	7
06	10	90	7		5	19	18	15	84	32	8
09	10	8	7			18	17	13	81	32	15
12	10	27	10			21	20	15	78	31	12
15	10	200	7		5	22	20	14	71	31	12
18	10	200	7		5	19	18	13	77	31	15
21	10	190	10		5	17	16	11	77	30	9
DAY 22											
00	2	UNL	15			13	12	08	80	30	7
03	0	UNL	15			08	08	05	84	30	8
06	8	UNL	10			08	08	04	84	33	8
09	10	UNL	7			06	05	-02	88	34	7
12	10	UNL	7			15	14	09	77	36	6
15	10	200	7			16	17	09	65	01	7
18	10	27	7		5	15	13	07	70	08	6
21	10	15	2		5	14	13	10	84	02	7
DAY 23											
00	8	15	1	6	5	11	10	08	80	36	8
03	10	12	3		5	08	08	03	76	36	10
06	10	80	4		5	04	03	-06	83	36	9
09	10	18	3		5	02	01	-09	86	36	8
12	10	UNL	10			08	07	-06	90	35	10
15	10	250	10			10	07	-06	88	36	10
18	10	UNL	15			05	03	-08	84	33	8
21	10	UNL	15			00	00	-10	82	33	10
DAY 24											
00	0	UNL	15			-03	-03	-12	86	35	12
03	0	UNL	15			-07	-07	-16	84	34	9
06	0	UNL	15			-08	-08	-18	84	35	9
09	0	UNL	15			-08	-08	-17	84	35	11
12	0	UNL	15			06	04	-10	87	34	13
15	0	UNL	15			11	08	-07	84	32	10
18	0	UNL	15			06	04	-08	90	31	6
21	0	UNL	15			02	01	-11	84	33	9
DAY 25											
00	0	UNL	15			-01	-02	-12	86	35	4
03	0	UNL	15			-06	-06	-14	88	36	8
06	0	UNL	15			-06	-06	-15	84	36	6
09	7	UNL	15			-01	-02	-11	82	01	5
12	8	UNL	15			16	12	-05	38	00	0
15	6	UNL	15			20	15	-07	30	00	0
18	8	UNL	15			16	12	-08	33	23	6
21	6	UNL	15			04	02	-10	52	00	0
DAY 26											
00	10	100	15			01	00	-11	86	36	3
03	10	100	15			09	07	-05	83	31	6
06	10	110	15			07	05	-04	80	34	6
09	10	90	15			13	10	-03	78	34	3
12	10	250	15			23	18	00	36	03	3
15	10	250	15			21	18	09	80	12	8
18	10	30	10			19	17	11	71	13	4
21	10	200	7		5	20	19	15	81	32	7
DAY 27											
00	10	10	2		5	20	19	15	81	02	7
03	10	10	3		5	19	18	14	81	36	5
06	10	30	7		5	18	17	13	81	01	8
09	10	47	6		5	18	17	13	81	02	8
12	10	15	3		5	19	18	14	81	11	5
15	10	15	2	8	5	20	18	14	77	01	8
18	10	12	2		5	19	18	13	77	36	8
21	10	10	2		5	18	17	13	81	01	11
DAY 28											
00	10	13	7		5	18	17	12	77	35	8
03	10	7	4		5	18	17	13	81	36	8
06	10	8	7		5	18	17	12	77	36	8
09	10	8	10		5	18	16	12	81	35	8
12	10	17	15		5	18	17	12	74	01	8
15	8	80	7		5	21	18	14	74	01	8
18	10	28	2	8	5	19	18	14	81	33	6
21	10	75	8		5	18	17	12	77	35	9
DAY 29											
00	10	70	8		5	17	16	11	77	35	7
03	10	60	10			16	15	10	77	33	6
06	10	45	7		5	15	14	08	77	32	5
09	10	70	10		5	14	13	08	77	32	7
12	10	80	10		5	18	16	09	68	33	6
15	10	80	2		5	18	17	11	71	30	6
18	10	UNL	15			15	14	09	77	31	5
21	10	UNL	15			11	10	06	80	33	7
DAY 30											
00	0	UNL	15			07	06	02	80	33	7
03	0	UNL	15			02	01	-07	86	33	4
06	0	UNL	10			00	00	-08	88	31	4
09	0	UNL	10			02	01	-11	84	33	5
12	0	UNL	10		IC	11	09	01	84	34	10
15	0	UNL	15		IC	15	13	05	84	36	6
18	0	UNL	15			09	07	-01	83	31	7
21	0	UNL	15			08	05	-01	73	34	8
DAY 31											
00	10	38	15			05	04	-02	72	34	8
03	9	40	15			03	02	-05	88	33	6
06	10	40	15			03	02	-05	88	34	6
09	10	40	10		5	05	04	-03	88	34	5
12	4	UNL	10			14	11	01	86	36	6
15	10	26	7		5	16	14	06	84	30	6
18	10	29	7		5	14	12	06	70	32	4
21	10	29	7		5	11	09	02	87	32	5

STATION: DULUTH MINN

YEAR & MONTH: 78 01

NOTES

CEILING
UNL INDICATES UNLIMITED

WEATHER

+	TORNADO
T	THUNDERSTORM
Q	SQUALL
R	RAIN
RW	RAIN SHOWERS
ZR	FREEZING RAIN
L	DRIZZLE
ZL	FREEZING DRIZZLE
S	SNOW
SP	SNOW PELLETS
IC	ICE CRYSTALS
SW	SNOW SHOWERS
SG	SNOW GRAINS
IP	ICE PELLETS
A	HAIL
F	FOG
IF	ICE FOG
GF	GROUND FOG
BD	BLOWING DUST
BN	BLOWING SAND
BS	BLOWING SNOW
BY	BLOWING SPRAY
K	SMOKE
H	HAZE
D	DUST

WIND

DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS. INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. ENTRY OF 00 IN THE DIRECTION COLUMN INDICATES CALM.

SPEED IS EXPRESSED IN KNOTS: MULTIPLY BY 1.15 TO CONVERT TO MILES PER HOUR.

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
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MINNESOTA POWER & LIGHT CO
CUSTOMER SERVICES DEPT.
30 WEST SUPERIOR STREET
DULUTH, MN

5582

DECEMBER 1978 .
DULUTH. MINNESOTA
NATIONAL WEATHER SERVICE OFC
INTERNATIONAL AIRPORT

Local Climatologic l Data

MONTHLY SUMMARY

LATITUDE 46° 50 'N LONGITUDE 92° 11 'W ELEVATION (GROUND) 1428 FT. STANDARD TIME USED: CENTRAL WBAN #14913

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT	DEGREE DAYS BASE 65° HEATING (SEASON BEGINS WITH JULY)	COOLING (SEASON BEGINS WITH JAN.)	WEATHER TYPES ON DATES OF OCCURRENCE 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW, ICE PELLETS OR ICE ON GROUND AT 0BAM IN.	PRECIPITATION WATER EQUIVALENT IN	SNOW, ICE PELLETS IN.	AVG. STATION PRESSURE IN. ELEV. 1417 FEET M.S.L.	WIND RESULTANT DIR.	RESULTANT SPEED M.P.H.	AVERAGE SPEED M.P.H.	FASTEST MILE SPEED M.P.H.	FASTEST MILE DIRECTION	SUNSHINE MINUTES	SUNSHINE PERCENT OF POSSIBLE	SKY COVER TENTHS SUNRISE TO SUNSET	SKY COVER TENTHS MIDNIGHT TO MIDNIGHT	DATE
1	12	-8	2	-18	-12	63	0		5	0	0	28.37	28	9.9	10.1	14	SW	529	100	0	0	1
2	10	-16	-3	-23	-14	68	0		5	T	T	28.66	35	1.8	5.2	12	NW	405	77	7	5	2
3	23	6	15	-3	11	49	0		5	.13	2.0	28.28	35	8.3	9.1	13	N	0	0	10	10	3
4	29	4	17	-2	8	48	0		7	T	.1	27.70	24	13.4	14.5	25	SW	0	0	10	8	4
5	25	4	15	-3	11	50	0		8	T	.4	27.89	27	14.8	15.1	23	SW	0	0	10	8	5
6	7	-5	1	-17	-12	64	0		8	0	0	28.53	27	11.0	12.4	19	W	522	100	0	0	6
7	8	-11	-3	-20	-15	68	0		8	T	T	28.69	27	6.8	7.2	11	SW	172	33	8	4	7
8	9	-11	-1	-18	-10	66	0		8	T	T	28.54	25	9.0	9.2	16	SW	416	80	3	4	8
9	1	-14	-7	-24	-18	72	0		8	0	0	28.48	30	10.7	10.8	18	NW	518	100	0	0	9
10	7	-20*	-7*	-23	-15	72	0		8	0	0	28.56	26	4.2	5.8	11	SW	429	83	2	1	10
11	24	-9	8	-8	7	57	0	1 6 8	8	T	.1	28.50	23	8.3	9.4	17	SW	4	1	10	9	11
12	33	23	28*	12	20	37	0	8	8	T	T	28.26	24	10.8	12.5	28	W	95	18	9	9	12
13	24	10	17	2	11	48	0	9	8	.01	.4	28.52	28	13.6	14.5	25	NW	355	69	9	9	13
14	28	14	20	5	12	45	0		8	0	0	28.18	23	8.7	8.8	13	SW	218	42	9	9	14
15	35*	17	26	12	18	39	0		8	0	0	28.05	28	13.6	14.0	24	SW	514	100	0	0	15
16	27	18	23	9	15	42	0		8	0	0	28.31	28	11.6	12.1	18	W	462	88	9	3	16
17	30	11	21	7	11	44	0		8	0	0	28.54	28	7.2	8.6	15	W	483	96	1	3	17
18	29	19	24	11	19	41	0	9	8	T	.1	28.51	09	17.4	17.8	28	NE	0	0	10	10	18
19	22	16	19	6	14	46	0	1 6	7	.32	4.8	28.38	11	17.6	17.7	25	E	0	0	10	10	19
20	24	17	21	8	18	44	0	1 6	12	.14	1.3	27.99	33	3.8	10.1	20	NW	0	0	10	10	20
21	22	9	16	3	9	49	0	1	12	T	.2	27.98	25	8.1	10.4	16	W	71	14	9	10	21
22	28	12	20	8	15	45	0	9	12	.05	.8	28.00	26	13.5	14.8	27	SW	0	0	10	10	22
23	23	3	13	1	9	52	0		12	.05	2.2	28.31	01	5.0	9.5	16	NW	0	0	10	10	23
24	11	-9	1	-11	-10	64	0		14	T	T	28.27	34	10.1	10.2	13	NW	470	92	5	4	24
25	10	-10	0	-11	-12	65	0		14	T	T	28.30	32	7.3	7.9	13	NW	428	84	2	5	25
26	12	-7	3	-8	- 5	62	0		14	T	T	28.48	28	9.9	10.1	19	W	340	66	6	6	26
27	11	-10	1	-10	- 8	64	0		10	T	.4	28.68	25	4.8	7.5	13	SW	151	29	8	7	27
28	24	11	18	7	14	47	0	1 9	12	.37	6.4	28.61	11	17.6	17.7	26	E	0	0	10	10	28
29	27	2	15	5	13	50	0	1	18	.12	1.8	28.54	18	3.0	12.8	19	E	0	0	10	10	29
30	4	-8	-2	-12	-15	67	0		14	0	0	28.79	29	10.1	10.2	17	W	431	84	7	6	30
31	4	-16	-6	-16	-19	71	0		14	0	0	28.85	32	9.1	9.4	13	NW	516	100	6	4	31
SUM	579	44				1699	0			1.19	20.8	28.38	27	5.0	11.1	28	NE	7529	FOR	206	194	
AVG.	18.7	1.4	10.1	-4.3	2	130	0			DEP.						DATE: 18		PERCENT	MONTH	AVG.	AVG.	
										-0.21								18011	47	6.6	6.3	

NUMBER OF DAYS				SEASON TO DATE	
MAXIMUM TEMP.		MINIMUM TEMP.		TOTAL	TOTAL
≤ 90°	≤ 32°	≤ 32°	≤ 0°	3905	224
DEP.	DEP.	DEP.	DEP.		
0	29	31	14	138	46

NUMBER OF DAYS	
PRECIPITATION ≥ .01 INCH	8
SNOW, ICE PELLETS ≥ 1.0 INCH	6
THUNDERSTORMS	0
HEAVY FOG	0
CLEAR 8 PARTLY CLOUDY 6 CLOUDY 17	

GREATEST IN 24 HOURS AND DATES			
PRECIPITATION		SNOW, ICE PELLETS	
.42	19-20	6.4	26

GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE	
16	29+

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON AN EARLIER DATE, OR DATES.
HEAVY FOG: - VISIBILITY 1/4 MILE OR LESS.
FIGURES FOR WIND DIRECTIONS ARE TENS OF DEGREES CLOCKWISE FROM TRUE NORTH. 00 = CALM.
DATA IN COLS. 6 AND 12-15 ARE BASED ON 7 OR MORE OBSERVATIONS PER DAY AT 3-HOUR INTERVALS.
FASTEST MILE WIND SPEEDS ARE FASTEST OBSERVED ONE-MINUTE VALUES WHEN DIRECTIONS ARE IN TENS OF DEGREES. THE / WITH THE DIRECTION INDICATES PEAK GUST SPEED.
ANY ERRORS DETECTED WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL SUMMARY

SUMMARY BY HOURS

HOUR LOCAL TIME	AVERAGES SKY COVER TENTHS	STATION PRESSURE IN.	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	RELATIVE HUMIDITY %	WIND SPEED M.P.H.	RESULTANT WIND DIRECTION	RESULTANT WIND SPEED M.P.H.
00	5	28.38	9	8	2	71	10.8	27	4.7
03	6	28.37	8	8	1	73	10.9	27	4.3
06	8	28.37	7	6	0	72	10.6	28	4.7
09	7	28.39	8	7	1	71	11.1	28	4.3
12	7	28.39	14	12	4	68	11.9	27	6.0
15	7	28.37	16	14	5	61	11.9	27	6.1
18	6	28.38	12	11	3	68	10.6	27	4.5
21	7	28.39	11	9	2	69	11.1	28	5.3

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DATE	A. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
1																						T	T	T	1
2																									2
3	T	T	T	T	T	.02	.02	.02	.03	.02	.01	T	.01	T	T	T	T	T	T	T	T	T			3
4									T	T	T	T	T		T	T	T	T	T	T	T				4
5							T	T	T	T	T	T	T	T											5
6																									6
7									T	T															7
8															T	T			T	T	T	T	T		8
9																									9
10																									10
11										T	T	T	T	T											11
12																			T	T	T	T	T	T	12
13	T	T	T	.01	T	T	T	T							T	T									13
14																•									14
15																									15
16																									16
17										T	T	T	T	T	T	T									17
18										T	.03	.05	.04	.02	.04	.05	.04	.05	T	T			T		18
19																							T	T	19
20	.02	.01	.01	T	.01	T	T	T	.02	.03	.01	.02	T	.01	T	T	T	T	T	T	T	T	T	T	20
21	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T									21
22	T	T	T	T	.02	.02	T	T	T	T	T	T	T	T	T	.01	T	T	T	T	T	T	T	T	22
23	T	T					.01	T	.01	.01	.01	T	T	T	T	T	.01	T	T	T	T	T	T	T	23
24	T	T	T																						24
25																								T	25
26	T	T	T	T	T	T	T	T	T	T	T														26
27								T	T	T	T	T	T	T							T	T	T	T	27
28	T	T	.01	.02	.02	.03	T	T	.03	.03	.02	.01	.01	.01	T	T	.01	.04	.03	.01	T	.02	.04	.03	28
29	.03	.01	.01	T	T	T	T	.01	.03	.02	.01	T	T	T											29
30																									30
31																									31

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I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC CENTER, ASHEVILLE, NORTH CAROLINA 28801.

noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / ENVIRONMENTAL DATA AND INFORMATION SERVICE

Daniel B. Mitchell
DIRECTOR, NATIONAL CLIMATIC CENTER

USCOMM--NOAA--ASHEVILLE 01/25/79 375

DECEMBER 1978 DULUTH, MINNESOTA

OBSERVATIONS AT 3-HOUR INTERVALS

FEB 79

HOUR	SKY COVER TENTHS	CEILING HNDS. OF FT.	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	REL. HUM. %	WIND DIR	WIND SPEED KNOTS
DAY 01											
00	0	UNL	15			00	00	-10	62	26	12
03	0	UNL	15			-03	-03	-12	65	29	10
06	0	UNL	15			-07	-07	-16	64	29	8
09	0	UNL	15			-06	-06	-15	64	29	7
12	0	UNL	15			03	01	-10	54	29	8
15	0	UNL	15			11	08	-08	42	28	10
18	0	UNL	15			04	02	-11	49	27	7
21	0	UNL	15			02	01	-10	57	29	7
DAY 02											
00	0	UNL	15			-04	-05	-14	61	31	7
03	0	UNL	15			-08	-09	-19	51	32	8
06	0	UNL	15			-15	-15	-24	53	31	9
09	4	UNL	15			-11	-11	-21	60	11	3
12	0	UNL	15			06	04	-08	50	18	3
15	0	UNL	15			08	06	-08	48	11	6
18	0	UNL	15			02	01	-10	57	00	0
21	10	11	15			02	01	-06	68	01	6
DAY 03											
00	10	15	10		S	09	07	-01	63	02	8
03	10	14	10		S	14	13	08	80	04	4
06	10	7	1		S	17	16	11	77	36	6
09	10	4	0	12	S	16	15	10	77	36	8
12	10	9	1		S	19	17	12	74	01	8
15	10	15	3		S	23	22	17	78	34	10
18	10	21	15		S	20	19	14	77	33	11
21	10	44	15		S	18	17	12	77	32	10
DAY 04											
00	10	49	15			16	15	11	81	27	8
03	0	UNL	15			07	06	01	78	26	10
06	8	130	15			09	07	-05	53	21	12
09	10	60	4		S	09	08	00	67	20	14
12	10	12	2		S	12	11	04	70	25	14
15	10	60	10		S	20	18	13	74	24	15
18	10	25	15		S	23	22	17	78	23	13
21	10	24	15			28	26	21	75	26	15
DAY 05											
00	2	UNL	15			24	22	16	71	26	14
03	9	22	15			24	22	16	71	26	17
06	9	70	15			24	22	15	68	27	13
09	10	30	2		S	23	21	16	74	27	14
12	10	40	2		SW	22	21	16	78	27	13
15	10	40	10			20	17	06	54	29	13
18	5	UNL	15			16	13	02	54	26	8
21	9	40	15			11	09	01	64	29	13
DAY 06											
00	1	UNL	15			04	02	-08	57	29	13
03	0	UNL	15			01	00	-10	59	28	10
06	0	UNL	15			-02	-03	-12	62	29	10
09	0	UNL	15			-03	-04	-13	62	31	12
12	0	UNL	15			03	01	-12	48	28	12
15	0	UNL	15			06	04	-10	47	23	11
18	0	UNL	15			00	00	-13	54	23	10
21	0	UNL	15			-05	-06	-16	58	26	8
DAY 07											
00	0	UNL	15			-05	-06	-16	58	28	7
03	0	UNL	15			-09	-09	-18	64	28	4
06	4	UNL	15			-10	-10	-20	60	30	4
09	10	22	15		S	-02	-03	-13	59	30	4
12	10	250	15			02	00	-12	51	26	8
15	7	UNL	15			06	04	-12	43	25	10
18	0	UNL	15			-01	-02	-15	51	25	9
21	0	UNL	15			-02	-03	-13	58	27	7
DAY 08											
00	0	UNL	15			-03	-04	-13	62	26	7
03	0	UNL	15			-04	-04	-13	65	26	8
06	0	UNL	15			-08	-08	-18	67	27	7
09	0	UNL	15			-07	-07	-17	61	26	8
12	6	55	15		IC	05	03	-06	60	24	13
15	0	UNL	15			08	08	-05	55	25	9
18	0	UNL	15			05	03	-06	60	23	9
21	0	UNL	15		S	06	05	-03	68	26	8
DAY 09											
00	0	UNL	15			-03	-04	-13	62	31	7
03	0	UNL	15			-08	-08	-18	61	32	10
06	0	UNL	15			-12	-12	-22	60	30	9
09	0	UNL	15			-12	-12	-23	57	31	9
12	0	UNL	15			-04	-05	-17	53	30	11
15	0	UNL	15			00	00	-19	48	30	13
18	0	UNL	15			-03	-04	-16	53	29	8
21	0	UNL	15			-05	-06	-17	55	31	9
DAY 10											
00	0	UNL	15			-08	-08	-17	64	28	7
03	0	UNL	15			-11	-11	-20	63	30	4
06	0	UNL	15			-13	-13	-22	63	29	5
09	0	UNL	15			-10	-10	-20	60	26	4
12	6	UNL	15			03	01	-11	51	26	6
15	3	UNL	15			06	04	-10	47	26	6
18	1	UNL	15			01	00	-12	54	15	4
21	3	UNL	15			-03	-03	-10	71	19	4
DAY 11											
00	3	UNL	15			-01	-02	-13	56	23	5
03	10	15	15			06	05	-02	68	24	6
06	10	4	15			09	08	02	73	24	7
09	10	8	4		S	10	08	05	80	23	7
12	10	23	2		SF	15	15	11	81	24	11
15	10	7	2		FH	21	20	16	81	24	11
18	10	3	2		FH	19	18	16	88	23	9
21	10	110	8		H	22	21	18	85	22	11
DAY 12											
00	10	85	6		H	24	23	20	85	22	11
03	10	5	4		H	24	23	21	88	19	12
06	10	40	7			24	23	19	81	24	9
09	10	110	7			24	22	18	78	23	12
12	10	100	7			28	26	20	72	26	11
15	10	100	10			31	28	21	66	24	10
18	7	110	10			29	27	22	75	23	10
21	10	20	10		S	28	25	19	69	30	12
DAY 13											
00	10	16	4		S	23	22	17	78	29	14
03	10	13	4		SBS	23	22	18	81	31	14
06	10	11	3		SBS	19	18	13	77	30	17
09	8	110	7			13	12	06	73	28	13
12	9	250	15			15	13	04	61	28	12
15	9	UNL	15			18	16	08	65	28	14
18	3	UNL	10			14	13	08	77	25	7
21	10	250	10			18	17	12	77	24	10
DAY 14											
00	10	250	15			18	18	14	81	22	10
03	10	UNL	15			20	18	13	74	24	8
06	10	100	15			18	15	11	81	24	8
09	10	120	15			16	15	10	77	23	7
12	10	290	15			23	20	15	65	22	7
15	10	290	15			24	21	12	60	22	7
18	6	100	15			23	20	12	63	22	8
21	8	100	15			20	18	12	71	24	9
DAY 15											
00	0	UNL	15			19	17	12	74	24	8
03	0	UNL	15			22	21	16	78	26	12
06	0	UNL	15			24	23	19	81	26	13
09	0	UNL	15			27	25	20	75	27	15
12	0	UNL	15			31	27	20	64	28	16
15	0	UNL	15			35	30	20	54	27	13
18	0	UNL	15			29	26	18	63	25	9
21	0	UNL	15			26	24	18	72	24	11
DAY 16											
00	0	UNL	15			23	22	19	85	26	11
03	0	UNL	15			21	20	17	84	27	9
06	7	UNL	15			18	17	14	84	25	9
09	8	UNL	15			19	18	14	81	28	9
12	4	UNL	15			24	22	18	71	30	12
15	4	UNL	15			26	23	16	66	29	10
18	0	UNL	15			22	19	12	65	28	13
21	0	UNL	15			20	18	12	71	29	11
DAY 17											
00	0	UNL	15			18	18	13	77	27	12
03	0	UNL	15			13	12	08	84	25	10
06	0	UNL	15			12	11	08	84	26	9
09	0	UNL	15			13	12	08	80	26	7
12	0	UNL	15			23	20	13	65	26	7
15	0	UNL	15			28	24	14	56	21	8
18	0	UNL	15			19	17	11	71	34	3
21	10	130	15			17	15	09	71	35	4
DAY 18											
00	10	120	15			24	23	19	81	09	10
03	10	6	15			26	25	22	85	08	13
06	10	5	15			26	25	22	85	08	15
09	10	13	10			28	26	21	75	06	15
12	10	8	7		S	25	24	20	81	09	18
15	10	13	7		S	24	22	18	78	08	17
18	10	13	10			23	21	16	74	10	16
21	10	13	10			22	20	14	71	10	18
DAY 19											
00	10	11	10			19	18	13	77	10	19
03	10	24	10			18	18	11	74	12	16
06	10	16	15			17	16	10	74	10	15
09	10	13	15			18	16	11	74	11	16
12	10	8	0	8	S	19	18	14	81	11	18
15	10	15	1		S	20	19	16	84	10	12
18	10	6	0	12	SF	21	20	17	84	11	17
21	10	10	15			21	20	17	84	11	12
DAY 20											
00	10	3	2	8	ZLSF	21	20	18	88	12	9
03	10	6	2	8	SF	22	21	19	88	12	8
06	10	3	1	8	ZLSF	23	22	20	88	15	5
09	10	10	1		SF	23	22	19	85	36	4
12	10	10	1	8	SF	23	22	20	88	35	7
15	10	11	3		SF	23	22	20	88	32	8
18	10	11	7		S	23	22	18	81	31	14
21	10	15	15		S	18	18	11	74	32	14
DAY 21											
00	10	11	15		S	17	16	10	74	29	13
03	10	7	7		S	10	09	06	84	28	9
06	10	32	10		S	11	10	07	84	28	7
09	10	7	7		S	11	10	06	80	26	8
12	10	15	4		SF	15	14	09	77	25	7
15	10	7	7		S	18	17	12	77	22	10
18	10	7	10			18	17	12	77	20	8
21	10	15	15			18	18	13	77	18	10
DAY 22											
00	10	19	10			22	21	18	85	21	13
03	10	32	7		S	28	26	20	72	24	15
06	10	17	2		SBS	22	20	15	74	28	17
09	10	16	10			20	18	13	74	28	13
12	10	14	3		S	22	21	16	78	28	13
15	10	14	3		S	24	22	18	78	26	10
18	10	200	10			20	18	10	65	29	15
21	10	20	10		S	15	14	08	74	26	7
DAY 23											
00	10	100	10		S	12	11	07	80	30	4
03	10	95	15			11	10	06	80	13	5
06	10	7	10			14	13	09	80	08	5
09	10	1			S	18	17	12	77	07	10
12	10	8	2	8	S	21	20	16	81	05	7
15	10	14	2	8	S	20	18	13	74	35	11
18	10	18	3		S	12	11	07	80	34	12
21	10	26	5		S	08	08	01	70	33	12
DAY 24											
00	10	28	10		S	04	03	-03	72	35	10
03	4	UNL	15			-06	-06	-14	68	34	9
06	0	UNL	15			-07	-07	-16	64	34	11
09	0	UNL	15			-05	-05	-15	61	35	10
12	0	UNL	15			05	03	-08	54	35	7
15	0	UNL	15			10	08	-04	53	34	6
18	0	UNL	15			04	03	-07	60	33	9
21	2	UNL	15			-01	-02	-10	65	33	8
DAY 25											
00	4	UNL	15			-05	-05	-13	68	33	7
03	4	UNL	15			-07	-07	-15	67	33	7
06	0	UNL	15			-08	-08	-18	64	34	7
09	0	UNL	15			-08	-08	-16	67	34	10
12	1	UNL	15			05	03	-08	54	28	8
15	6	200	15			07	05	-06	55	29	6
18	10	UNL	15			00	-01	-10	82	28	5
21	10	UNL	15			02	01	-08	82	30	5
DAY 26											
00	8	UNL	15		SW	-01	-02	-10	65	31	3
03	10	25	15		SW	04	03	-05	68	29	5
06	10	40	10		S	08	05	-02	69	28	7
09	10	38	10		S	09	08	00	87	29	10
12	6	20	10			11	09	-01	90	26	11
15	3	UNL	15			08	07	-05	83	27	13
18	3	UNL	15			04	02	-08	87	28	11
21	0	UNL	15			-01	-02	-12	90	29	10
DAY 27											
00	0	UNL	15			-05	-06	-14	68	28	8
03	7	40	15			-06	-06	-16	61	30	7
06	3	UNL	15			-09	-09	-18	64	25	5
09	10	14	3		S	00	00	-09	85	23	12
12	10	30	2		S	05	04	-04	86	22	9
15	3	UNL	15			10	08	-02	90	28	4
18	8	85	15			08	07	-01	88	13	3
21	10	90	10		S	06	05	-03	86	09	4
DAY 28											
00	10	55	4		S	11	10	03	70	11	8
03	10	6	2	8	SF	18	17	14	84	11	14
06	10	9	3		SF	17	16	12	81	11	16
09	10	7	0	12	SF	19	18	14	81	10	15
12	10	14	10		S	21	20	15	78	11	18
15	10	10	3		S	23	21	14	68	11	19
18	10	8	1		S	22	21	18	85	11	18
21	10	15	3		SBS	23	22	18	84	12	15
DAY 29											
00	10	7	1		SF	24	23	21	88	11	16
03	10	6	1	8	S	24	23	21	88	13	14
06	10	4	4		S	24	24	22	92	14	9
09	10	7	1		SF	25	24	22	88	14	9
12	10	7	6		SF	22	21	18	85	25	10
15	10	30	7			15	13	06	87	29	8
18	10	40	15			10	08	-01	81	29	12
21	10	40	15			07	05	-03	83	29	11
DAY 30											
00	10	75	15			02	01	-06	90	28	10
03	10	75	15			-04	-04	-11	71	30	9
06	1	UNL	15			-07	-07	-18	55	28	11
09	10	85	15			-06	-06	-17	58	29	10
12	10	UNL	15			-02	-03	-17	48	28	9
15	3	UNL	15			03	01	-14	44	27	9
18	0	UNL	15			-04	-05	-15	58	30	7
21	0	UNL	15			-05	-06	-16	58	30	6
DAY 31											
00	0	UNL	15			-08	-08	-18	51	30	5
03	0	UNL	15			-12	-12	-21	53	32	7
06	8	UNL	15			-14	-14	-23	53	32	6
09	3	UNL	15			-16	-16	-25	53	34	7
12	7	UNL	15			-02	-03	-17	48	35	8
15	9	UNL	15			04	02	-14	42	32	10
18	9	UNL	15			-03	-04	-16	53	32	10
21	6	110	15			-06	-07	-19	52	32	12

STATION: DULUTH MINN

YEAR & MONTH: 78 12

NOTES

CEILING
UNL INDICATES UNLIMITED

WEATHER

- \+ TORNADO
- T THUNDERSTORM
- Q SQUALL
- R RAIN
- RW RAIN SHOWERS
- ZR FREEZING RAIN
- L DRIZZLE
- ZL FREEZING DRIZZLE
- S SNOW
- SP SNOW PELLETS
- IC ICE CRYSTALS
- SW SNOW SHOWERS
- SG SNOW GRAINS
- IP ICE PELLETS
- A HAIL
- F FOG
- IF ICE FOG
- GF GROUND FOG
- BD BLOWING DUST
- BN BLOWING SAND
- BS BLOWING SNOW
- BY BLOWING SPRAY
- K SMOKE
- H HAZE
- D DUST

WIND

DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS. INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E.. 09 FOR EAST. 18 FOR SOUTH. 27 FOR WEST. ENTRY OF 00 IN THE DIRECTION COLUMN INDICATES CALM.

SPEED IS EXPRESSED IN KNOTS: MULTIPLY BY 1.15 TO CONVERT TO MILES PER HOUR.

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC CENTER
FEDERAL BUILDING
ASHEVILLE. N.C. 28801

AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE AND FEES PAID
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COM-210

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FIRST CLASS

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MINNESOTA POWER & LIGHT CO
CUSTOMER SERVICES DEPT.
30 WEST SUPERIOR STREET
DULUTH, MN 55802

NOVEMBER 1978
DULUTH. MINNESOTA
NATIONAL WEATHER SERVICE OFC
INTERNATIONAL AIRPORT

Local Climatological Data

MONTHLY SUMMARY

LATITUDE 46° 50 'N LONGITUDE 92° 11 'W ELEVATION (GROUND) 1428 FT. STANDARD TIME USED: CENTRAL WBAN #14913

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT	DEGREE DAYS BASE 65° HEATING (SEASON BEGINS with JULY)	COOLING (SEASON BEGINS with JAN.)	WEATHER TYPES ON DATES OF OCCURRENCE 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW, ICE PELLETS OR ICE ON GROUND AT 0BAM IN.	PRECIPITATION WATER EQUIVALENT IN	SNOW, ICE PELLETS IN.	AVG. STATION PRESSURE IN. - - - ELEV. 1417 FEET M.S.L.	WIND RESULTANT DIR.	RESULTANT SPEED M.P.H.	AVERAGE SPEED M.P.H.	FASTEST MILE SPEED M.P.H.	FASTEST MILE DIRECTION	SUNSHINE MINUTES	PERCENT OF POSSIBLE	SKY COVER TENTHS SUNRISE TO SUNSET	SKY COVER TENTHS MIDNIGHT TO MIDNIGHT	DATE
1	2	3	4	5	6	7A	7B	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	59	33	46	9	25	19	0		0	0	0	28.62	22	14.2	14.5	25	SW	536	89	8	5	1
2	66	34	50	14	30	15	0		0	0	0	28.54	21	2.7	5.6	11	SW	600	100	1	1	2
3	70*	45	58*	22	39	7	0	1 8	0	0	0	28.44	24	9.4	11.7	17	NW	598	100	1	3	3
4	48	28	38	4	32	26	0	3	0	.05	0	28.48	09	8.5	11.8	18	NE	121	20	10	7	4
5	50	32	41	7	29	24	0	3	0	.02	0	28.21	27	12.8	15.1	24	SW	472	80	8	8	5
6	42	25	34	0	22	31	0		0	0	0	28.61	29	9.1	9.8	16	NW	598	100	0	0	6
7	49	28	38	5	20	27	0		0	0	0	28.47	19	11.8	12.1	17	S	398	66	8	6	7
8	63	41	52	19	30	13	0		0	0	0	28.08	22	11.2	13.8	24	SW	286	46	10	8	8
9	44	34	39	7	28	26	0		0	.04	.4	28.42	03	5.8	7.8	17	NE	0	0	10	10	9
10	35	26	31	0	27	34	0	1 6	1	.31	2.7	28.83	06	14.6	16.0	24	NE	0	0	10	10	10
11	28	18	23	-8	16	42	0		1	0	0	28.98	01	9.8	10.2	17	N	371	65	8	9	11
12	31	20	26	-4	19	39	0	1 4 6	1	.07	.2	28.87	10	10.8	12.1	21	E	0	0	10	10	12
13	38	28	34	4	29	31	0	1 4 6	1	.37	.2	28.17	20	8.4	16.5	32	SW	0	0	10	10	13
14	28	23	26	-3	17	39	0		1	T	.4	28.49	27	15.1	15.2	25	W	15	3	10	10	14
15	31	22	27	-1	16	38	0		1	T	T	28.73	23	9.9	10.8	17	SW	426	76	8	5	15
16	37	15	26	-2	20	39	0	1	1	0	0	28.75	17	4.3	5.3	11	S	561	100	0	2	16
17	35	27	31	4	24	34	0		1	T	.1	28.34	33	3.9	8.3	17	NW	0	0	10	10	17
18	28	11	20	-7	20	45	0	1 6	1	.02	.7	28.50	29	11.3	11.7	21	W	15	3	10	9	18
19	13	6	10	-18	2	55	0		1	0	0	29.00	32	11.5	11.8	17	NW	121	22	10	9	19
20	13	0	7	-19	-5	58	0		1	0	0	29.15	31	6.8	7.1	9	NW	401	73	5	6	20
21	15	-3	6	-19	-8	59	0		1	0	0	28.97	28	7.5	8.5	11	SW	518	94	0	0	21
22	21	-2	10	-15	-1	55	0	6	1	.07	.7	28.72	13	4.5	6.6	14	E	65	12	8	6	22
23	25	21	23	-1	18	42	0	1	3	.18	2.3	28.27	35	.6	9.8	17	NW	0	0	10	10	23
24	21	10	16	-8	12	49	0		3	.01	.1	28.46	29	6.8	8.1	13	W	0	0	10	10	24
25	27	13	20	-3	15	45	0		4	T	T	28.62	31	5.7	7.2	13	NW	435	80	8	8	25
26	27	13	20	-2	14	45	0		4	T	.2	28.83	09	1.4	4.8	8	E	178	33	9	10	26
27	27	15	21	-1	19	44	0		5	.09	1.2	28.35	19	3.7	6.5	17	NW	0	0	10	10	27
28	15	0	8	-14	0	57	0		5	.01	.4	28.26	28	4.8	11.4	18	NW	382	73	7	7	28
29	25	-5	10	-11	3	55	0	1 9	5	.03	.5	28.08	27	10.0	12.4	26	W	318	60	8	6	29
30	10	-12*	-1*	-22	-14	86	0		5	0	0	28.41	27	8.5	9.9	15	SW	531	100	0	0	30
SUM	1023	SUM	545			TOTAL	1159	TOTAL	0		TOTAL	1.27	TOTAL	10.1	FOR THE MONTH:					TOTAL	7922	%	213	SUM	205	
AVG.	34.1	AVG.	18.2	AVG.	26.2	DEP.	-61	DEP.	0	NUMBER OF DAYS PRECIPITATION >.01 INCH	13	DEP.	-0.46					DATE:	13	POSSIBLE	16922	MONTH	47	AVG.	7.1	AVG.	6.8

NUMBER OF DAYS MAXIMUM TEMP. ≥ 90°	≤ 32°	MINIMUM TEMP. ≤ 32°	≤ 0°	SEASON TO DATE DEP.	TOTAL	DEP.	TOTAL
0	17	25	6	8	2206	48	224

NUMBER OF DAYS SNOW, ICE PELLETS ≥ 1.0 INCH	3
THUNDERSTORMS	2
HEAVY FOG	0
CLEAR 6 PARTLY CLOUDY 4 CLOUDY 20	

GREATEST IN 24 HOURS AND DATES PRECIPITATION		SNOW, ICE PELLETS		GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE	
.44	12-13	3.0	22-23+	5	30+

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON AN EARLIER DATE, OR DATES.
HEAVY FOG: - VISIBILITY 1/4 MILE OR LESS.
FIGURES FOR WIND DIRECTIONS ARE TENS OF DEGREES CLOCKWISE FROM TRUE NORTH. 00 = CALM.
DATA IN COLS. 6 AND 12-15 ARE BASED ON 7 OR MORE OBSERVATIONS PER DAY AT 3-HOUR INTERVALS.
FASTEST MILE WIND SPEEDS ARE FASTEST OBSERVED ONE-MINUTE VALUES WHEN DIRECTIONS ARE IN TENS OF DEGREES. THE / WITH THE DIRECTION INDICATES PEAK GUST SPEED.
ANY ERRORS DETECTED WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL SUMMARY

SUMMARY BY HOURS

HOUR LOCAL TIME	AVERAGES SKY COVER TENTHS	STATION PRESSURE IN.	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	RELATIVE HUMIDITY %	WIND SPEED M.P.H.	RESULTANT WIND DIRECTION	RESULTANT WIND SPEED M.P.H.
00	6	28.55	26	23	17	70	10.3	28	3.7
03	6	28.55	25	22	17	73	9.4	29	2.9
06	6	28.54	24	22	16	73	9.7	29	3.5
09	7	28.55	26	23	17	70	10.1	26	2.8
12	7	28.54	31	26	17	60	11.4	24	4.4
15	7	28.52	32	27	17	57	11.7	24	4.3
18	7	28.53	28	24	16	63	9.9	26	3.1
21	7	28.54	26	23	16	67	10.7	27	3.4

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DATE	A. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
1																									1
2																									2
3																									3
4																						.01	.02	.02	4
5	.02	T	T																						5
6																									6
7																									7
8																									8
9														T	T	T	T	T	T	T	.01	.01	.01	.01	9
10	.05	.05	.03	.01	.02	.04	.02	.02	.02	.01	T	T	T	T	T	.01	.01	.01	T	.01	T				10
11																									11
12																			T	T	.03	T	.04		12
13	.01	.03	.02	T	.02	.09	.05	.01	.05	.04	.05	T	T		T	T		T	T	T	T	T	T	T	13
14	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	14
15	T	T	T	T	T	T	T																		15
16																									16
17							T	T	T	T	T	T							T	T	T	T	T		17
18				T	T	T	T		T	T	T	.02	T	T	T	T	T	T	T	T	T	T				18
19																									19
20																									20
21																									21
22														T	T	T	T				T	.01	.03	.03	22
23	.06	.05	.02	.01	T	T	T	.01	.02	T	T	T	.01	T	T	T	T	T	T	T	T	T	T	T	23
24	T	T	T	T	T	T	T	T	T	T	T	T	T	.01	T	T	T								24
25						T	T	T																	25
26					T	T	T	T	T	T	T														26
27	T	T	T	T	T	T	T	T	T	T	T	T	T	T	.01	.01	.02	.02	.01	.01	T	.01	T	T	27
28	T	T	T															T	T	T	T	T	.01	T	28
29	.01	T	.01	.01	T	T	T	T	T	T	T	T	T	T	T										29
30																									30

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noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / ENVIRONMENTAL DATA AND INFORMATION SERVICE

Daniel B. Mitchell
DIRECTOR, NATIONAL CLIMATIC CENTER

USCOMM--NOAA--ASHEVILLE 12/26/78 375

OBSERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER TENTHS	CEILING HNDS. OF FT.	VISIBILITY: WHOLE MILES	VISIBILITY: TENTHS MILE	WEATHER	TEMPERATURE: AIR °F	TEMPERATURE: WET BULB °F	TEMPERATURE: DEW PT. °F	REL. HUM. %	WIND: DIR	WIND: SPEED KNOTS
DAY 01											
00	2	UNL	15			35	30	20	64	25	8
03	3	UNL	15			37	30	18	60	23	12
06	0	UNL	15			34	29	19	64	22	12
09	8	UNL	15			39	33	24	65	23	14
12	7	UNL	15			54	42	25	33	21	16
15	7	UNL	15			58	46	31	38	21	17
18	6	UNL	15			51	43	33	50	21	15
21	0	UNL	15			47	41	33	58	22	9
DAY 02											
00	0	UNL	15			46	41	34	63	26	8
03	0	UNL	15			40	36	31	70	27	7
06	0	UNL	15			40	36	30	68	32	4
09	1	UNL	15			48	41	32	54	00	0
12	0	UNL	10			63	47	29	28	12	4
15	0	UNL	7			64	48	28	27	17	8
18	1	UNL	7			55	45	27	34	18	4
21	0	UNL	10			48	40	28	44	17	4
DAY 03											
00	0	UNL	10			50	43	35	57	21	6
03	0	UNL	15			48	42	35	59	21	9
06	0	UNL	15			46	42	38	74	21	8
09	5	UNL	15		H	50	47	45	83	22	12
12	7	UNL	15		H	64	55	47	64	22	10
15	7	UNL	7			69	56	44	41	23	10
18	8	UNL	15			61	48	37	41	27	12
21	10	250	15			54	44	33	46	31	14
DAY 04											
00	0	UNL	15			46	41	35	66	32	10
03	0	UNL	10			41	38	33	73	00	0
06	2	UNL	10			28	27	24	85	01	5
09	5	UNL	15			43	37	30	60	10	10
12	10	90	15			46	40	32	58	10	12
15	10	90	15			45	38	28	51	10	15
18	10	90	15			43	39	35	73	09	16
21	10	250	15			46	42	37	71	12	15
DAY 05											
00	10	60	7		TRW	48	46	43	80	17	8
03	10	80	15			50	47	44	80	19	6
06	10	80	15			47	40	30	52	29	18
09	7	UNL	15			45	37	28	47	28	17
12	10	UNL	15			46	37	24	42	26	16
15	8	UNL	15			46	37	23	40	27	17
18	10	UNL	15			42	34	21	43	27	13
21	9	35	15			39	32	20	46	28	12
DAY 06											
00	6	UNL	15			34	28	21	59	27	11
03	0	UNL	15			33	30	24	70	28	10
06	0	UNL	15			31	30	29	92	29	9
09	0	UNL	15			33	30	25	72	30	11
12	0	UNL	15			40	32	19	43	30	12
15	0	UNL	15			42	34	21	43	31	8
18	0	UNL	15			31	27	20	64	28	4
21	0	UNL	15			29	26	20	69	21	3
DAY 07											
00	0	UNL	15			29	26	19	66	17	7
03	0	UNL	15			29	26	19	66	17	7
06	0	UNL	15			31	27	18	59	18	11
09	10	UNL	15			36	30	18	48	19	13
12	10	UNL	15			43	34	20	40	20	13
15	8	130	15			47	37	21	36	20	13
18	10	90	15			44	35	22	42	21	10
21	10	UNL	15			43	35	24	47	21	10
DAY 08											
00	4	UNL	15			43	36	25	48	20	10
03	0	UNL	15			41	35	25	53	20	12
06	0	UNL	15			42	36	26	53	20	14
09	10	UNL	15			46	36	29	52	20	14
12	10	UNL	15			57	46	32	28	23	15
15	10	250	15			61	48	33	35	24	15
18	10	90	15			51	42	32	48	25	7
21	10	UNL	15			48	42	36	83	33	10
DAY 09											
00	10	100	15			44	40	34	88	32	8
03	10	110	15			41	37	31	88	01	7
06	10	110	15			38	35	28	85	36	5
09	10	70	15			40	35	27	80	02	5
12	10	55	15			43	39	33	83	08	6
15	10	12	10		RW	38	38	30	73	09	6
18	10	18	10			39	34	25	57	05	8
21	10	14	2	8	SW	35	33	30	82	05	7
DAY 10											
00	10	5	2		SW	34	32	30	85	06	12
03	10	4	2		S	34	32	30	85	08	13
06	10	5	2		S	34	32	30	85	07	15
09	10	5	1		S	33	31	28	85	06	16
12	10	4	0	8	SF	33	31	28	82	08	15
15	10	8	1		SF	31	28	26	82	05	15
18	10	16	4		SF	28	27	23	82	02	12
21	10	42	7			28	26	21	75	01	13
DAY 11											
00	10	44	10			26	24	20	78	01	12
03	10	40	15			25	23	19	78	01	12
06	10	120	15			23	22	17	78	01	12
09	10	120	15			23	21	15	71	01	10
12	10	UNL	15			25	23	16	69	01	7
15	10	UNL	15			27	24	15	67	02	7
18	10	UNL	15			23	21	15	71	08	4
21	10	UNL	15			20	18	11	68	01	7
DAY 12											
00	10	19	15			20	18	12	71	02	5
03	10	20	15			22	20	15	74	02	6
06	10	15	15			25	24	21	85	11	6
09	10	15	15			27	25	20	75	11	14
12	10	40	15			28	26	20	72	12	12
15	10	44	15			28	26	20	69	10	14
18	10	44	15			29	27	22	75	11	12
21	10	35	3		SW	30	28	24	78	11	15
DAY 13											
00	10	13	5		ZR	30	28	25	82	11	17
03	10	2	3		ZRSF	32	31	28	89	10	14
06	10	2	2		ZRF	33	32	30	89	10	9
09	10	3	1	8	RSF	35	34	32	89	15	8
12	10	2	3		LF	36	35	34	92	22	9
15	10	15	7		S	36	34	30	79	25	20
18	10	19	10		S	33	30	25	72	26	18
21	10	18	9		S	30	28	23	75	25	20
DAY 14											
00	10	19	10		S	29	28	20	66	28	18
03	10	22	10		S	28	26	20	72	27	15
06	10	23	15		S	27	24	16	63	27	14
09	10	26	1		S	26	24	19	75	27	10
12	10	23	7		S	27	24	18	69	28	13
15	10	29	4		SW	27	24	18	69	28	12
18	10	28	7		SW	26	23	14	60	28	11
21	10	24	10		SW	24	21	13	63	28	13
DAY 15											
00	10	23	10		SW	23	20	12	63	27	10
03	10	22	15		S	25	21	15	71	24	7
06	10	16	15		S	23	21	14	68	26	10
09	10	14	15			23	21	18	74	21	11
12	10	250	15			27	24	17	66	21	11
15	10	12	10			31	27	18	59	21	11
18	10	18	10			28	24	16	61	21	7
21	10	18	10			28	23	17	69	23	8
DAY 16											
00	0	UNL	15			23	22	17	78	24	6
03	0	UNL	15			22	21	17	81	00	0
06	0	UNL	15			15	14	11	84	00	0
09	0	UNL	3		GF	24	23	20	85	16	4
12	0	UNL	7			34	30	24	67	18	9
15	0	UNL	10			37	32	25	62	15	8
18	0	UNL	7			30	28	25	83	12	8
21	10	120	10			32	28	23	68	19	8
DAY 17											
00	10	85	10			32	28	22	67	18	7
03	10	36	10			31	28	23	72	10	4
06	10	44	10		S	30	28	23	75	07	5
09	10	30	2		S	31	28	25	78	05	5
12	10	100	7			33	30	24	70	34	6
15	10	100	10			35	31	23	62	31	10
18	10	7	7			33	31	26	82	31	12
21	10	6	6		SW	31	29	26	82	32	9
DAY 18											
00	10	6	7			10	6	7			
03	10	4	3		F	27	26	22	81	28	10
06	10	4	4		ZLF	26	25	22	85	30	9
09	10	9	9		SF	26	25	22	85	30	7
12	10	7	1		SF	28	25	23	88	30	6
15	10	19	2	8	SW	26	25	22	85	26	10
18	10	18	7		SW	27	25	20	75	28	12
21	10	13	10		SW	24	22	18	71	28	14
DAY 19											
00	0	UNL	15			11	10	05	77	30	13
03	9	UNL	15			10	09	04	76	31	9
06	10	UNL	15			11	10	05	77	31	11
09	10	80	15			11	09	02	67	32	15
12	10	250	15			12	10	02	64	33	12
15	10	100	15			11	09	-01	88	34	8
18	10	UNL	15			09	07	-02	81	32	6
21	10	90	15			07	06	-01	89	32	10
DAY 20											
00	10	85	15			06	05	-02	89	32	8
03	10	38	15			06	05	-02	88	34	8
06	4	UNL	15			03	02	-07	83	31	8
09	1	UNL	15			05	03	-06	80	33	7
12	4	UNL	15			11	08	-07	44	32	5
15	5	UNL	15			12	09	-06	44	27	7
18	9	110	15			09	07	-06	50	30	6
21	6	130	15			06	04	-07	55	30	6
DAY 21											
00	0	UNL	15			02	01	-10	57	31	7
03	0	UNL	15			-02	-03	-12	62	32	7
06	0	UNL	15			-02	-03	-13	59	29	6
09	0	UNL	15			01	00	-10	68	31	7
12	0	UNL	15			10	07	-06	48	28	10
15	0	UNL	15			14	11	-04	44	26	9
18	0	UNL	15			10	08	-05	50	23	8
21	0	UNL	15			08	06	-09	55	29	5
DAY 22											
00	0	UNL	15			04	03	-07	80	31	4
03	3	UNL	16			02	01	-07	86	28	3
06	0	UNL	15			-01	-02	-11	82	00	0
09	2	UNL	15			07	05	-04	80	14	4
12	10	38	15			15	12	00	91	14	7
15	10	35	7		S	16	13	04	90	15	8
18	10	27	10			18	17	08	85	12	10
21	10	8	9		S	20	18	12	71	11	10
DAY 23											
00	10	15	1	8	S	21	20	18	81	11	11
03	10	2	1	8	S	21	20	17	84	09	10
06	10	4	7		S	23	22	19	85	11	9
09	10	3	1	8	SF	25	22	19	85	16	3
12	10	11	2		SF	24	23	18	81	27	7
15	10	11	8		SF	25	23	19	78	31	8
18	10	13	10		S	23	22	17	78	31	11
21	10	17	10		SW	22	20	19	74	29	10
DAY 24											
00	10	40	10		SW	21	19	14	74	29	9
03	10	11	1		SW	19	18	13	77	31	9
06	10	10	10		SW	19	18	13	77	29	9
09	10	9	7		SW	19	17	12	74	28	6
12	10	11	6		SW	19	17	11	71	31	7
15	10	11	6		SW	19	18	13	77	26	8
18	7	100	10			15	14	10	80	31	4
21	10	40	10			15	14	10	80	13	4
DAY 25											
00	10	40	10			21	20	18	78	22	6
03	10	42	10			24	22	18	71	29	8
06	10	44	10		SW	23	22	18	81	31	7
09	6	12	7			23	21	16	74	34	8
12	8	250	10			25	22	15	66	32	10
15	5	UNL	10			25	22	14	65	28	4
18	10	24	10			21	18	13	71	36	4
21	10	19	16			20	18	14	77	34	3
DAY 26											
00	10	18	15			13	12	09	84	31	4
03	10	17	10			19	16	14	81	31	3
06	10	13	10		SW	20	19	15	81	36	5
09	6	40	7		SW	22	21	17	81	00	0
12	8	27	7			27	24	15	61	14	6
15	10	250	10			26	22	13	58	11	7
18	10	150	10			23	21	14	68	06	3
21	10	35	10			24	22	16	71	16	5
DAY 27											
00	10	35	15			24	22	18	78	16	5
03	10	42	10		SW	24	22	18	78	16	5
06	10	17	10		SW	23	22	17	78	20	6
09	10	9	7		SW	23	22	18	81	18	6
12	10	8	2	8	S	26	24	20	81	18	7
15	10	9	1		S	27	26	22	81	18	6
18	10	8	1	8	S	26	25	22	85	00	0
21	10	4	3		S	23	22	19	85	33	10
DAY 28											
00	10	75	7		S	15	14	08	74	33	12
03	9	UNL	15			07	06	02	80	31	12
06	3	UNL	15			04	03	-07	80	33	12
09	8	UNL	15			03	02	-07	83	30	8
12	2	UNL	15			08	07	-04	85	26	6
15	10	250	15			12	10	00	88	21	9
18	10	35	15		SW	12	10	03	87	18	10
21	10	8	3		S	12	11	06	77	17	10
DAY 29											
00	10	35	2		S	13	12	09	80	18	9
03	10	7	2		S	17	16	13	84	22	10
06	10	5	5		S	20	19	16	84	25	11
09	10	15	4		S	22	20	15	74	28	15
12	9	22	4		SBS	11	09	00	81	28	17
15	3	UNL	10			10	07	-08	43	31	4
18	10	35	15			05	03	-08	54	29	8
21	10	11	15			00	00	-11	68	30	12
DAY 30											
00	0	UNL	15			-05	-05	-15	61	30	10
03	0	UNL	15			-09	-09	-18	64	31	10
06	0	UNL	15			-11	-11	-21	60	31	9
09	0	UNL	15			-08	-08	-18	58	26	7
12	0	UNL	15			03	01	-10	54	25	7
15	0	UNL	15			08	07	-08	80	34	11
18	0	UNL	15			04	02	-09	54	23	8
21	0	UNL	15			-01	-03	-10	65	25	7

STATION: DULUTH MINN

YEAR & MONTH: 78 11

NOTES

CEILING

UNL INDICATES UNLIMITED

WEATHER

+	TORNADO
T	THUNDERSTORM
Q	SQUALL
R	RAIN
RW	RAIN SHOWERS
ZR	FREEZING RAIN
L	DRIZZLE
ZL	FREEZING DRIZZLE
S	SNOW
SP	SNOW PELLETS
IC	ICE CRYSTALS
SW	SNOW SHOWERS
SG	SNOW GRAINS
IP	ICE PELLETS
A	HAIL
F	FOG
IF	ICE FOG
GF	GROUND FOG
BD	BLOWING DUST
BN	BLOWING SAND
BS	BLOWING SNOW
BY	BLOWING SPRAY
K	SMOKE
H	HAZE
D	DUST

WIND

DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS. INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. ENTRY OF 00 IN THE DIRECTION COLUMN INDICATES CALM.

SPEED IS EXPRESSED IN KNOTS; MULTIPLY BY 1.15 TO CONVERT TO MILES PER HOUR.

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

AN EQUAL OPPORTUNITY EMPLOYER

POSTAGE AND FEES PAID
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COM-210

U.S. MAIL
FIRST CLASS

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MINNESOTA POWER & LIGHT CO
CUSTOMER SERVICES DEPT.
30 WEST SUPERIOR STREET
DULUTH, MN

5580

OCTOBER 1978
DULUTH, MINNESOTA
NATIONAL WEATHER SERVICE OFC
INTERNATIONAL AIRPORT

Local Climatological Data

MONTHLY SUMMARY

LATITUDE 46° 50 'N LONGITUDE 92° 11 'W ELEVATION (GROUND) 1428FT. STANDARD TIME USED: CENTRAL WBAN #14913

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEPARTURE FROM NORMAL	AVERAGE DEW POINT	DEGREE DAYS BASE 65° HEATING (SEASON BEGINS WITH JULY)	COOLING (SEASON BEGINS WITH JAN.)	WEATHER TYPES ON DATES OF OCCURRENCE 1 FOG 2 HEAVY FOG 3 THUNDERSTORM 4 ICE PELLETS 5 HAIL 6 GLAZE 7 DUSTSTORM 8 SMOKE, HAZE 9 BLOWING SNOW	SNOW, ICE PELLETS OR ICE ON GROUND AT 0BAM IN.	PRECIPITATION WATER EQUIVALENT IN	SNOW, ICE PELLETS IN.	AVG. STATION PRESSURE IN. ELEV. 1417 FEET M.S.L.	WIND RESULTANT DIR.	RESULTANT SPEED M.P.H.	AVERAGE SPEED M.P.H.	FASTEST MILE SPEED M.P.H.	FASTEST MILE DIRECTION	SUNSHINE MINUTES	PERCENT OF POSSIBLE	SKY COVER TENTHS SUNRISE TO SUNSET	SKY COVER TENTHS MIDNIGHT TO MIDNIGHT	DATE
1	68	41	55	5	43	10	0		0	T	0	28.47	18	8.0	10.4	17	SE	538	77	9	7	1
2	69	47	58	8	46	7	0		0	.02	0	28.31	25	4.7	10.2	17	W	537	77	6	6	2
3	62	41	52	2	40	13	0	1	0	T	0	28.24	28	7.8	8.3	17	SW	253	36	7	6	3
4	51	45	48	-2	42	17	0	1	0	.25	0	28.23	27	6.7	8.6	11	SW	0	0	10	10	4
5	50	41	46	-4	42	19	0	1	0	.25	0	28.29	33	10.8	11.1	17	NW	12	2	10	9	5
6	51	38	45	-5	33	20	0	1	0	.01	0	28.54	31	10.8	11.1	19	NW	355	52	7	8	6
7	47	31	39	-10	26	26	0		0	0	0	28.66	30	7.2	7.6	11	NW	609	89	3	3	7
8	60	31	46	-3	31	19	0		0	0	0	28.56	20	6.8	9.6	18	S	642	95	5	6	8
9	62	42	52	3	41	13	0		0	T	0	28.41	16	6.6	7.8	12	S	516	76	3	4	9
10	57	38	48	0	47	17	0	2 8	0	0	0	28.44	14	4.6	4.8	8	S	0	0	10	9	10
11	61	46	54	6	42	11	0	1	0	.03	0	28.07	22	11.8	14.0	24	S	201	30	9	7	11
12	50	38	44	-4	29	21	0		0	T	0	28.22	28	13.4	13.8	23	W	333	50	5	4	12
13	40	28	35	-12	23	30	0		0	0	0	28.65	31	7.9	8.1	14	NW	123	19	8	7	13
14	45	21	33	-14	23	32	0		0	.01	0	28.66	27	3.9	6.8	11	SW	212	32	5	5	14
15	45	31	38	-9	34	27	0	1	0	.20	T	28.41	01	3.3	6.8	14	NE	71	11	9	8	15
16	47	26	37	-9	27	28	0	1	0	0	0	28.75	26	2.9	6.6	12	S	504	77	4	4	16
17	55	36	46	0	28	19	0		0	0	0	28.58	22	9.7	11.5	23	SW	150	23	10	9	17
18	46	32	39	-6	27	26	0		0	0	0	28.68	30	8.2	8.9	18	SW	550	85	6	6	18
19	64	38	51	6	32	14	0		0	0	0	28.42	27	10.5	11.9	19	NW	519	81	9	7	19
20	75	39	57	13	38	8	0		0	0	0	28.27	22	11.1	11.8	20	SW	617	98	0	1	20
21	76*	48	62*	18	41	3	0		0	0	0	28.14	25	7.9	9.1	19	NW	471	74	6	6	21
22	49	38	44	1	29	21	0		0	0	0	28.58	32	13.1	13.5	17	NW	26	4	10	10	22
23	48	25	37	-6	23	28	0		0	0	0	28.78	23	8.4	9.1	19	S	478	75	7	7	23
24	61	38	50	8	31	15	0		0	0	0	28.09	21	16.1	16.3	23	SW	545	87	8	7	24
25	54	37	46	5	32	19	0		0	T	T	28.03	30	11.3	13.2	22	NW	18	3	10	10	25
26	43	32	38	-3	28	27	0		0	T	0	28.30	27	8.8	7.8	13	W	62	10	8	9	26
27	46	33	40	0	28	25	0		0	0	0	28.37	30	8.4	11.1	18	NW	208	34	6	6	27
28	46	21*	33*	-7	27	32	0		0	T	0	28.72	13	3.4	6.6	7	SE	433	70	2	3	28
29	52	33	43	4	32	22	0		0	T	0	28.60	18	13.2	13.8	24	SE	182	30	7	6	29
30	58	31	45	7	35	20	0		0	0	0	28.49	25	11.4	16.1	26	SW	399	66	9	5	30
31	53	25	39	1	21	26	0		0	0	0	28.83	26	9.2	9.6	18	SW	570	94	2	2	31
SUM	1690	SUM	1092			TOTAL 615	TOTAL 0			TOTAL .77	TOTAL T	FOR THE MONTH: 28.44	26	5.5	10.2	26	SW	TOTAL 10132	% FOR MONTH	SUN 210	SUN 197	
AVG.	54.5	AVG.	35.2	AVG. 44.9	DEP. -0.4	AVG. 33	DEP. 4	DEP. 0	PRECIPITATION .01 INCH 7			DEP. -1.53				DATE: 30		POSSIBLE 20251		AVG. 6.8	AVG. 6.4	

NUMBER OF DAYS				SEASON TO DATE		SNOW, ICE PELLETS		GREATEST IN 24 HOURS AND DATES			GREATEST DEPTH ON GROUND OF SNOW, ICE PELLETS OR ICE AND DATE
MAXIMUM TEMP.		MINIMUM TEMP.		TOTAL		> 1.0 INCH 0		PRECIPITATION		SNOW, ICE PELLETS	
≥ 90°	≤ 32°	≤ 32°	≤ 0°	1047	224	THUNDERSTORMS 0					
0	0	12	0	DEP. -53	DEP. 48	HEAVY FOG 1		.50	4- 5	T	25+
						CLEAR 5	PARTLY CLOUDY 12		CLOUDY 14		

* EXTREME FOR THE MONTH - LAST OCCURRENCE IF MORE THAN ONE.
T TRACE AMOUNT
+ ALSO ON AN EARLIER DATE, OR DATES.
HEAVY FOG - VISIBILITY 1/4 MILE OR LESS.
FIGURES FOR WIND DIRECTIONS ARE TENS OF DEGREES CLOCKWISE FROM TRUE NORTH. 00 = CALM. DATA IN COLS. 6 AND 12-15 ARE BASED ON 7 OR MORE OBSERVATIONS PER DAY AT 3-HOUR INTERVALS. FASTEST MILE WIND SPEEDS ARE FASTEST OBSERVED ONE-MINUTE VALUES WHEN DIRECTIONS ARE IN TENS OF DEGREES. THE / WITH THE DIRECTION INDICATES PEAK GUST SPEED.
ANY ERRORS DETECTED WILL BE CORRECTED AND CHANGES IN SUMMARY DATA WILL BE ANNOTATED IN THE ANNUAL SUMMARY

SUMMARY BY HOURS

HOUR LOCAL TIME	AVERAGES SKY COVER TENTHS	STATION PRESSURE IN.	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	RELATIVE HUMIDITY %	WIND SPEED M.P.H.	RESULTANT WIND DIRECTION	RESULTANT WIND SPEED M.P.H.
00	6	28.44	42	38	33	70	9.4	25	5.5
03	6	28.42	41	38	33	73	9.1	26	5.7
06	5	28.44	39	37	32	77	9.2	28	5.6
09	5	28.46	45	40	35	68	10.8	27	5.8
12	6	28.46	51	43	33	54	13.3	27	7.4
15	8	28.44	52	43	33	49	12.9	26	6.5
18	7	28.45	47	40	32	59	8.5	25	3.5
21	6	28.45	43	39	32	66	8.7	29	3.8

HOURLY PRECIPITATION (WATER EQUIVALENT IN INCHES)

DATE	A. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	P. M. HOUR ENDING AT 1	2	3	4	5	6	7	8	9	10	11	12	DATE
1																								T	1
2			.02																						2
3																	T						T	T	3
4	T	T	T	T	T	T	T	T		T	T	T	T					T	.04	.04	.06	.02	.02	.07	4
5	.04	.03	.03	.07	.02	.03	.01	.01	.01	T	T	T	T	T	T										5
6	T	T	.01										T												6
7																									7
8																									8
9		T	T	T																					9
10																									10
11												T	.01	.02	T										11
12															T										12
13																									13
14																									14
15	.05	.03	.07	T	.01	.01	T	T	T	T	T			.01	T	T	.01	.01						T	15
16																									16
17																									17
18																									18
19																									19
20																									20
21																									21
22																									22
23																									23
24																									24
25										T	T	T	T	T											25
26				T	T	T	T						T												26
27																									27
28																							T	T	28
29	T	T																							29
30																									30
31																									31

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noaa NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION / ENVIRONMENTAL DATA AND INFORMATION SERVICE

Daniel B. Mitchell
DIRECTOR, NATIONAL CLIMATIC CENTER

USCOMM--NOAA--ASHEVILLE 11/27/78 375

C[illegible]ERVATIONS AT 3-HOUR INTERVALS

HOUR	SKY COVER TENTHS	CEILING HNDS. OF FT.	VISIBILITY WHOLE MILES	VISIBILITY 16THS MILE	WEATHER	TEMPERATURE AIR °F	TEMPERATURE WET BULB °F	TEMPERATURE DEW PT. °F	REL. HUM. %	WIND DIR	WIND SPEED KNOTS
DAY 01											
00	0	UNL	15			46	42	38	80	26	5
03	0	UNL	15			43	41	38	86	26	5
06	2	UNL	15			47	44	41	80	23	7
09	8	UNL	15			56	50	44	64	21	8
12	8	UNL	15			65	54	44	47	20	15
15	10	250	15			65	55	46	50	13	15
18	10	250	15			55	51	47	75	10	8
21	10	80	15			55	51	47	75	11	9
DAY 02											
00	10	60	15			56	51	46	68	14	10
03	10	90	15			56	52	48	75	17	10
06	10	110	15			53	50	47	80	15	8
09	8	250	15			58	54	50	75	26	10
12	4	UNL	15			66	55	45	47	30	9
15	5	UNL	15			67	53	41	38	28	15
18	2	UNL	15			60	50	40	48	28	5
21	0	UNL	15			53	47	40	62	30	6
DAY 03											
00	0	UNL	15			47	43	39	74	30	3
03	3	UNL	15			46	43	40	80	30	5
06	8	60	15			45	43	41	86	23	6
09	6	UNL	15			52	48	44	74	28	9
12	6	UNL	15			60	50	40	48	27	11
15	8	75	15			59	47	35	41	31	8
18	7	75	15			51	46	41	86	29	11
21	9	70	15			47	44	40	77	28	9
DAY 04											
00	10	5	4		LF	46	44	43	89	29	7
03	10	7	7		L	45	44	42	88	28	6
06	10	9	10		L	46	44	42	86	28	10
09	10	8	7			46	46	43	83	28	11
12	10	14	6		L	48	46	43	83	26	9
15	10	27	10			48	45	41	74	23	8
18	10	28	10		R	48	45	41	77	20	5
21	10	15	4		RF	46	44	43	89	05	4
DAY 05											
00	10	29	6		RF	45	44	42	89	02	5
03	10	23	7		R	45	44	42	89	35	8
06	10	11	7		R	46	44	43	89	34	7
09	10	8	7		R	47	45	43	86	33	10
12	10	6	3		RLF	47	45	44	89	31	12
15	10	14	10			50	47	44	80	33	12
18	10	20	15			46	44	40	74	33	10
21	2	UNL	10			44	42	39	83	33	13
DAY 06											
00	9	40	15			41	39	36	82	32	10
03	10	25	15			40	38	35	82	31	10
06	7	32	15			38	36	33	78	30	10
09	4	UNL	15			45	40	34	66	31	7
12	0	UNL	15			46	40	33	61	33	13
15	0	UNL	15			50	41	31	48	31	14
18	10	UNL	15			48	39	28	52	29	7
21	9	47	15			42	37	30	63	32	8
DAY 07											
00	10	40	15			39	34	27	62	32	9
03	3	UNL	15			36	32	26	67	31	7
06	0	UNL	15			32	29	25	75	30	5
09	3	UNL	15			38	33	24	55	34	7
12	4	UNL	15			42	35	25	51	28	8
15	3	UNL	15			47	38	28	44	28	13
18	1	UNL	15			42	36	28	53	28	4
21	0	UNL	15			35	32	28	70	00	0
DAY 08											
00	5	UNL	15			34	31	28	73	26	3
03	5	75	15			34	32	29	82	24	5
06	3	UNL	15			36	33	29	78	22	6
09	4	UNL	15			45	38	32	60	21	10
12	4	UNL	15			55	44	32	42	20	13
15	4	JNL	15			60	47	32	35	19	13
18	8	UNL	15			53	44	34	48	18	9
21	7	UNL	15			48	43	38	81	18	8
DAY 09											
00	10	47	15			48	42	36	63	18	11
03	10	75	15		RW	47	43	38	71	18	8
06	8	75	15			46	43	38	77	17	7
09	0	UNL	15			51	46	41	80	13	5
12	6	UNL	15			57	50	42	80	21	4
15	4	UNL	15			61	53	46	56	15	8
18	1	UNL	15			60	47	46	83	10	8
21	0	UNL	15			46	44	41	83	14	8
DAY 10											
00	0	UNL	10			42	41	40	93	00	0
03	10	2	1		F	46	46	44	93	00	0
06	10	1	0	4	F	48	47	46	93	14	4
09	10	2	0	8	F	52	51	50	93	12	5
12	10	7	2	8	F	53	50	48	83	13	7
15	10	8	4		F	55	52	50	83	15	7
18	10	30	4		F	53	51	50	90	15	5
21	10	0	0	1	F	51	50	49	93	18	5
DAY 11											
00	6	20	5		F	51	48	47	86	19	9
03	10	7	4		F	52	50	48	86	20	13
06	10	7	4		F	51	48	47	86	19	13
09	10	100	7			54	50	47	77	20	15
12	10	100	10			58	52	46	65	24	13
15	8	250	15			57	51	46	67	27	12
18	4	UNL	15			55	43	28	37	28	10
21	0	UNL	15			48	38	25	41	24	12
DAY 12											
00	0	UNL	15			47	38	28	44	26	11
03	0	UNL	15			44	37	28	48	27	14
06	0	UNL	15			42	37	29	60	28	18
09	0	UNL	15			45	37	28	58	28	13
12	7	38	15			49	40	28	46	28	15
15	10	40	15			49	40	34	66	03	11
18	8	75	15			44	38	30	58	30	10
21	5	UNL	15			38	35	31	76	28	6
DAY 13											
00	10	40	15			38	34	29	70	30	8
03	10	35	15			38	32	28	67	32	5
06	7	35	15			31	28	23	72	32	5
09	10	33	15			34	29	21	59	30	7
12	10	35	15			38	32	21	50	31	11
15	10	40	15			39	32	20	46	32	8
18	6	UNL	15			34	29	21	59	29	7
21	0	UNL	15			30	27	20	66	33	5
DAY 14											
00	0	UNL	15			28	26	20	69	33	5
03	0	UNL	15			24	23	18	81	33	5
06	0	UNL	15			22	21	17	81	33	3
09	1	UNL	15			34	31	25	70	31	4
12	9	42	15			40	33	23	51	28	9
15	8	250	15			44	37	26	48	24	9
18	10	250	15			39	34	28	80	18	5
21	10	70	15			38	34	27	82	20	7
DAY 15											
00	10	13	7		RW	38	38	32	78	21	8
03	10	5	7		RW	38	36	34	86	21	8
06	10	6	4		LF	38	37	35	89	22	3
09	10	3	2		RF	38	37	35	86	02	7
12	10	10	15			40	38	35	82	02	13
15	10	10	15			44	40	34	66	03	11
18	9	38	15			37	35	33	85	03	6
21	3	UNL	15			35	33	31	85	36	5
DAY 16											
00	0	UNL	15			31	30	28	89	35	5
03	0	UNL	15			31	30	28	88	33	5
06	0	UNL	15			30	29	26	85	34	6
09	0	UNL	10			37	35	33	85	01	3
12	6	38	15			44	37	28	49	22	5
15	5	UNL	15			46	37	25	44	23	8
18	8	UNL	15			42	35	25	51	21	7
21	10	250	15			40	34	25	56	20	7
DAY 17											
00	10	UNL	15			38	33	26	82	20	10
03	10	UNL	15			37	32	25	82	20	10
06	10	UNL	15			37	32	25	82	20	9
09	10	200	15			43	36	27	83	20	12
12	10	UNL	15			51	42	30	46	21	15
15	10	200	15			55	46	33	43	22	13
18	10	200	15			50	42	33	52	30	6
21	7	UNL	15			44	38	33	66	31	5
DAY 18											
00	0	UNL	15			38	35	31	76	32	5
03	0	UNL	15			36	34	31	82	33	6
06	0	UNL	15			34	32	29	82	33	8
09	0	UNL	15			38	35	28	87	33	7
12	6	UNL	15			42	38	25	51	31	11
15	10	UNL	15			46	38	23	42	28	10
18	6	UNL	15			40	34	24	53	28	8
21	10	130	15			38	33	24	57	27	7
DAY 19											
00	10	150	15			38	33	24	57	24	14
03	10	UNL	15			42	38	28	81	28	15
06	10	UNL	15			41	35	27	98	28	12
09	10	250	15			48	41	33	96	30	10
12	10	UNL	15			60	48	38	44	28	12
15	8	UNL	15			64	50	35	34	32	12
18	2	UNL	15			54	45	35	49	29	3
21	2	UNL	15			45	40	35	80	23	5
DAY 20											
00	0	UNL	15			45	40	35	68	26	4
03	0	UNL	15			44	41	37	76	28	5
06	0	UNL	15			47	43	38	74	23	12
09	0	UNL	15			56	48	40	55	23	15
12	6	UNL	15			66	53	39	34	22	16
15	9	UNL	15			73	55	38	28	20	14
18	8	UNL	15			64	50	37	37	20	8
21	0	UNL	15			58	48	38	46	22	8
DAY 21											
00	10	250	15			57	48	40	53	22	9
03	10	110	15			54	47	41	82	28	5
06	7	250	15			50	46	40	88	24	7
09	1	UNL	10			60	50	41	90	23	5
12	6	250	15			73	59	40	30	26	7
15	9	250	15			75	57	42	31	22	10
18	8	UNL	15			59	51	44	58	25	7
21	8	UNL	15			57	48	40	53	30	13
DAY 22											
00	10	23	15			46	44	38	86	29	15
03	10	UNL	15			44	40	35	71	31	11
06	10	250	15			41	37	31	68	31	12
09	10	150	15			38	35	28	85	33	13
12	10	23	15			40	35	28	82	32	13
15	10	250	15			45	37	25	46	33	14
18	10	UNL	15			40	34	25	56	32	8
21	10	35	15			40	34	24	53	33	10
DAY 23											
00	10	33	15			38	33	28	82	33	6
03	1	UNL	15			33	29	21	81	32	9
06	0	UNL	15			27	25	20	75	28	4
09	2	UNL	15			38	33	25	80	26	8
12	8	UNL	15			44	35	22	42	21	9
15	10	250	15			46	38	21	37	20	11
18	10	250	15			43	35	22	43	20	9
21	10	290	15			40	33	23	51	21	11
DAY 24											
00	10	80	15			41	34	23	49	21	15
03	10	110	15			40	34	26	57	22	17
06	4	UNL	15			38	34	27	86	21	13
09	10	UNL	15			42	37	30	83	22	16
12	6	UNL	15			54	44	33	46	20	14
15	10	UNL	15			60	47	34	38	21	12
18	3	UNL	15			54	46	39	49	20	12
21	2	UNL	15			55	46	36	48	21	14
DAY 25											
00	8	UNL	15			54	47	39	57	23	14
03	10	110	15			52	46	37	57	28	11
06	10	15	10			46	41	36	71	32	14
09	10	21	15			43	38	32	85	32	12
12	10	21	10		RW	43	38	31	83	33	14
15	9	40	10			42	36	28	86	30	12
18	10	42	15			40	34	28	87	30	8
21	10	45	15			38	34	28	80	28	7
DAY 26											
00	10	45	15			37	33	28	85	27	6
03	10	42	15			38	34	28	70	28	6
06	10	7	10		L	36	34	32	85	30	4
09	8	8	15			37	35	31	78	28	8
12	10	21	15			43	37	30	80	30	8
15	10	47	15			42	36	27	55	25	7
18	9	110	15			40	35	27	60	22	6
21	10	100	15			38	35	28	85	22	7
DAY 27											
00	3	UNL	15			38	33	28	76	23	8
03	10	UNL	15			37	33	28	70	24	8
06	0	UNL	15			37	33	27	67	28	10
09	0	UNL	15			41	36	30	65	30	14
12	10	30	15			45	39	30	56	33	14
15	10	40	15			48	38	28	50	31	12
18	9	70	15			40	34	25	55	30	5
21	10	75	15			38	33	25	60	32	6
DAY 28											
00	0	UNL	15			33	30	25	72	32	7
03	0	UNL	15			30	28	24	78	00	0
06	0	UNL	15			24	23	20	85	30	3
09	0	UNL	15			36	33	28	73	12	9
12	3	UNL	15			39	35	30	70	12	8
15	5	UNL	15			45	38	28	51	18	6
18	8	UNL	15			35	33	29	78	11	7
21	10	40	10			38	34	32	85	13	8
DAY 29											
00	10	40	10		R	40	37	32	73	21	9
03	10	38	15			39	37	34	82	18	7
06	10	UNL	15			36	34	32	85	14	7
09	0	UNL	15			42	38	33	71	18	12
12	10	UNL	15			50	41	30	46	15	18
15	10	250	15			51	42	31	46	18	15
18	10	250	15			47	40	31	54	15	14
21	8	UNL	15			47	40	32	56	16	14
DAY 30											
00	0	UNL	15			51	43	35	64	18	17
03	3	UNL	15			56	48	38	67	20	20
06	0	UNL	15			54	48	37	73	22	18
09	0	UNL	15			55	47	40	67	28	14
12	10	UNL	15			56	48	35	65	28	16
15	10	23	15			48	40	33	61	30	16
18	8	UNL	15			41	37	31	80	29	7
21	8	UNL	15			38	33	28	76	28	6
DAY 31											
00	0	UNL	15			35	32	28	76	29	6
03	0	UNL	15			33	30	26	79	30	6
06	0	UNL	15			25	24	20	81	27	4
09	0	UNL	15			39	35	28	65	27	7
12	0	UNL	15			50	38	20	31	25	17
15	4	UNL	15			52	38	14	22	25	13
18	2	UNL	15			42	33	18	38	24	7
21	3	UNL	15			36	29	17	46	25	7

STATION

DULUTH MINN

YEAR & MONTH

78 10

NOTES

CEILING

UNL INDICATES UNLIMITED

WEATHER

* TORNADO
T THUNDERSTORM
Q SQUALL
R RAIN
RW RAIN SHOWERS
ZR FREEZING RAIN
L DRIZZLE
ZL FREEZING DRIZZLE
S SNOW
SP SNOW PELLETS
IC ICE CRYSTALS
SW SNOW SHOWERS
SG SNOW GRAINS
IP ICE PELLETS
A HAIL
F FOG
ZF ICE FOG
GF GROUND FOG
BD BLOWING DUST
BN BLOWING SAND
BS BLOWING SNOW
BY BLOWING SPRAY
K SMOKE
H HAZE
D DUST

WIND

DIRECTIONS ARE THOSE FROM WHICH THE WIND BLOWS. INDICATED IN TENS OF DEGREES FROM TRUE NORTH: I.E., 09 FOR EAST, 18 FOR SOUTH, 27 FOR WEST. ENTRY OF 00 IN THE DIRECTION COLUMN INDICATES CALM.

SPEED IS EXPRESSED IN KNOTS; MULTIPLY BY 1.15 TO CONVERT TO MILES PER HOUR.

U.S. DEPARTMENT OF COMMERCE
NATIONAL CLIMATIC CENTER
FEDERAL BUILDING
ASHEVILLE, N.C. 28801

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FIRST CLASS

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Customer Services Dept.
DEC 8 1978
File
Contract
55302
Technical
Other

LCD-21-14913-PD-7912

MINNESOTA POWER & LIGHT CO
CUSTOMER SERVICES DEPT.
30 WEST SUPERIOR STREET
DULUTH, MN

RECEIVED
OCT 31 1979
OFFICE OF HEARING
EXAMINERS

STATE OF MINNESOTA
OFFICE OF HEARING EXAMINER
FOR THE MINNESOTA PUBLIC SERVICE COMMISSION

In the Matter of the Proposed Adoption of a Rule by the Public Service Commission Governing Disconnection of Service to Gas and Electric Utility Customers during Periods of Cold Weather and Repeal of PSC 299 Cold Weather Rule

Comments of Otter Tail Power Company

Otter Tail Power Company, an investor-owned utility, submits the following comments in opposition to the Minnesota Public Service Commission's Cold Weather Rule as it is presently proposed.

I.

General Argument

(a) The Statement of Need and Reasonableness, together with the agency's affirmative presentation of facts, does not establish the need for and reasonableness of the proposed rule.

The Administrative Procedures Act and the Hearing Examiner's Rules require that in any rules proceeding, the agency seeking a change in its rules shall make an affirmative presentation of facts showing the need for and the reasonableness of the proposed rule and shall also present any other evidence it deems necessary to fill all relevant, substantive and procedural statutory or regulatory requirements for a rules change [MSA 15.0412; HE104(g)] These authorities indicate that it is the agency's responsibility to support and show the need for the rules change. Minnesota Statutes 216B also indicate that the Commission must make an evaluation of a rules change. Although MSA 216B.09 provides that the Commission may ascertain and fix just and reasonable standards, regulations or practices for public utilities and MSA 216B.08 grants the Commission authority to prescribe rules and regulations. MSA 216B.23

Subd. 2 provides a standard for the Commission to follow in promulgating rules or changes to rules. This section 216B.23 provides in relevant part, whenever the Commission shall find any regulations ". . . to be unjust, unreasonable, insufficient, preferential, unjustly discriminatory or otherwise unreasonable or unlawful, or shall find that any service that can be reasonably demanded cannot be obtained, the Commission shall determine and by order fix reasonable . . . regulations . . . to be furnished, imposed, observed and followed in the future in lieu of those found to be unreasonable, inadequate or otherwise unlawful . . ." The section of the statute just referred to suggests that the legislature, in delegating to the Commission legislative authority for proposing rules for electric service, also established a standard of reasonableness and guidelines for determining when present practices should be changed. Clearly, it is the agency's "burden" in this case to establish that the presently existing Cold Weather Rule PSC 299 is "unjust, unreasonable, insufficient, preferential, unjustly discriminatory, or otherwise unreasonable or unlawful" and that there is a need for the proposed rules change.

The Commission, in support of its proposed rule, has submitted a Statement of Need and Reasonableness together with certain exhibits. The Statement of Need and Reasonableness is frought with speculation, hearsay and supposition. The exhibits relied on for support are exhibits, for the most part, that were developed in 1978 and have not been updated to the present time for either accuracy or verification of content. If the Statement of Need and Reasonableness was submitted to meet the Commission's evidentiary requirement for establishing need and the other factors in 216B.23, Subparagraph B, in opposition to the present Cold Weather Rule PSC 299, then we submit that the Statement of Need and Reasonableness is clearly inadequate. There is no affirmative showing on the part of the

Commission in its statement, or at any of the hearings held on this rule, that PSC 299 Cold Weather Rule as it presently exists is "unjust, unreasonable, insufficient, preferential, unjustly discriminatory or otherwise unreasonable or unlawful."

Instead, the Statement of Need and Reasonableness indicates the Commission's arbitrary and capricious attempt to change a rule without proper investigation and determination of facts sufficient to support a rules change. The proposed rule should be rejected as not being properly supported under the Minnesota Administrative Procedures Act and the Hearing Examiner's Rules and should not be judged solely on the basis of its emotional appeal.

(b) The proposed rule fails to assist customers in meeting rapidly accelerating utility costs.

In the PSC Statement of Need and Reasonableness, the Commission recites that the rising cost of utility service, when coupled with inflation, places a crippling financial burden on many Minnesota citizens. However, the Commission does not identify what "need" this rule is attempting to satisfy. It is unclear from the Commission's statement whether it is their intention to protect customers against disconnection of service because of the customer's inability to pay the increase in utility bills or because of the customer's inability to pay any utility bills. Harsh winters are not unknown in Minnesota, nor are utility bills. These known facts are not sufficient to support the need for the proposed rule, as Minnesota residents have prepared for winter and utility bills in the past. It is apparently the increased cost of utility service during cold weather periods that is causing the Commission concern; however, the proposed rule does not provide that utility customers must pay for service during cold weather periods, but in effect establishes a blanket prohibition or moratorium on the disconnection of utility service for non-payment during a six-month period from October 15 to

April 15. This moratorium has nothing whatsoever to do with increased costs of utility services. The Commission has chosen to take the unreasonable position, as is evidenced by the proposed rule, that because of rapidly accelerating utility costs, utility customers need not pay for service during six months of cold weather.

(c) The proposed rule fails to identify the customers who need the protection of a Cold Weather Rule.

Section 115(G) of the Public Utilities Regulatory Policies Act of 1978 (PURPA) states that there shall be no terminations of service when the customer establishes he or she is unable to pay their utility bill. The Commission cavalierly rejected this PURPA "inability to pay" standard as "too cumbersome" and opted for across-the-board minimum temperature restriction. The proposed rule is not reasonable in that it fails to properly identify the class of customers which the federal legislation intends to protect. The Federal Register Volume 44, No. 204, Friday, October 19, 1979, contains a notice of proposed voluntary guidelines suggested by the Economic Regulatory Administration, Department of Energy Docket No. ERA-R-79-47, which suggests that the standard which must be considered by state regulatory authorities in the case of termination of electric service under the Public Utility Regulatory Policies Act of 1978 is as follows:

(1) No electric service to an electric consumer may be terminated unless reasonable prior notice (including notice of rights and remedies) is given to such consumer and such consumer has a reasonable opportunity to dispute the reasons for such termination; and (2) During any period when termination of service to an electric consumer would be especially dangerous to health, as determined by the state regulatory authority (with respect to an electric utility for which it has rate-making authority) or non-regulated electric utility and such consumer establishes that (a) he is unable to pay for such service in accordance with

the requirements of the utility's billing, or (b) he has ability to pay for such service, but only in installments. (emphasis added) Further on in the Economic Regulatory Administration's comments they state, "the guidance set forth herein is advisory in nature and is not legally binding. It does, however, constitute DOE's opinion on the issues that should be addressed when considering the termination standard. Accordingly, the guideline complements, and is fully consistent with, the other activities undertaken by DOE pursuant to PURPA." We think this point is worthy of note in that the other sections of PURPA, particularly the rate design sections, require that the proper price signal of increasing costs of energy be relayed to the consumer. The Minnesota Public Service Commission is inconsistent with that portion of PURPA in its proposed rule in that it effectively established that no customer shall be subject to disconnection for nonpayment during the cold weather months. The Commission's approach is unreasonable in light of the PURPA guidelines and standards, which recognize that energy costs are increasing and wish to make that fact known to the consumers.

The mere adoption of a 32° minimum temperature restriction which prohibits termination of utility service for all customers (without any regard to their ability to pay) underscores the proposed rule's total failure to deal with the class of people who might indeed need the protections of such a rule. Perhaps the agency is recognizing that many other costs, including flood and clothing, have also increased because of the current inflation. The agency therefore intends to provide relief through the one service it can control. Such action is totally beyond the scope of authority delegated to the Commission by the legislature. The responsibility of the Commission is to provide some relief to customers who demonstrate an inability to pay winter utility bills -- not to free all customers from utility bill payments six months of every year.

(d) The proposed rule fails to require customers to make regular payments during cold weather periods, and it is therefore unreasonable.

The Commission, on page 10 of its Statement of Need and Reasonableness filed as support for the proposed rule, indicates that "if delinquent customers are not compelled to pay, all ratepayers would have to bear the burden." But there is nothing in this proposed rule compelling payment, or even compelling the establishment of the payment agreement. The six-month moratorium established by the temperature restriction places no obligation on a customer, either to prove their inability to pay or to compel them to make payments. The proposed rule does provide incentive to enter into a payment agreement near the end of the moratorium to avoid service termination when the moratorium is lifted.

The proposed rule also invites those who are able to pay for utility service not to do so during the moratorium or the cold weather period. Since the utility is not given any leverage under the proposed rule to insure either full or partial payments from non-paying customers, there is nothing that can compel the customer to make regular payments, something the Commission said was so important. As the Commission noted, "if delinquent customers are not compelled to pay, all ratepayers would have to bear the burden." (Statement, page 10).

(e) The proposed rule permits the customers to carry arrears from one cold weather period into the next.

The proposed rule provides for a six-month moratorium on utility payments, and provides no incentive on the part of the customer to either enter into a payment arrangement or to make payments, and finally allows customers up to twelve months to repay accumulated arrears. These rules are unreasonable in that they permit a customer to carry outstanding balances from one moratorium period into the next moratorium period.

If a person has not paid for utility services during the period between cold weather periods or has not fully repaid the bill prior to the next cold weather period, then there will be little incentive to pay during the second

cold weather period when there is no threat of termination of service. As can be seen, the likelihood of pyramiding the arrears is great, and the result will be that many customers will be so far in debt that they will never be able to recover. This will require all ratepayers to assume the burden of unpaid arrears. The Commission, in evaluating its proposed rule, should take into consideration that utilities may need additional rate relief to meet the effects of their Cold Weather Rule.

(f) The Commission, in its Statement of Need, stated that "compelling payment in installments increases the likelihood of payment and decreases the likelihood of eventual shut-off."

At page 10 of the Commission's Statement of Need and Reasonableness, the Commission has inferred that compelling payment from delinquent customers would be beneficial. However, the Public Service Commission cannot, by law, compel any customer to pay his utility bill. Collections of obligations are utility management responsibility and can be managed only through internal utility collection procedures, including disconnection of service and through court proceedings. Even Commission-mandated deferred payment agreements are nothing more than a legally enforceable contract under which the customer agrees to make specified payments, and the utility agrees to accept the payment and not to terminate service. But in the case of this Cold Weather Rule, the utility is denied its management prerogatives and even the legal enforceability of the contract, as the Commission has specified that the customer cannot be terminated during the six-month cold weather period if the temperature limitations are not met. Therefore, we note that proposed PSC 299G, which calls for Department of Public Service Commission resolution, should be modified to assure the utility of its right to utilize the legal process to collect overdue accounts when the terms of the payment agreement are not satisfied. This section fails to recognize the utility's contractual remedy for breach of contract, which is the termination of electric service for default.

It is Otter Tail's position, with regard to the proposed rule, that in addition to limiting the payment period, should a customer fail to make his agreed upon payment or refuse to enter into a deferred payment agreement as discussed earlier in this instrument, the utility may disconnect service pursuant to the procedures and requirements of PSC 298, 300 and 301. This world is not without stress in the form of threats of termination for nonpayment, for groceries, for oil, for propane, for telephone service, for any number of other commodities that may be purchased on credit. In each case the time-honored method of collection has been to refuse service until payment is made or to repossess articles purchased on time. This is a well-understood approach by today's consumers in today's market. The threat of termination, even during the six-month cold weather period in which temperature restrictions apply, is the only reasonable means available to the utility to compel payment and protect the interests of those ratepayers who do meet their payment obligations.

Another area in which the proposed rule falls short is the area of energy theft or meter tampering. Proposed PSC 299C would allow termination of service to occupied residences pursuant to PSC 298B.02, which provides for disconnection of service without notice for the safety of the customer, other customers, utility equipment, or when the public is threatened. However, the section does not provide for disconnection pursuant to PSC 298B.01, which allows disconnection without notice in the event of unauthorized use or tampering with utility equipment. The Commission apparently inadvertently omitted the consideration of this section, as an intentional omission of PSC 298B.01 would seem to provide Commission sanction to the theft of utility services. Otter Tail recommends that PSC 299 be amended to read as follows:

C. Disconnection restriction for unoccupied residential units.

Notwithstanding the provisions of any other customer service rule, no utility shall disconnect service to an occupied residential unit for any reason, except as provided in PSC Rule 298B., if the disconnection

affects the primary heat source of the residential unit and if the minimum temperature restriction or the payment agreement set forth below applies.

(g) The variance proposal in the Cold Weather Rule is contrary to the intent of the Administrative Procedures Act.

Proposed Rule 299H allegedly grants the Commission the right to vary the terms of the Cold Weather Rule without complying with the provisions of the Administrative Procedures Act. There is no provision in the Minnesota Statutes, the Commission's enabling legislation, or the rules of the Office of Hearing Examiners which permits a state agency to modify, suspend or alter existing rules without imploring the rule-making procedure, nor does there appear to be procedure allowing for the granting of variances from the rule, even though the variance or such suspension is necessary in order to comply with federal statutes and regulations. The requirements for following the Administrative Procedures Act and the Hearing Examiners' rules, when adopting, or modifying, or changing, or varying an adopted rule, is explained in the Report of the Hearing Examiner, and last winter's consideration of a moratorium on utility disconnection, PSC Docket No. G and E/N-78-1208.

I.

Otter Tail's Proposed Rule

Although Otter Tail, to this point, has indicated its opposition to the proposed Cold Weather Rule and to specific sections of the proposed rule, we feel that we also have an obligation to propose an alternative to the proposed rule which will attempt to effect a compromise between the Commission's position and the utility's position that will benefit not only the customers, but also will make the rule workable for the utilities involved. Some of the obligations that Otter Tail feels in this regard are to participate in the development of a rule which we believe will comply with the intent of Congress in the Public Utilities Regulatory Policiy Act of 1978 (PURPA) and will assist those who have difficulty

meeting the costs of winter utility service, and in turn provide adequate protection for the utility. Otter Tail submits the following proposal for consideration in effecting a modification of the Commission's proposed Cold Weather Rule. The Company's proposed rule is based upon the Commission's rule and has been modified, in part, to effect the changes necessary to comply with PURPA, the needs of Otter Tail's customers, and the utility's needs for providing adequate service.

PSC 299 - Disconnection of Service During Periods of Cold Weather

1. Between December 1 and March 31, no utility shall disconnect residential utility service, if the predicted 24-hour (6 a.m. to 6 a.m.) temperature as reported by the National Weather Service at its first order station nearest the residence is to be 32° Fahrenheit or lower and the disconnection affects the primary heat source of such residence if:

   (a) the customer establishes he is unable to pay the full amount of his monthly utility bills; and

   (b) he enters into an agreement with said utility to make monthly installment payments to be applied to his utility bills.

2. All installment agreements shall be prepared, or later modified, so that all arrears to the customer's account shall be satisfied on or before December 1 of the next succeeding year.

3. For the purpose of determining the reasonableness of the amount of the payments under an installment agreement, the parties shall consider:

   (1) The size of the delinquent account, if any, and the reasons why the debt is outstanding.

   (2) The customer's average annual and monthly consumption.

   (3) The customer's ability to pay.

   (4) The customer's payment history.

   (5) Any other relevant factors concerning the circumstances of the customer.

4. If a customer fails to pay for his utility service in full, or refuses to enter into an installment agreement, or defaults in payment pursuant to an installment arrangement he has entered into, the utility may disconnect service pursuant to the procedures and requirements of PSC Rules 298, 300 and 301.

The above rule as proposed by Otter Tail obligates a customer to make payment during the winter months, enabling the size of the total bill to be reduced

over the cold weather period. Under the above rule, a customer who chooses not to pay his utility bill during the cold weather period, if identified as having the ability to pay, will be terminated, thus reducing the amount of arrears which must be born by all customers.

Furthermore, the Otter Tail proposed rule would require satisfaction of all arrears prior to the beginning of the next cold weather period. The shortening of the cold weather period to four months will allow a fairly lengthy period in which to make up arrears. We firmly believe that a new Cold Weather Rule must include the shorter period in order to avoid the development of pyramiding arrears which would make catching up virtually impossible for our customers who elected not to pay their utility bill during the cold weather period. This rule also provides for payment agreements, when necessary, and they are to begin before a customer is in trouble with his bill. This feature would allow Otter Tail's existing Even Monthly Payment Plan to be incorporated into the rule, a plan which we feel offers maximum protection to the customer and the utility.

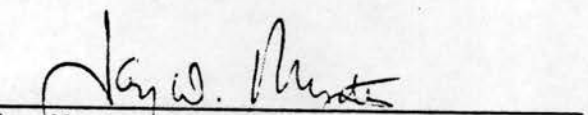
The opportunity to make payment arrangements before a customer faces payment troubles also permits early consultation with social service assistance agencies prior to the critical cold weather period. Such agencies are then able to work with customers to determine their eligibility for state and federal aid and to assist in determining a payment figure which is reasonable for all concerned.

Otter Tail believes that the rule, as proposed by it, balances the interests of the utility and the customer by establishing a procedure by which those requiring assistance receive it while protecting all utility customers from those who, while able to pay, choose not to do so. The above proposal also simplifies the process described in the Commission's proposed Rule 299, retaining the protective features of the Commission's proposal, while leaving the actual arrangements to the utility

and its customers. Our proposal further provides the means and the incentive for customers to keep up with their payments, thereby avoiding the large pyramiding balances, which are a disservice to customer and utility alike.

Otter Tail recognizes the Commission's responsibilities under PURPA and joins the Commission in seeking a solution to the problem of high energy bills, particularly those for home heating oil. Although we feel that the presently existing Cold Weather Rule PSC 299 is adequate and meets the PURPA requirements, we believe that our proposed rule is a satisfactory compromise with the unreasonable requirements of the Commission's rule and goes beyond fulfilling the PURPA requirements and provides a safe and equitable termination policy for the utility customers in Minnesota.

Respectfully submitted,

By 

Jay Myster, General Attorney
Otter Tail Power Company

Otter Tail
POWER COMPANY

215 South Cascade Street
Fergus Falls, Minnesota 56537
Phone 218-736-5411

RECEIVED
OCT 31 1979
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EXAMINERS

October 30, 1979

Mr. Richard DeLong
Hearing Examiner
Office of Hearing Examiners
1745 University Avenue
St. Paul, MN 55104

Dear Mr. DeLong:

Enclosed are Otter Tail Power Company's comments on proposed PSC 299 Cold Weather Rule. These comments have been mailed on October 30, 1979. Your instructions at the hearing in Little Falls indicated that comments must be received by the fifth working day after the last hearing date. We feel strongly about the comments we have submitted and ask that you accept the enclosed comments as timely filed.

Your cooperation in this matter will be greatly appreciated.

Sincerely yours,

Jay D. Myster
General Attorney
jks

Enclosures

SAINT LOUIS COUNTY
SOCIAL SERVICE DEPARTMENT

Miles J. Wangensteen, Director

October 30, 1979

RECEIVED
NOV 2 1979
OFFICE OF HEARING
EXAMINERS

Richard DeLong
Office of Hearing Examiners
1745 University Avenue
St. Paul, Minnesota 55104

Dear Mr. DeLong:

We are writing in response to recent hearings relative to PSC 299, Disconnection of Service during periods of cold weather. During the last several years this Agency has been involved in cold weather disconnects. Pursuant to State law we have been called upon to make face to face contact with persons who have had power shut off especially in cases involving families with children and situations in which elderly have been involved. Our past experiences in carrying out the law have been difficult due to several factors:

1) Notification from the Utility Company many times comes late in the day which necessitates an "emergency" response by our staff.

2) Most of our efforts to contact utility customers have been futile since they have already vacated the property in question and countless hours of staff time are spent on referrals without any substance.

A review of the proposed rule changes indicates a definite effort to improve the effectiveness of the cold weather rule especially as it affects this Agency's involvement. We wholeheartedly support the changes and urge its adoption.

Sincerely,

Miles J. Wangensteen

Miles J. Wangensteen
Director

ld

SERVICES TO ADULTS
26 South 12th Avenue East
Duluth, Minnesota 55802
(218) 728-4253
AN EQUAL OPPORTUNITY EMPLOYER

25 Main Place
Council Bluffs, Iowa 51501
Telephone (712) 325-2091

Peoples Natural Gas Division of Northern Natural Gas Company

RECEIVED
OCT 29 1979
OFFICE OF HEARING EXAMINERS

October 25, 1979

Hearing Examiner Richard DeLong
Office of Hearing Examiners
1745 University Avenue
St. Paul, Minnesota 55104

RE: Comments of Peoples Natural Gas Division on Proposed Rule Governing Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather.

Dear Mr. DeLong:

In accordance with the notice published in the State Register on Monday, September 17, 1979, the Commission invited written comments on proposed changes to PSC 299, Disconnection of Service During Periods of Cold Weather. Peoples Natural Gas Division of Northern Natural Gas Company respectfully submits the following comments:

General Comment

Peoples distributes natural gas at retail to 83 communities in Minnesota which comprise 60,189 customers. This is an average of approximately 750 customers per community. Jurisdictional sales volumes for 1978 were 20,175,328 Mcf.

Peoples shares the Commission's concern about the safety and health of utility customers in Minnesota, and the need to protect the handicapped, the elderly, and other financially distressed persons from undue suffering, and the need for the State of Minnesota to comply with the requirements of the Public Utility Regulatory Policies Act of 1978 (PURPA). Peoples believes that the Commission can adopt a cold weather rule which offers the elderly, handicapped, and financially distressed customers protection, and which at the same time does not penalize the utility and the customers who pay their utility bills. However, for the reasons set forth in these comments, we believe that the proposed rule must be substantially modified if this goal is to be most effectively accomplished.

The Minimum Temperature Restriction

In weighing this portion of the rule, the Commission should consider what purpose it is intended to serve. If the purpose is strictly humanitarian,

then any outdoor temperature below a late spring or early fall comfort level is too cold for a sick or elderly person to endure in an unheated premise. If the purpose of the rule, on the other hand, is to give an extra degree of help to the sick, handicapped, and elderly, then the rule should be revised to benefit those persons. Obviously, a cold weather disconnect rule only postpones the inevitable day of reckoning for nonpaying customers. A more effective and humane approach would be to give the sick, handicapped and elderly an extra long period of notice prior to disconnect.

If the Commission feels compelled to ennact some minimum temperature rule, then certainly 32° is unrealistic from a practical point of view. Considering the normal weather patterns in Minnesota, there are extended periods during the six months from October 15 to April 15 when the predicted twenty-four hour temperature will be less than 32°. Peoples suggests that 20° would be a more reasonable minimum restriction.

The proposed rule refers to "The predicted 24 hour (12:00 a.m. to 12:00 p.m.) temperature . . .". We assume this means a twenty-four hour period extending from midnight, but this is not clear as written.

The Payment Agreement Restriction

Section B requires that the utility offer the customer a deferred payment agreement prior to the disconnection of service, which the customer may then accept and return. This provision will result in the utility being compelled to contact the customer and inquire into such things as his ability to pay, the reasons why the bill is outstanding, and any other relevant factors, before it can make the written offer of a deferred payment agreement. Until the utility has obtained such information from the customer, it does not have the information required by subparagraph (c) to determine the reasonableness of the initial payment under the deferred payment agreement. In effect, unless the utility is able to contact the customer and obtain disclosure of the required information, disconnection may be impossible since the utility will be unable to formulate a reasonable deferred payment agreement. By

placing the burden on the utility to determine the customer's ability to pay, this provision is contrary to PURPA Section 304(a)(2) which states that the customer must establish his inability to pay or his ability to pay but only in installments.

The Commission's objective in this regard can, and currently is being accomplished by the inclusion in the Notice of Disconnection of a statement regarding the availability of an installment payment agreement. Under this procedure, the customer is presently being clearly advised of the availability of such an agreement, and it is not unreasonable to expect the customer to contact the utility and request such an agreement if it is desired. The Commission may, however, wish to consider special conditions for the aged and handicapped.

The criteria set forth in subparagraph (c) for determining the reasonableness of a deferred payment agreement are vague, indefinite, and unmanageable. The criteria offer no guidance to the utility in determining those customers which are to be considered financially able and those to be considered financially unable to pay their utility bills. Such vague criteria will inevitably lead to the adoption of different standards by each utility and thereby result in unequal treatment between customers of different utilities. Such vague standards will also lead to claims that the utility discriminated or acted arbitrarily or capriciously in reaching a determination of a customer's financial ability to pay. In addition, the utility has no way tp verify any financial information submitted by a customer. Those customers who are dishonest or simply refuse to pay their bills regardless of financial ability, can still avoid payment under this provision.

Peoples urges the Commission to revise this provision and adopt more definite and precise criteria which will offer guidance to the utility in evaluating a customer's ability to pay; which will be based on information which is verifiable by the utility; and which will result in a uniform application of the criteria between utilities. Peoples requests that all interested parties be afforded the opportunity to comment on the revised criteria.

Notice of Pending Disconnection to Local Welfare Agency

Section F of the proposed rule provides that the utility shall notify the local welfare agency orally, followed by a written notice within five days, of their intent to discontinue service when a delinquent customer fails to enter into or comply with the terms of a deferred payment agreement. To require that the utility notify the local welfare agency for all delinquent customers, regardless of their statuts as aged, ill, or handicapped, goes far beyond the requirements of PURPA and the Economic Regulatory Administration's Proposed Guidelines on utility termination; is an undue administrative burden on the utility; and is unnecessary to accomplish the Commission's objectives in this regard.

Peoples suggests that a reasonable alternative is to give each existing customer and all new customers the opportunity to request third party notification of Notice of Discontinuation of Gas Service, and to designate elderly or handicapped status. A copy of the form, as used by Peoples in other states, is attached as Exhibit "A" for the Commission's consideration.

An additional form of protection and notice to the customer which is used by Peoples in other states is a card issued with all disconnect notices entitled "Information Regarding Customer Rights and Company Assistance". This card provides the delinquent customer with four suggestions of steps that may be taken to avoid disconnection, including contacting the local welfare agency. A copy of this Notice is attached as Exhibit "B" for the Commission's consideration.

Peoples has no objection to notifying the local welfare agency for those customers who designate elderly or handicapped status, or who notify the company of serious illness. This somewhat restricted approach will limit the administrative burden being placed on the utility, while at the same time accomplishing the Commission's objective in this regard. The card procedure advises customers of the availability of financial assistance, and it is not unreasonable to expect those customers who are not handicapped, ill, or elderly, to be able to contact the utility or the local welfare agency to seek this assistance for themselves if it is desired.

The On-Site Visit Required During Non-Business Hours

Section D.1 of the proposed rule requires an on-site inspection of a premise believed to be unoccupied during normal working hours; and in the event that personal contact is not achieved, another on-site visit during non-business hours is required. If Peoples has such a potential disconnect in Cottonwood, Minnesota, Company personnel would have to drive, after normal working hours, from Tracy, Minnesota, to comply with the rule. This is a sixty (60) mile round trip. It generates an unreasonable expense which must be absorbed by other rate payers.

We suggest that a reasonable alternative would be to use a large, brightly colored door tag which warns of a turn-off within the next twenty-four hour period unless the occupant contacts the utility and makes satisfactory arrangements.

This procedure is being used successfully in other states. A copy of the form is attached as Exhibit "C" for the Commission's consideration.

A Twelve Month Deferred Payment Period

Definition No. 4 refers to a deferred payment period of twelve months. We believe that this is not at all helpful to the customer. A deferred payment period should be flexible in order to meet specific budget needs, but under no circumstances should a customer's unpaid balance, even under an installment plan, be allowed to extend beyond the commencement of the next ensuing heating season. To do so would put many customers into such financial difficulties that they would loose all hope and chance of paying their delinquent utility bills.

Conclusion

It is Peoples belief that the implementation of a reasonable cold weather rule may be accomplished at a reasonable range of cost while at the same time affording bona fide hardship customers with the protection they need. Proposed Rule PSC 299 does not fit this criteria in its present form. Prior to adoption of a new cold weather rule, Peoples would urge the

Commission to reconsider the substantial amount of data submitted by the utilities regarding the impact of last winters moratorium, and to weigh and consider the suggestions and comments of each of the Minnesota Utilities as well as those of Peoples Division, and to modify the new rule along the lines suggested above.

Respectfully submitted,

Frank Rathbun

FRANK RATHBUN
Manager, Rate Administration

CJF/cra

25 Main Place
Council Bluffs, Iowa 51501
Telephone (712) 325-2091

Peoples Natural Gas Division of Northern Natural Gas Company

RECEIVED
OCT 29 1979
OFFICE OF HEARING EXAMINERS

October 26, 1979

Hearing Examiner Richard DeLong
Office of Hearing Examiners
1745 University Avenue
St. Paul, Minnesota 55104

RE: Comments of Peoples Natural Gas Division on Proposed Rule Governing Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather.

Dear Mr. DeLong:

The enclosed exhibits were inadvertently omitted from our letter to you of October 25th on the above-referenced matter. We apologize for any inconvenience this has caused.

Sincerely,

Frank Rathbun

FRANK RATHBUN
Manager, Rate Administration

CJF/cra
Enclosures

CUSTOMER NOTICE

Under a recently passed Nebraska law, third party notice is available to all residential customers of Peoples Natural Gas.

At your request, we will send a copy of any notice of gas service discontinuance to the person (third party) you authorize.

We believe this service will be of special benefit to the disabled, handicapped or elderly since the notice will ensure a third party is aware of possible discontinuation of gas service.

If you desire third party notification, please contact your local Peoples' office.

Efficient Gas Energy—
Peoples Delivers It!

Peoples Natural Gas

84-1A-6 100/54

THIRD PARTY NOTIFICATION

NAME _____ ACCOUNT NO. _____

ADDRESS _____

CITY _____

HEREBY REQUEST AND AUTHORIZE PEOPLES NATURAL GAS TO PROVIDE THIRD PARTY NOTIFICATION OF NOTICE OF DISCONTINUATION OF GAS SERVICE, WHEN RENDERED, TO

NAME _____ PHONE _____

ADDRESS _____

CITY _____

DATE _____ _____
(CUSTOMER/AUTHORIZATION SIG.)

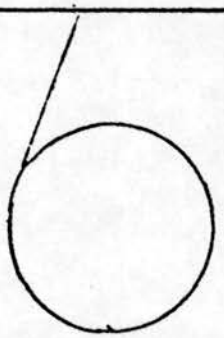
_____
RELATIONSHIP IF DIFFERENT
THAN CUSTOMER

Form 78-3540

Information Regarding Customer Rights and Company Assistance

1. If you are unable to pay the full amount due please contact the Account Supervisor at the telephone number and location designated on the Notice of Discontinuation of Service to arrange a mutually agreed upon payment schedule.
2. Prior to the disconnection date you may request a conference regarding any dispute over such proposed disconnection. The utility (Peoples) may not disconnect service pending the conclusion of the conference. Such conference request shall set forth reasons for dispute and relief requested.
3. Disconnection may be postponed or prevented upon presentation of a duly licensed physician's certificate within 5 days of receipt of this notice. It shall certify that subscriber or resident within subscriber's household has an existing illness or handicap which would cause such subscriber or resident to suffer an immediate and serious health hazard by disconnection of gas service. Health hazard certification will prevent service disconnection for 30 days after Company receipt of such certification.
4. Welfare recipients may qualify for payment assistance of utility bill and should contact their caseworker.

Form 78-4203



IMPORTANT GAS DISCONNECT NOTICE

WE HAVE TRIED UNSUCCESSFULLY TO CONTACT:

NAME _____ TIME _____

ADDRESS _____ DATE _____

OUR RECORDS INDICATE THE NATURAL GAS FOR THIS ACCOUNT IS SUBJECT TO "TURN OFF" TODAY _____ FOR LACK OF PAYMENT, HOWEVER THE "TURN OFF" WILL BE DELAYED A MINIMUM OF 24 HOURS

(Date)

CONTACT US AT ONCE AT _____

(Phone)

—IF YOU ARE UNABLE TO PAY THE FULL AMOUNT DUE ($_____)
SO WE CAN WORK WITH YOU ON A REASONABLE PAYMENT PLAN

—IF YOU BELIEVE THE AMOUNT DUE IS INCORRECT
SO WE CAN MEET WITH YOU & CORRECT ANY ERROR

See Information Back of This Notice

Peoples Natural Gas Division of Northern Natural Gas Company

THE FOLLOWING INFORMATION WAS MAILED
WITH A NOTICE OF DISCONTINUANCE OF SERVICE

Information Regarding Customer Rights and Company Assistance

1. If you are unable to pay the full amount due, please contact the Account Supervisor at the telephone number and location designated on the Notice of Discontinuation of Service to arrange a mutually agreed-upon payment schedule.
2. You may obtain assistance if you believe the amount due is incorrect by calling the Account Supervisor referred to in 1. above to set up a meeting with you in the Supervisor's office. Please call as soon as you can so that the meeting can be scheduled before the date of discontinuance of service which is indicated on the enclosed notice.
3. If there is a dispute involving the amount of your past due gas bill, you may pay a sum equal to the undisputed portion of the bill pending settlement and thereby avoid discontinuance of service for non-payment of such disputed bill for up to 45 days after the rendering of the bill.
4. You may also file a complaint with the Iowa State Commerce Commission, Des Moines, Iowa 50319, in which case the 45 days may be extended to 60 days after the rendering of the bill.
5. You have the right to use the formal or informal complaint procedures of Iowa Code 1977, Sec. 476.3 and I.A.C. (250) 6.2 and 3.
6. See also Commission Rule I.A.C. (250) 19.4 (15)h.

Peoples Natural Gas

IMPORTANT REQUEST

IF THE OCCUPANT(S) OF THIS RESIDENCE ARE INFIRMED BY REASON OF AGE, MENTALLY INCAPACITATED OR PHYSICALLY DISABLED INCLUDING BLINDNESS AND LIMITED MOBILITY, SUCH THAT THEY CANNOT HANDLE THE PROBLEMS ASSOCIATED WITH PAYMENT OF THIS ACCOUNT, THE COMPANY SHOULD BE NOTIFIED IN WRITING AT ONCE.

Form 78-2721(1/79)

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OCT 30 1979
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Proposed Adoption of a Rule
e Commission Governing
ervice to Gas and Electric
During Periods of Cold Weather
SC 299 Cold Weather Rule

Minnesota Public Service Commission
Docket No. A-8117-27/PSC-80-

Comments of Office of Consumer Services
Dated October 30, 1979

INTRODUCTION

The Minnesota Office of Consumer Services (OCS) submits the following comments on the Proposed Rule governing utility terminations of service. The following recommendations were summarized by an oral statement given on our behalf at the October 19 public hearing in Minneapolis. Some of these positions have been expanded or clarified.

The OCS is recommending the following three main changes to the Proposed Rule:

1) The addition of a low income restriction on termination of service;

2) The setting of a maximum limit for the initial payment; and

3) The expansion of the notification procedure.

Each of these recommendations will be explained individually in the following discussion.

Finally, we are attaching as Attachment 1 at the end of this statement a copy of the Proposed Rule which incorporates the changes recommended by the OCS.

1. Low income citizens should receive special protection from termination of service.

In proposing a low income restriction to be included in the

Rule, OCS is requesting that additional consideration be given to those residential customers with family incomes below a specific level.

The Proposed Rule, as it now stands, states that customers who fall behind on their bill payments can enter into a deferred or alternative payment plan. If that customer defaults on the payment plan, he or she may be disconnected from service, provided that the minimum temperature restriction is not in effect.

OCS recognizes a problem in the Proposed Rule in that many low income people receive federal and state funds to be used for heating bills. The time that this aid is received varies from year to year. Some of this aid may not even be available until the end of the heating season. Persons relying on these funds might therefore have difficulty meeting a payment plan schedule and could be subjected to the threat of termination even though they would eventually be able to pay the outstanding bill.

OCS believes that the provision we have added to the Rule (see Attachment 1, section C, paragraph 3) resolves this problem. The provision, called the low income restriction, prohibits termination of service during cold weather months if the customer's family income is less than or equal to a specified level which varies with the cost of living. This restriction is similar to one proposed in Maryland by the Office of People's Counsel in the generic hearings held by the Maryland Public Service Commission on a rule governing termination of service.

OCS recommended in an oral statement at the Minneapolis public hearing that the quideline be 125% of the U.S. Department of Labor Poverty Guidelines. For a nonfarm family of four, this would be approximately $8,375. (U.S. Department of Labor, April 1979.) Since that time, OCS has become aware of information from the Bureau of Labor Statistics which indicates that this guideline underestimates the cost of living in Minnesota. According to this information, the annual cost of a low income budget for a metropolitan Minneapolis-St. Paul family of four is approximately $11,421 (see Attachment 2). In light of this information, OCS suggests that the guideline used to define "low income" be that which most accurately reflects the cost of living in this particular region. OCS recommends the use of the Bureau of Labor Statistics guidelines for a low income metropolitan family budget as the most appropriate.

OCS proposes that any one of several very specific and objective items of documentation be accepted by the utility companies as evidence of income level. These items are as follows:

1) The most recent income tax return(s) filed by members of the household;

2) For each employed member of the family, either paycheck stubs for the last two months or a written statement from the customer's employer of wages for the last two months;

3) A Medicaid card or food stamp eligibility document; or

4) Documentation from the Department of Public Welfare, the Social Security Administration, the Veteran's Administration, or other pension providers.

Since the Minneapolis public hearing at which the above were presented, several consumer groups have suggested to OCS that other situations should be included. OCS believes the suggestions were of merit and, therefore, has incorporated them into our final recommendation. An additional item of identification has been added:

5) A letter showing dismissal from a job or documentation of unemployment.

Also, an additional statement has been added that would allow consideration for customers who can show medical records indicating extraordinarily high expenses during that year.

OCS believes that making eligibility hinge upon the production of such items protects low-income customers. In the first place, definitive standards avoid subjective (and in some conceivable cases, arbitrary) analysis by the companies. Secondly, the availability of objective tests lessens administrative paperwork involved in more extensive income verification procedures. At the same time, such a rule ensures that persons on fixed incomes, those that have lost their jobs, and those that will receive aid for heating bills are protected.

The utility may, at its discretion, waive this requirement to produce evidence of income and accept as a fact the customer's declaration of means.

A customer who is protected by the low income restriction remains responsible for paying his or her bill at the end of the cold weather months.

2. A maximum limit should be set for the initial payment of a deferred payment plan.

OCS believes that the Rule should ensure that any customer who wants to enter into a deferred payment plan should be able to do so. The initial payment should not be viewed as an obstacle to entry into the plan. The determination as to whether or not an initial payment is reasonable should not be left entirely to the companies; even with the criteria presented in the Proposed Rule as to the reasonableness of an initial payment, there still is a large degree of subjective decision-making left to the companies. OCS believes that this should be changed so that an initial payment should not be in excess of 10% of the outstanding bill, or $25, whichever is lower, unless the customer consents otherwise. This initial payment will reduce the size of the outstanding bill somewhat, but will not prevent a customer who wants to from going on a deferred payment plan.

3. Notification procedures before termination should be increased.

In the Proposed Rule, the procedures for notification before termination are not complete. The Proposed Rule only requires the utility companies to notify the welfare agency in the citizen's locality. OCS suggests that this notification be expanded to require the companies to inform the customer that the local welfare agency has emergency services and may provide financial assistance.

The advantage of this increased notification procedure is that the customer may make the initial call inquiring about

services rather than waiting to receive a call about them from the welfare agencies. It also provides added protection to the customer in the event of some delay or error at the welfare agency.

SUMMARY

The purpose of the Rule as proposed by the Public Service Commission is to specify the conditions and times that are dangerous to the health and life of Minnesota citizens and to develop guidelines for the termination of service during these times. OCS believes the minimum temperature restriction and the payment agreement restriction that are incorporated into the Proposed Rule are a significant improvement over the existing Cold Weather Rule. However, while we generally support the above two restrictions, OCS believes that they do not adequately protect the citizens of Minnesota who most need protection--the poor and elderly. For this reason, OCS strongly recommends the inclusion in the Rule of a provision similar to the low income restriction that we have set forth.

OCS believes that this proposal not only protects low income customers in Minnesota but is beneficial to the rest of the residential consumers as well. It encourages those who are able to enter into a deferred or alternative payment plan to do so. It encourages the use of these payment plans as the primary option for most residential consumers. It lessens the possibility that persons would not pay their bills until the heating season ends,

even if they could. It targets the prohibition on terminations directly at the low income residents who may really need it.

OCS is aware of the companies' right to collect any rates authorized by the Public Service Commission. However, even with all of the changes proposed by OCS, the companies would have adequate methods to ensure payments of the bills.

First, if a customer cannot pay the full amount of a bill, the utility company will offer the deferred or alternative payment plan which will amortize the overdue balance over a period of time. Eventually the company will collect its full payment.

Second, if a customer has a family income above the low income guideline and cannot establish medical or special circumstances, the company may threaten termination of service provided the minimum temperature restriction is not in effect. Some feel that this is a great incentive for the customer to pay the bill.

Third, even though the company cannot threaten termination of service during winter months for low income customers, it can threaten termination as of April 15. Assuming that federal and state aid has been appropriated and distributed by then, these customers will retire their bills at that time.

Finally, a utility company may have a late payment charge to collect interest on outstanding bills. The Public Service Commission will be promulgating a rule on these interest charges in the future. The interest charge in the proposed rule was substantial enough to cover the cost to the utility of borrowing money to

make up for the outstanding bills.* An interest charge for late payments can act as an incentive for customers to pay their bills on time.

OCS would like to address one final point. An argument that may likely be made is that uncollectibles and bad debt write-offs will increase if the Rule, as amended by OCS, is adopted. OCS recognizes that such an increase would neither be beneficial to the utility companies nor in the overall interests of the residential consumers in that such costs of additional uncollectibles would be passed on to the paying customers (of all income levels) in the next rate case.

However, OCS contends that an assumption of increased write-offs must be supported by facts. The data collected by the Public Service Commission from the utility companies on the effect of last year's moratorium is difficult to interpret in terms of cause-and-effect relationships. Such complicating factors as the weather, an increase in rates, and general economic conditions are hard to isolate from the data.

Even if the causal nexus between last year's moratorium and an increase in uncollectibles could be or had been more conclusively established, such a showing would not necessarily support a resumption of cold-weather shutoffs. First, it should be noted

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* Indeed, in written comments submitted to the Department of Public Services on June 29, 1979, in connection with the Proposed Late Payment Rule, the OCS has suggested that these interest rates may be unduly high and inadequately disclosed.

that the risks to the health or even the lives or some of our citizens who are unable or even unwilling to respond to a termination notice may be reason enough to countenance some increase in the level of uncollectibles. Secondly, the Proposed Rule, even with the OCS recommended changes, clearly leaves the consumer with substantial incentive as well as a more adequate opportunity to respond to utility company demands to pay now or arrange to pay on an equal monthly installment basis in the future.

In conclusion, OCS generally supports the intent of the Proposed Rule. For the reasons stated above, OCS encourages the adoption of several changes to the Proposed Rule for the primary purpose of protecting citizens against the severe Minnesota winters.

We appreciate the opportunity to address this issue.

Respectfully submitted,

Kris Sanda — 10-30-79

KRIS SANDA, Director — Date

Eldon J. Spencer, Jr. — 10-30-79

ELDON J. SPENCER, JR., Supervisor — Date
Residential Utility Consumer Unit

Diane Hunt — 10-30-79

DIANE HUNT, Research Analyst — Date
Residential Utility Consumer Unit

Proposed Rule as Amended by OCS

PSC 299 Disconnection of service during periods of cold weather.

A. Purpose and authority. The rule contained herein is prescribed by the Commission pursuant to Minn. Stat. § 216B.05, subd. 1, to prohibit disconnection to an occupied residential unit if the temperature is reported to be at 32 degrees Fahrenheit or lower or the payment agreement procedure applies.

B. Definitions

For the purpose of this rule, the following definitions shall apply:

1. "Alternative payment agreement" means a plan providing for deferred payment of bills for usage which does not meet the definition of "deferred payment agreement."

2. "Cold weather months" means the period of time beginning on October 15 and terminating on April 15 following. The Commission shall vary the period for a given year if the National Weather Service reports temperature variation of extreme amounts.

3. "Deferred payment agreement" means a plan providing installment payment of amounts which the customer owes the utility at the beginning of the deferred payment period and for estimated usage during the deferred payment period, wherein payment shall be made by:

   a. Payment of a reasonable amount of the outstanding bill at the time the agreement is entered into; and

   b. Payment of the following amount in equal monthly installments:

      1. the balance of the outstanding bill; and

      2. bills for estimated usage during the remaining months of the deferred payment period; and

      3. a true-up to reconcile actual and estimated usage in the final months.

4. "Deferred payment period" means the 12-month period commencing with the first day of the period covered by an outstanding bill.

5. "Payment agreement" means a "deferred payment agreement" proposed by the utility or an "alternative payment agreement"

agreed upon by the utility and the customer.

6. "Residential" means pertaining to a dwelling unit receiving gas and/or electric service which is occupied by its owner or tenant whether or not the occupant is the customer of the utility.

7. "Low income" means a customer whose family income is less than or equal to the guidelines established by the Bureau of Labor Statistics for a low income metropolitan Minneapolis-St. Paul family.

C. Disconnection restriction for occupied residential units.

Notwithstanding the provisions of any other customer service rule, no utility shall disconnect service to an occupied residential unit for any reason, except the safety of the occupants or the public as provided in PSC Rule 298B.2, if the disconnection affects the primary heat source of the residential unit and if the minimum temperature restriction or the payment agreement restriction set forth below applies.

1. Minimum temperature restriction.

Disconnection shall not take place if the predicted 24 hour (12 a.m. to 12 p.m.) temperature as reported by the National Weather Service at its first order station nearest the dwelling unit is to be 32 degrees Fahrenheit (0 degrees Celsius) or lower.

2. Payment agreement restriction.

No utility shall terminate residential service during cold weather months unless:

a. The utility has made a written offer, or an oral offer confirmed in writing within 72 hours, for a deferred payment agreement; and

b. The customer has failed to enter into or comply with such an agreement or an alternative payment agreement. The customer shall have five days after receipt of the utility's written offer:

1. to deposit in the mail, or otherwise deliver to the utility or its agent, written acceptance of the offer; or

2. to enter into an alternative payment agreement.

c. ~~For purposes of determining the reasonableness of the amount of the initial payment under a payment agreement, the parties shall consider:~~

~~1. The size of the delinquent account;~~

~~2. The customer's ability to pay (if the customer is a landlord and the service is to a tenant, the landlord shall be presumed to be able to pay the bill);~~

~~3. The customer's payment history;~~

~~4. The length of time that the debt has been outstanding;~~

~~5. The reasons why the debt is outstanding;~~

~~6. Any other relevant factors concerning the circumstances of the customer.~~

c. A reasonable initial payment is determined to be an amount not to exceed 10% of the outstanding bill or $25, whichever is lower, unless the customer agrees otherwise.

d. Billing statements to customers receiving service under payment agreements shall contain, in addition to the information required by PSC Rule 313, the following information:

1. the actual charges incurred for usage during the billing periods; and

2. the billing amount due and payable for the billing period pursuant to the terms of the payment agreement.

3. Low income restriction.

No utility shall terminate residential service during cold weather months if the customer's family income is less than or equal to the Bureau of Labor Statistics guidelines defined in section B, paragraph 7.

a. The utility shall accept any of the following as evidence of family income:

1. the most recent income tax return(s) filed by members of the household;

2. for each employed member of the household:

i) a written statement of gross wage for the last two months by the customer's employer,

ii) paycheck stubs for the last two months;

3. Medicaid card, documentation of eligibility for food stamp program;

4. written documentation from the Department of Public

Welfare, the Social Security Administration, the Veterans Administration, or other pension provider;

5. letter showing dismissal from a job or documentation of unemployment.

b. Documentation of excessive medical expenses should be taken into consideration.

c. The utility may, at its discretion, waive the requirement of production of evidence and accept affirmation of income by the customer.

d. Deferral of the payment does not relieve the customer of the obligation to pay the gross balance after April 15.

D. Disconnection restriction for unoccupied residential units.

1. No utility shall disconnect service to the primary heat source of a residential dwelling unit during cold weather months, which it believes to be unoccupied, prior to conducting an on-site inspection of such residential unit and attempting to make direct personal contact with any occupants therein. Such inspection shall include at least one visit to the residential unit by field personnel during normal working hours; and in the event that personal contact is not achieved, another on-site visit during non-business hours.

2. If the field personnel are unable to make direct personal contact with any occupants, and if it reasonably appears from the on-site inspection the residential unit is unoccupied, then service may be disconnected pursuant to the procedures and requirements of PSC Rule 298, 300 and 301.

3. The utility shall follow-up termination of service to an unoccupied residential unit by conducting an additional on-site inspection of the premises and attempting to make direct personal contact with any occupants therein on the day immediately following termination of service, including Sundays and holidays. If such residential unit is then found to be occupied, service must be reconnected:

a. If the minimum temperature restriction applies; or

b. If the utility has not satisfied the requirements or procedures of the pyament agreement restriction.

The utility shall not charge the customer for reconnection of service pursuant to this subsection.

E. Payment agreements.

1. A deferred payment agreement or an alternative payment agreement shall state immediately preceding the space provided for

the customer's signature and in bold face print at least two sizes larger than any other used thereon: "IF YOU ARE NOT SATISFIED WITH THIS AGREEMENT, DO NOT SIGN. IF YOU DO SIGN THIS AGREEMENT, YOU AGREE THAT YOU OWE THE AMOUNT STATED TO BE YOUR OUTSTANDING BILL AND YOU AGREE TO MAKE PAYMENTS IN ACCORDANCE WITH THIS PLAN."

2. If during the term of a payment agreement consumption or rates are substantially greater than estimated, the difference shall be amortized over subsequent months for a reasonable time, and the required payments shall be adjusted accordingly. At least 30 days prior to billing the customer such an adjusted amount, the utility shall send written notice of the reasons for the adjustment and the amount of the adjusted monthly installment.

3. If during the term of a payment agreement the consumption or rates are substantially less than estimated, the utility shall refund any excess payments as soon as possible and shall adjust future billings under the agreement accordingly. The utility may, with express consent of the customer, credit excess payments to future bills. Such consent must be given in writing, and signed after the amount of any excess payments has been determined and reported to the customer.

4. The terms of a payment agreement may be modified because of a change in a customer's circumstances if it would be reasonable to do so. Reasonableness shall be determined under the criteria set forth in this rule for determination of the initial payment.

5. Any payments made by a customer in compliance with a payment agreement or otherwise, shall first be considered made in payment of the previous account balance with any remainder credited to the current bill.

~~F. Termination for failure to enter into or comply with payment agreement.~~

F. Termination for failure to meet payment agreement requirements or low income criteria.

If a customer has failed to enter into or comply with the terms of a payment agreement or has not shown evidence of meeting the low income criteria, the utility shall have the right to disconnect pursuant to the procedures and requirements of PSC 298, 300, and 301, but subject to the restrictions contained in the minimum temperature restriction. If the utility has offered a deferred payment agreement and the customer has failed to enter into such agreement within the time provided herein, or if the customer has failed to comply with a payment agreement, or if the customer has not shown evidence of a low income as defined herein, then the utility shall notify the local welfare agency orally, followed by a written notice within five days, of their

intent to discontinue service; the name and address of the customer, and telephone number if known; the name and address of any tenant occupying the residential unit if such tenant is not the customer of the utility, and telephone number of the tenant if known; and a statement of the amount then due and payable. In addition the utility shall inform the customer that the appropriate local welfare agency has emergency services and may provide financial assistance. The utility shall not terminate service until 10 days after the written notice is given to the local welfare agency.

G. Disputes.

If a dispute arises concerning the ~~reasonableness,~~ application or performance of any payment agreement or modification of a payment agreement under this rule~~.~~ or the veracity of the evidence submitted pursuant to section C, paragraph 3 above, the utility shall provide the customer with a copy of the Commission's customer service rules and the telephone number of the Department of Public Service together with a statement that the customer may call the Department for information and assistance. The Commission may resolve any such dispute which cannot be resolved by the Department on an informal basis.

Disputes not involving a payment agreement shall be governed by PSC 303.

H. Exemptions.

The Commission may grant variances from this rule upon a showing of good cause, and may suspend part or all of this rule in order to comply with federal regulations.

News
United States Department of Labor
Bureau of Labor Statistics Washington, D.C. 20212

John Rogers (202) 523-9641
Kathryn Hoyle (202) 523-1913

USDL: 79-305
FOR RELEASE: SUNDAY EDITIONS
April 29, 1979

Significant changes were made in the method for updating family budgets for some local areas as a result of the Consumer Price Index Revision Program which was completed in January 1978. The changes are described on page 10 of this release.

AUTUMN 1978 URBAN FAMILY BUDGETS AND COMPARATIVE INDEXES FOR SELECTED URBAN AREAS

The Bureau of Labor Statistics of the U.S. Department of Labor today issued updated estimates for three hypothetical annual family budgets and the comparative indexes that can be used to compare the cost of these budgets in selected urban areas. This updating reflects changes in prices and personal taxes between autumn 1977 and autumn 1978.

In autumn 1978, the U.S. average cost of the lower budget for an urban family of four was $11,546 a year, while the intermediate and higher levels were $18,622 and $27,420, respectively, as shown in table A. (Costs for 39 metropolitan areas and four nonmetropolitan regions are shown in tables 1-3, and comparative indexes for these areas are shown in tables 4-6.)

Differences in Budgets among Urban Areas

Area indexes reflect not only differences among the areas in price levels, but also regional variations in consumption patterns and differences in climate, types of transportation facilities, and taxes.

For the lower budget, costs were 7.0 percent higher in the metropolitan than in the nonmetropolitan urban areas. The metropolitan-nonmetropolitan differences were 11.6 percent for the intermediate budget and 17.4 percent for the higher. Total budget levels were lowest in small cities in the South.

Further details on the indexes are presented in tables 4, 5, and 6.

Description of the Three Budgets

The budgets represent the costs of three hypothetical lists of goods and services that were specified in the mid-1960's to portray three relative standards of living--described as lower, intermediate, and higher.

These budgets are for a precisely defined urban family of four: A 38-year-old husband employed full time, a non-working wife, a boy of 13, and a girl of 8. After about 15 years of married life, the family is settled in the community, and the husband is an experienced worker. The family has, for each budget level, average inventories of clothing, housefurnishings, major durables, and other equipment. The budgets pertain only to an urban family with the specified characteristics. (How family consumption budgets vary for urban families of different size and composition is shown in table C.) No budgets are available for rural families.

AREA	TOTAL BUDGET 2/	FAMILY CONSUMPTION						
		TOTAL CONSUMPTION	FOOD			HOUSING 3/		
			TOTAL	FOOD AT HOME	FOOD AWAY FROM HOME	TOTAL 4/	SHELTER 5/ (RENTER)	HOUSE-FURNISHINGS & OPERATIONS
URBAN UNITED STATES	$11546	$9391	$3574	$3087	$488	$2233	$1673	$560
METROPOLITAN AREAS 1/	11685	9485	3616	3109	507	2267	1718	549
*NONMETROPOLITAN AREAS 1/	10925	8968	3388	2985	403	2081	1471	610
NORTHEAST:								
BOSTON, MASS	12501	9916	3683	3216	467	2573	2010	563
BUFFALO, N.Y	11396	9265	3554	3085	469	2126	1566	560
*HARTFORD, CONN	11996	9930	3711	3202	509	2536	1988	548
*LANCASTER, PA	11123	8934	3598	3122	476	2173	1650	523
NEW YORK-NORTHEASTERN, N.J	12063	9682	3884	3341	543	2282	1733	549
PHILADELPHIA, PA-N.J	11903	9336	3903	3343	560	2036	1525	511
PITTSBURGH, PA	11273	9003	3628	3097	531	2062	1529	533
*PORTLAND, MAINE	11902	9836	3589	3111	478	2597	2021	576
*NONMETROPOLITAN AREAS 1/	11280	9188	3538	3129	409	2051	1518	533
NORTH CENTRAL:								
*CEDAR RAPIDS, IOWA	11332	9122	3296	2811	485	2308	1761	547
*CHAMPAIGN-URBANA, ILL	12117	9826	3545	3087	458	2589	2017	572
CHICAGO, ILL.-NORTHWESTERN IND	11829	9628	3709	3237	472	2265	1744	521
CINCINNATI, OHIO-KY,-IND	11244	9171	3724	3254	470	1947	1436	511
CLEVELAND, OHIO	11532	9471	3666	3101	565	2084	1566	518
*DAYTON, OHIO	10888	8963	3548	3084	464	1948	1368	579
DETROIT, MICH	11596	9317	3576	3054	522	1994	1511	483
*GREEN BAY, WIS	11108	8912	3273	2855	418	2244	1623	621
*INDIANAPOLIS, IND	11218	9200	3465	2996	469	2092	1548	544
KANSAS CITY, MO.-KANS	11409	9334	3697	3193	504	2009	1458	551
MILWAUKEE, WIS	11733	9329	3436	2937	499	2246	1711	535
[redacted]	[redacted]	9196	3542	3029	513	2209	1679	530
ST. LOUIS, MO.-ILL	11150	9159	3747	3282	465	2005	1455	550
*WICHITA, KANS	11574	9481	3505	3026	479	2362	1779	583
*NONMETROPOLITAN AREAS 1/	11322	9223	3432	3044	388	2293	1718	575
SOUTH:								
ATLANTA, GA	10495	8745	3411	2932	479	1912	1334	578
*AUSTIN, TEX	10288	8685	3217	2708	509	1985	1398	587
BALTIMORE, MD	11899	9350	3334	2847	487	2451	1841	610
*BATON ROUGE, LA	10590	8844	3478	3048	430	1853	1306	547
DALLAS, TEX	10699	8987	3345	2779	566	2068	1520	548
*DURHAM, N.C	11172	9004	3293	2857	436	2218	1644	574
HOUSTON, TEX	10906	9140	3403	2838	565	2042	1458	584
*NASHVILLE, TENN	10364	8735	3289	2832	457	2021	1438	583
*ORLANDO, FLA	10582	8898	3164	2685	479	2167	1585	582
WASHINGTON, D.C.-MD.-VA 1/	12398	9794	3600	3074	526	2583	2015	568
*NONMETROPOLITAN AREAS 1/	10278	8569	3276	2876	400	1895	1241	654
WEST:								
*BAKERSFIELD, CALIF	11380	9403	3486	2994	492	2234	1683	551
DENVER, COLO	11475	9369	3616	3139	477	2033	1441	592
LOS ANGELES-LONG BEACH, CALIF	12193	9998	3550	3019	531	2610	2076	534
SAN DIEGO, CALIF	11661	9603	3418	2848	570	2394	1881	513
SAN FRANCISCO-OAKLAND, CALIF	12710	10379	3665	3164	501	2730	2150	580
SEATTLE-EVERETT, WASH	12506	10304	3644	3133	511	2759	2131	619
HONOLULU	14870	11433	4474	4004	470	3106	2442	664
*NONMETROPOLITAN AREAS 1/	11886	9519	3472	3049	423	2383	1777	606
ANCHORAGE, ALASKA	19030	14679	4547	4029	518	4828	3845	983

SEE FOOTNOTES FOLLOWING TABLE 3.
*FOR THESE URBAN AREAS, 1978 COSTS WERE ESTIMATED USING CPI PRICE CHANGES FOR THE APPROPRIATE REGION/POPULATION SIZE CLASS.

STATE OF MINNESOTA
OFFICE OF CONSUMER SERVICES
Metro Square Building
7th and Robert
St. Paul, Minnesota 55101
(612) 296-2331

RECEIVED
OCT 30 1979
OFFICE OF HEARING
EXAMINERS

October 30, 1979

Mr. Richard DeLong
Office of Hearing Examiners
1745 University Avenue
St. Paul, Minnesota 55104

Re: In the Matter of the Proposed Adoption of a Rule
By the Public Service Commission Governing
Disconnection of Service to Gas and Electric
Utility Consumers During Periods of Cold Weather
And Repeal of PSC 299 Cold Weather Rule
Docket No. A-8117-27/PSC-80-

Dear Mr. DeLong:

I am hereby submitting the written comments on behalf of the Office of Consumer Services in the above-captioned matter.

Sincerely,

Eldon J. Spencer, Jr.

ELDON J. SPENCER, JR.
Supervisor
Residential Utility Consumer Unit
(612) 296-6032

EJS:jrw

Enclosure

ADMIN 1000 (Rev. 1/78)
SF-00006-01

STATE OF MINNESOTA

DEPARTMENT Public Service

Office Memorandum

TO : Richard DeLong

RECEIVED
OCT 30 1979
OFFICE OF HEARING EXAMINERS

DATE: 10/30/79

FROM : Randall Young, Director
Commission Support Staff

RDY

PHONE: 6-7526

SUBJECT: Final Written Comment for Proposed Rules Governing Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather and Repeal of PSC 299 Cold Weather Rule

As a follow-up to the public hearings held on the above captioned rule, the commission has reviewed a number of the comments made at those hearings by members of the public. The commission feels that the hearings raised a number of minor alterations which will improve the overall quality of this rule. In order to make a complete record on these suggestions, I am enclosing a revised draft of the rule which incorporates changes proposed at the hearings. In some cases, a brief description of the commission's reasons for considering these proposed changes is necessary.

1. The commission has made a minor alteration to Section C.2.a. (see enclosed rule). Paul Marincel, Minnesota Citizen Action, offered testimony in Minneapolis that a copy of the rule itself will not be of much aid to the average citizen because of its complexity. He suggested that a shut-off notice be accompanied by a common language explanation of the rule and the customer's rights. The essence of this comment was reiterated by a number of other citizens testifying, including Keith Dunder of the St. Cloud Area Legal Services. Upon review, the commission agrees that it would be most appropriate to include a common language explanation of the customer's rights and obligations with the written offer of a deferred payment agreement sent by the utility. The commission feels, however, that the common language explanation should be sent before the shut-off notice so that each customer will be aware of his right, and will be able to take steps to protect his interest before the possibility of a shut-off. Furthermore, this change will provide the customer with the information which he or she needs to know in understandable terms. It would help to minimize the possibility of misunderstanding or misinterpretation which could lead to a potentially unfortunate situation. It is not believed that this requirement would be unduly burdensome upon the utility.

2. Another addition was made to Section C.2.a. as a result of testimony at the evening Albert Lea hearing by Eileen Knutson of Mower County. She proposed that the utility be required to include with any disconnect notice issued pursuant to this rule a list of government and private programs available to individuals which might provide assistance in paying delinquent utility bills. This suggestion was supported by other public testimony. This proposal, similar to the previous one, will minimize the possibility of misunderstandings. This proposal will also maximize the possibility of

individuals who need assistance being directly connected to the appropriate programs. With the utility acting as a clearinghouse, the utility can be more assured of customers receiving assistance when appropriate. The addition of C.2.a. will also assure that the utilities have a greater likelihood of receiving payments on delinquent bills. By allowing the utility to choose the option of either including a statement with the disconnect notice listing those agencies or including a telephone number that customers may call to get that information, any potential burden may be minimized by allowing flexibility. The utility may handle this in a manner which best suits its particular operating procedure.

3. The commission heard comments from two different sources concerning the statement that should go on the payment agreement pursuant to section E1. In Grant Rapids, Mr. Esko of MP&L stated that the language to be placed on the agreement as provided by the proposed rule will have the effect of deterring customers who are behind on their payments from entering into or signing any agreement. In Little Falls, Keith A. Dunder testified that the proposed language as written would not inform the customer that he or she had the right of appeal to the Minnesota Department of Public Service and the Public Service Commission or that the Public Service Commission was available to mediate and settle disputes between the customer and the utility. The commission has considered both comments and finds that they both have merit. It has, therefore, rewritten this section to reflect the concerns of both witnesses. Under the new proposed language in Section E1, the statement to be included in the payment agreement informs the customer that he or she should not sign unless he or she reads and understands the agreement. This should satisfy the concerns expressed by MP&L. However, the commission was also concerned that by merely leaving the language as MP&L had suggested at the hearing the utility customer would be unaware of his or her rights. To correct this, the PSC has added an extra sentence which states that if the customer does not feel that the deferred payment agreement suggested by the company is fair, he or she should not sign and must appeal to the MDPS within three days. This requirement will bring the matter to the Department's attention rapidly so a resolution may be reached in a timely matter. This timeliness will benefit all parties involved.

Elwood Jensen, Mayor of Geneva, Minnesota, suggested that Section F be amended to require the utility company to notify the local welfare agency and the local CAP agency of a disconnect notice. By giving notice to both agencies, there is a greater likelihood that the individual needing funding will receive funding from the appropriate source. This testimony was supported at every subsequent hearing. At the Grand Rapids hearing, Lisa Wrabek, VISTA volunteer from Cass County, suggested that the wording be changed to reflect agencies "dispensing federal emergency assistance funds" and not be limited to CAPs. She pointed out that in some areas of the state,

these agencies were technically not Community Action Programs. The commission has found merit in these suggestions, and has reworded Section F (F.1 in the enclosed changes) to encompass both CAPs and any organization which is the functional equivalent of the CAPs, but operate under a different name.

Another minor modification is reflected in F.2 of the new proposed rule. In effect this change is merely a retirement of a requirement contained in existing rule PSC 301. Mr. Harry Herman testified at the Minneapolis hearing that the utility should be required to go to the home of any customer before shutting off service during the cold weather months. This requirement is made in the proposed rule for unoccupied residences, but not for occupied residences. Mr. Herman, as well as a number of other witnesses, pointed out that many elderly and handicapped people may receive these notices and the simplified explanations of the rule and still not understand their rights. Mr. Herman stated that in order to insure that all people who might be entitled to benefit will have protection against utility shut-offs, a personal visit by someone, perhaps the utility representative. While PSC 301 specifically requires that before the utility can shut off a customer, there must be personal contact.

The commission feels that during the cold weather months, at least, there is need for the additional requirements provided for in Section F.2. Specifically, the utility will be required to make one on-site visit during the non-working hours, if a previous on-site visit during working hours failed to result in personal contact with the customer. This provision parallels Section D.1 of the original proposed rule. Furthermore, Section F.2 details what the utility must explain to its customer.

The inclusion of this provision will minimize any potential for misunderstanding or misinterpretation which could lead to accidental or unnecessary shut-offs due to a misunderstanding or lack of knowledge of customer obligations and/or the availability of assistance to pay delinquent utility bills. Although on the surface this may seem to duplicate efforts of notice, it was pointed out by many members of the public that there are numerous customers who, for one reason or another, do not read or understand such situations. By insuring both written and oral notice, accidental shut-offs or intentional shut-offs caused by a customer's lack of knowledge or understanding will be reduced to a minimum.

The commission's proposal does not put an undue burden on the utilities in that this requirement is already reflected in present PSC rules. Additionally, there was little negative comment received from the utilities concerning the parallel provision in the proposed rule, Section D.1. To the extent that this change will place some burden on the companies, on balance the protection of health and welfare is both necessary and reasonable and outweighs any possible inconveniences.

Larry Esko, MP&L, testified in Grand Rapids that some time restriction should be placed on the Public Service Commission and the Minnesota Department of Public Service in their efforts to resolve disputes pursuant to Section G of the proposed rule. The language which they suggested would limit such resolution periods to 30

days. The commission agrees that this time limitation would be in the best interest of all parties involved. It is both necessary and reasonable to require the Department and Commission to abide by the same types of time guidelines which it is imposing upon the customers and the companies.

At this point, it is appropriate to comment on a change proposed by the utilities which the commission chose not to adopt. During the hearings each utility which presented a statement charged that the rule was, in effect, a complete moratorium. Their statements were based on Section C.1 which provides that a utility may not shut off the primary heat source to a residential unit if the predicted temperature in the next 24 hours is to be 32° fahrenheit or less. The utilities suggested that no minimum temperature restriction should be placed in the rule.

Under cross-examination each utility admitted that under the companies' proposed change, even if the temperature was well below freezing and a customer was unable to enter into a deferred payment agreement or unable to comply with the agreement, that customer could be shut off. This would be true, each utility stated, even if the customer made a good faith effort to pay his or her bills, but was unable to do so due to a lack of funds.

The commission rejects the utilities' suggestion for two reasons. First, the utilities' recommendation would eliminate any possibility for a uniform cold weather policy. Under the utilities' proposal, the shut off decision would be left to the utility, resulting in a disparity of treatment to customers in the same situation. Second, and more importantly, the elimination of the minimum temperature restriction would mean that the PSC would fail to meet the PURPA guidelines established in PURPA § 115(g)304(a). Specifically, the federal guidelines provide that each state regulatory commission make a determination as to when termination of service to a gas or electric customer would be especially dangerous to health and to prevent shut-offs during those times if the customer is unable to pay his bill. If the state regulatory commission does not adopt regulations of this nature, it must establish its reasons, on the record, for not doing so.

The commission feels that, as it is presently written, the proposed rule meets the PURPA guidelines. For the above reasons, the PSC must reject the utilities' proposal.

In conclusion, the commission feels that there is a need for the proposed rules with these changes. Testimony of the hearings as developed by testimony and staff examination and presentation clearly show a need for these changes. The commission also feels that the processes and procedures which are outlined in this proposed rule are reasonable for both the customers and the utility companies in that they do not place any undue hardships on the parties.

/jg

Enclosures

FIRST UNITED CHURCH

UMC UCC

Marvin L. Ediger, Pastor Telephone 612 632-5468

1000 S.E. FIRST STREET - LITTLE FALLS, MINNESOTA 56345

October 12, 1979

Ms. Laura Lund
Morrison County Concerned Citizens
First Lutheran Church
Little Falls, Minnesota 56345

RE: The hearing on the shut-off ban/regulated utilities

Since I cannot be at the hearing on Tuesday, October 23, I want to offer this written statement as a way of sharing my concern for the issues that will be surfaced at the hearing.

I am keenly aware through contact with members of my congregation of the anxiety level that is already being raised due to the rising fuel costs and the limited resources available to senior citizens. Since the Fuel Assistance Program has been operating out of our church facility during the last several years, I have witnessed considerable unfairness in the way in which these programs have been designed and implemented. My criticism is not one toward the staff of the agencies who have tried to minister the funds, but the way in which the funds were set up to help with the fuel assistance itself. It is quite unfair to have fuel assistance given out, for instance, on a first come first served basis. It is equally unfair to provide assistance only to those who have unpaid bills in the spring of the year. It encourages persons not to pay the bills in anticipation of getting assistance. Neither is it fair to the fuel companies involved.

I would be supportive of a shut-off ban on regulated utilities that would not undermine the level of responsibility for persons and families paying fuel costs to the level of their financial ability. Assuring that each person and family measures up to their level of responsibility is absolutely essential in our democratic society.

Sincerely,

Marvin L. Ediger

Marvin L. Ediger

MLE:hi

Stephen G. Wenzel
District 12B
Morrison-Mille Lacs Counties
Committees:
Agriculture
Financial Institutions and
Insurance, Vice-Chairman
Governmental Operations

Minnesota House of Representatives

Rodney N. Searle, Speaker

PUBLIC SERVICE COMMISSION
OCT 17 1979

October 18, 1979

Ms. Katherine (Kati) Sasseville
Chairwoman
Minnesota Public Service Commission
7th Floor American Center Building
Kellogg and Robert Streets
St. Paul, MN 55101

Dear Chairwoman Sasseville:

Because of a conflict in my schedule, I am unable to personally testify on Tuesday, October 23rd, in Little Falls, on the "Cold Weather Rule" - PSC Rule 299. Attached you will find a statement which I would like to have placed into the record on this very important matter.

Thank you for your cooperation.

Best regards.

Sincerely,

Steve Wenzel
State Representative

10/22 To: Mary Harty
From: Kati Sasseville

SW:dv

Enc.

Reply to: 294 State Office Building, St. Paul, Minnesota 55155 (612) 296-4247

October 18, 1979

STATEMENT OF STATE REPRESENTATIVE STEPHEN WENZEL - DISTRICT 12B

I wish to have my comments entered into the record relative to PSC Rule 299 as it bears directly on my constituents on the extremely important matter of determining the state policy on utility disconnections.

Even though the Proposed PSC Rule 299 is better than the present outdated rule, it still does not do enough for the protection of the elderly on fixed incomes and the poor citizens of Minnesota. It is my belief that Proposed PSC Rule 299 should be amended to state there "shall not be any utility shut-offs by any regulated utility company which serves customers in Minnesota, from the time period of October 15 through April 15 of any year".

It is easy to understand that illness and its effects can come about with temperatures outside at 36°, 38°, 45° or even 55°, if the utility customer does not have service. I urge the Minnesota Public Service Commission to basically adopt a ban on winter heating shut-offs through the rule-making procedure and to include the deferred payment item within the rule.

The only correction I would urge the Commission to make on the deferred payment rule would be to allow the customer to make 12 equal monthly installments - <u>without</u> an initial payment. An initial payment is like a down payment for a home mortgage, indeed if utility bills do not stop increasing, citizens will have to mortgage their future in order to pay their utility bills.

I know that our hard working citizens of Minnesota would not take advantage of a moratorium on winter heating season disconnection. Instead, I feel that the Public Service Commission can be a catalyst in getting Minnesotans to pay their utility bills (through deferred payments), thus protecting the consumer and the utility companies which serve them.

Thank you for this opportunity to have my comments known.

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Reply of PSC Staff to Joint Comments of Utilities

In Section 2.1 the Utilities state that the Commission fails to distinguish, in its proposed rule between the inability to pay the increase in utility bills or to pay any utility bills. There is a distinction without a difference. The utility bill presents to customers (over all increases) due to inflation. There is ample proof on the record of the need of a cold weather rule to enable those customers who cannot pay their present bills to continue to receive heat during the severe weather months, which pays their bills affordable installments. The statement of need and Staff comments by Stuart Mitchell address the need for this rule created by the present high cost of energy.

Reply to 2.2.

In this section the Utilities allege that the proposed rule "misses the class of customers which PURPA is designed to protect."

In fact the proposed rule includes the two ~~proposed~~ categories of customers set out by PURPA, in C.1, the section concerning temperature restrictions. However, the commission decided that the rule could not be written to just include these two categories, nor would it be possible to enforce such limitations. (See comments of Randy Young ~~of~~ attached hereto.) The Utilities comments ~~that~~ that "all customers are now relieved from paying their bills in winter and discussed in the next section.

Reply to 2.3 + 2.4

The Utilities ~~comments~~ in writing and at the hearings alleged that under the

proposed rate, customers who can afford to pay will not pay their bills. However, neither at the hearings, nor in their written comments, ~~was~~ ~~there~~ was any evidence presented to back up this argument. This is significant in that the covered utilities were required by PSC to keep records on the late-payments, ~~the total~~ and uncollectable bills during last years moratorium. Furthermore, ~~MP&L~~ in its separate written comments to the Hearing Examiner, submitted on October 30, 1979 stated that no clear evidence existed that those who could pay, would not pay. (See page 5-7 of ~~their~~ MP&L's final comments)

~~As a result~~ According ~~to~~ ~~their~~

~~Staff's Reply to MP&L's Final Comments~~

~~reply to Section entitled "Cold Weather Months"~~

MP&L ~~stated in its written comments that~~

RD Young
Comments

Common

In response to the joint utilities' comments, the staff reasserts that establishment of specific criteria for identifying customers who need protection (2.2) is too cumbersome and unrealistic. With the uncertainty of federal & state funding to aid in the payment of utility bills, and the unpredictability of utility costs, it is not possible to predict who will need protection of the CU rule. This situation will vary from year to year, as well. Thus, it is felt that protection must be extended to all who potentially may need it. This flexibility will allow a this protection and still provide a mechanism for payments to avoid further unmanageable bills. It is incorrect to say that all needed protection can be identified by a formula or socio-economic stats, or age. Because of this, the proposed rule is superior in meeting the goal of PURPA. Even NSP in its Comments of 10/30/79 indicate that it is hard to make these distinctions and suggested a mini moratorium.

In response to 2.4, staff believes that the proposed deferred payment plan (DPP) does take into consideration delinquencies before the next cold weather period. These can be included in the utility's calculation of the down pymt and the monthly installments. The proposed rule does not, and

rightfully so, require the delinquencies to be pd before a DPP can be ~~sete~~ entered into. This would place an undue hardship on many people and prohibit them from getting a DPP, ~~and~~ thus being disconnected.

RD

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WESTERN GAS UTILITIES, INC.

3900 WASHINGTON AVE. NO.
MINNEAPOLIS. MINN. 55412

SERVING NATURAL GAS TO WATERTOWN, MINN. DELANO, MINN.

10/29/79

STATE OF MINNESOTA
Office of Hearing Examiner

Public Service Commission Proposed Rules Bovering Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather and Repeal of PSC 299 Cold Weather Rule.

Comments of Western Gas Utilities, Inc.

Western Gas Utilities, Inc. furnishes natural gas to approximately 1200 customers in Delano and Watertown, Minnesota. Our meter count 1,027 Residential, 160 Commercial and Industrial, 13 Interruptible. MCF gas sales are 48% Residential 32% Commercial Industrial and 20% Interrutpible.

Western Gas Utilities vigorously opposes the proposed rule for the following reasons:

1. Any residential customer can hide behind this rule and not pay their fair share for a unbelieveble six month moratorium. This does not take into consideration whether they can afford to pay or not.
2. The preparatory work that must be done prior to a termination of gas usage is unreal. The rule implies we have a collection staff of unlimited persons to collect over due accounts. To comply with all the rule requirements it would take one credit person for every ten past due accounts.
3. The rule does not include any relief from our supplier (Northern Natural Gas Co.) that we do not have to pay our bill for six

months because our customers can't, or are excused to pay bills by the P.S.C.

4. The cash flow of our company is so critical we could not survive a winter with restricted cash flow which this rule could create.
5. It is absurd to increase the rates for the honest, prompt paying accounts to have to support these unfair delinquent and potentially "write off" bills.
6. The rule is unfair in its entirety.

Suggested Alternate Rule

All residential utility customers that cannot pay their bills, and have failed to work out an agreeable credit payment plan for paying up the past due balance, will be mailed a Notice Of Termination Of Service by the utility. The customer would take this notice to the proper government fuel assistance agency and let them make arrangements with the utility to continue service to the customer.

Respectfully submitted,

WESTERN GAS UTILITIES, INC.

Hartley Medin
Vice President

HM:lc

ADMIN 1000 (Rev. 1/78)

STATE OF MINNESOTA

DEPARTMENT OFFICE OF HEARING EXAMINERS

Office Memorandum

TO : RICHARD DELONG
Hearing Examiner

DATE: Sept. 26, 1979

FROM : DUANE R. HARVES
Chief Hearing Examiner

PHONE:

SUBJECT: COLD WEATHER RULE HEARINGS

Attached is a copy of my memo to Randy Young in response to his memo to you of September 24, 1979.

Pursuant to the attached memo, please order a transcript of all hearings.

DRH:sh
cc: Sharon Schmidt
Bernard Singer

ADMIN 1000 (Rev. 1/78)

STATE OF MINNESOTA

DEPARTMENT OFFICE OF HEARING EXAMINERS

Office Memorandum

TO : RANDY YOUNG
Commission Support Division
Dept. of Public Service

DATE: Sept. 26, 197

FROM : DUANE R. HARVES
Chief Hearing Examiner

PHONE: 6-8100

SUBJECT: COLD WEATHER RULE HEARINGS

Your request for a court reporter at the hearings is approved.

Additionally, in view of public and legislative concerns raised over the Interstate Power Company case, pursuant to M. S. 15.0412, subd. 4, I am requesting Hearing Examiner Richard DeLong to have a transcript of all hearings prepared.

DRH:sh
cc: ✓Richard DeLong
Bernard Singer
Sharon Schmidt

MANAGING ATTORNEY
James R. Flett

ATTORNEYS
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October 18, 1979

Hearing Examiner Richard DeLong
Office of Hearing Examiners
1745 University Avenue
St. Paul, Minnesota 55104

Re: Cold Weather Shut-off Rule - PSC 299

Dear Sir:

This office represents the St. Cloud Area Recipients Alliance and we are writing on their behalf.

According to the latest figures available from the Department of Public Welfare, there are approximately 5000 families in the Stearns, Benton, Sherburne, and Wright County areas who subsist on incomes of less than 125% of the federal poverty guidelines and whose primary source of fuel is either electricity or natural gas. All, or nearly all of these families will be affected by the proposed cold weather shut-off rule, since the companies providing the electricity and natural gas will be regulated by the rule. In addition, there are an unknown number of poor families who use propane or fuel oil for heat, but depend on electric power for forced air furnaces.

Figures recently published in the Minnesota State Register (4 S.R. 556, Monday, October 8, 1979) clearly reveal that there have been and will continue to be substantial increases in the cost of heating fuels from all sources. In addition, it is common knowledge that the costs of virtually all goods and services necessary to maintain a household are rising at an unprecedented pace. Since such a large number of poor households subsist on fixed incomes from Social Security, private pensions, or welfare benefits, it is clear that many of these households will have a very difficult time keeping current on their heating bills during the winter months.

Most of these poor households consist of elderly people who have great difficulty in moving about during the winter, or families with young children. It would be inexcusable to subject these households to a termination of their heat source during the winter months. Such terminations would cause severe hardship and sooner or later would result in deaths.

With this in mind, it is clear that the proposed rule on cold weather shut-offs is inadequate and we request that the following changes be made:

1) Proposed PSC 299(C)(1) - minimum temperature restriction must be deleted, and replaced by a provision that would prohibit any termination of a heat source from October 1 to April 1, and provides that in the discretion of the Commissioner the period during which utility terminations are prohibitted may be extended in the event of unseasonably cold weather.

We submit that the minimum temperature restriction as it has been proposed in PSC 299(C)(1) will not provide any real protection against the dangers of a cold weather shut off.

First, the rule will be based on whether the predicted 24 hour temperature will go above 32°. Shut offs could occur whether or not the temperature ever did go above 32°.

More importantly, the proposed rule would allow a shut-off if on just one day the predicted temperature went above 32° regardless of the fact that the household might be facing weeks or months of sub-zero temperatures. The rule creates a situation that would be comic, but for its tragic consequences. The utilities would sit poised with a list of households to be terminated, waiting for that single day of thaw which would allow them to sweep out and shut off as many households as time allowed. This could be done in spite of the fact that a thaw might well occur when these households are still facing the coldest weather of the winter.

The consequences would be terrible. Fixed income poor people would obviously be unable to pay off their balance plus reconnection costs. Agencies which might be able to assist some of the households would be deluged, on the day of the thaw, with requests beyond their capacity to respond. Households of elderly, immobile people and households with young children

would be effectively turned out of their homes, and even if they could find a new dwelling the utility which terminated them certainly would not offer new service.

The proposed rule is almost worse than no rule at all, since it would concentrate the shut offs in such a way as render alternative sources of aid inneffective, and would create a bizarre sort of clock-watching system, with poor people watching the weather forcasts and dreading the moment the predicted temperature goes above the magic number of 32°.

2) Regarding the "payment plan" initial payment proposed at PSC 299(C)(2()(c), one of the following alternative provisions should be added:

a) the initial payment shall never be higher than the proposed monthly payments.

b) the initial payment shall never be more than $25 or 10% of the outstanding bill, whichever is less.

We submit that unless the regulation imposes some real protection as to the size of the initial payment, the payment plan will be nothing more than a sham. A person who has been unable to keep up his payments will obviously be unable to make a high initial payment and will be immediately in default. It is ludricous to suppose that the utility would actually consider the factors outlined in PSC 299(C)(2)(c), since the rule contemplates that the deferred payment plan will be sent to the customer for his signature without any prior input from the customer. The only method of insuring that the initial payment is fair is to make specific provision limiting the size of the payment.

3) Regarding the notice which would accompany a deferred payment plan, as found at PSC 299(E)(1), the following language should be added to the notice, "If you are not satisfied with this agreement, do not sign it. You have the right to propose an alternate payment plan, and you have the right to contact the Public Service Commission to mediate any dispute between you and the utility. The utility will provide you with the phone number of the Public Service Commission."

We submit that this language is required since, without it, there is no guarantee that the customer will ever be informed that he or she has the right to suggest an alternate payment agreement, and that the Public Service Commission is available to mediate disputes.

> 4) A provision should be added to PSC 299 providing that a customer who changes residences may not be denied service by a regulated utility at the new residence if conditions were such that service could not be terminated at the old residence.

Such a provision would insure that poor people would not be restricted in making a necessary change of residence because of the threat of not being able to receive service from a utility.

In sum, we submit that a cold weather shut-off rule is very necessary if tragedy is to be avoided. However, the rule as proposed will not be effective. We request that the above changes be incorporated into the rule to insure that it offers some real protection to the low and fixed-income people who will be the victims of winter fuel terminations.

Thank you for your consideration.

Respectfully submitted,

LAW OFFICES OF
ST.CLOUD AREA LEGAL SERVICES

Keith A. Dunder
Staff Attorney

KAD/mrr

Oct 11th 79

Dear Richard DeLong

Wid like to voice our opinion at the community Hearing, but my husband is disabled + I don't leave town so we are unable to attend.

We are on S.S.C that is my husband is, I'm not old enough yet + we have a terrible time making ends meet, + we conserve Gas + electricity in every way possable, I only wash every 2 wks, + I have a little shower & since takes very little hot water, I bake very little as we are alone we have winterized our home in every way, watch T.V. very little, + use only 1 small light in a room + still the bills go higher,

My husband worked very hard for his retirement + then had to retire

early because of extensive surgery + I only hope something can be done about these terrible rising prices on gas. ~~the~~ elec. oil etc in fact everything, our medicine bill per mo is terrible, I don't know if this kind of a letter will help you or not, but, something must be done, they just can't shut off our utilities, what are we to do freeze to death or starve

Mr + Mrs. Wm G Allen

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October 29, 1979

Richard DeLong
Office of the Hearing Examiner
1745 University Avenue, Room 300
St. Paul, Minnesota 55104

Dear Mr. DeLong:

I am a staff attorney with the Legal Aid Society of Minneapolis. As part of our Senior Citizens Law Project, I represent a group known as the United Seniors. This is an organization of senior citizens based in North Minneapolis. As part of my representation of these clients, I would like to comment on the utility shut-off regulations proposed by the Public Services Commission. Many of the members of United Seniors are elderly with very low income and few resources. They, in particular, will be greatly affected by any regulations governing utility shut-offs. As their advocate, I would like to call your attention to a few of the major trouble spots in the regulations presently being considered.

One large gap in these proposed rules is the complete lack of due process provisions in the section dealing with the creation of payment agreements [see Part C(2)]. There are a number of ideal standards of reasonableness listed, yet there is no enforcement mechanism to ensure that payment agreements will, in fact, be reasonable. As the rules are now written, a resident could have his or her utilities disconnected for failure to comply with the payment agreement--whether that agreement is reasonable or not.

We have two proposals in response to this gap in due process procedures. The first is that the regulations be amended to contain definitive procedures for a formal hearing by an impartial arbitrator in those situations where the reasonableness of the proposed payment agreement is in dispute. This would be the ideal mechanism for protecting the interests of tenants and residential homeowners.

If such a formal hearing procedure is viewed as unfeasible, our second proposal is that the PSC adopt a procedure similar to that found in PSC Rule 303. Rule 303 is the current rule governing disputes in billing and service, and provides for the payment of the

United Way Agency

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JUSTICE

disputed amount into an escrow account pending an informal investigation by the PSC. Under the proposed shut-off regulations, the utility is to offer the customer a specific plan called a "deferred payment plan" in which the customer would have to make an initial payment, and then make equal monthly payments sufficient to cover the past due amount plus estimated usage during the payment period. The payment period covers seven months--that is, from October through April. We suggest the money to be deposited in escrow be 1/7 of this amount, in other words, the amount of the first monthly payment. If the informal procedures of the PSC determine that the payment agreement is a reasonable one, the amount in escrow would then be given to the utility. This procedure could be implemented quite well, while still protecting the rights of the utility company during the continuation of utility services. The customer is assured that the utility will not discontinue his/her services during the course of the dispute, while the escrow account assures the utility will receive its money if the payment schedule is found acceptable. Variations on this scheme could be worked out in those cases where the dispute lasts longer than one month.

As the proposed regulations now stand, there are no due process protections available. The Commission should implement definitive standards to assure residents are adequately protected in their dealings with public utilities. A formal hearing is the most desirable solution--however, even the informal procedures of PSC Rule 303 would be better than the present proposed regulations.

The second major problem with the proposed rules is the procedures which govern the discontinuing of services to "occupied residential units". Part F outlines the steps the utility must follow in order to cut off services because of the tenant's or residential owner's failure to enter into a payment agreement. Part F allows the utilities to place the burden on the local welfare agency to make personal contact with the residential occupant. The agency is given ten days to make such a contact before utilities are cut off.

Such a procedure is grossly inadequate and particularly insensitive to the needs of elderly residents. Many of these elderly live alone and may become ill or unable to care for themselves and their affairs. In addition, many elderly residents have hearing or visual impairments that limit their ability to communicate. These occupants may have failed to enter into the payment agreement because of illness or some other legitimate reason. The county welfare department is already overworked, and it moves at the same snail's pace and with the same extensive amounts of red tape that encumber all governmental agencies. It is not reasonable to place on the welfare agency this additional burden of contacting residents whose utilities are scheduled to be cut off. Giving the agency only ten days to make a contact is even more unreasonable and exhibits a marked lack of familiarity with the slow pace of the welfare bureaucracy. As it is now, The Hennepin County Welfare Department uniformly advises all of its clients that benefit checks will <u>normally</u> be three days to a week late.

A better procedure would be to place the burden on the public utility to make a personal contact with the residential occupant before services are cut off. This "personal contact by the utility" is a procedure provided for in Part D which deals with residences "believed to be unoccupied". Such a procedure is even more imperative in a case of occupied premises where the situation is likely to be life-threatening. We believe a personal contact with the resident is absolutely necessary before the utility cut-off can occur. The welfare department could be a support agency in helping to reach the customer, but the main responsibility should rest on the utility intending to discontinue service.

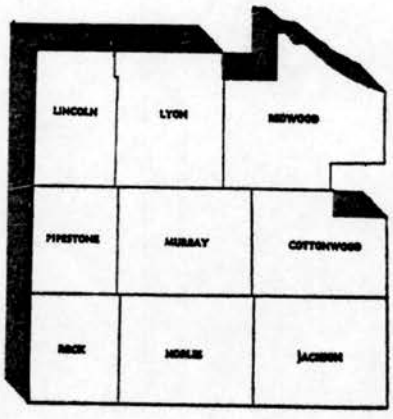
There is a simple way to make the present proposed regulations implement this requirement of personal contact. That is, the regulations could state that occupied premises would be residences "believed to be unoccupied", if the welfare department fails to make contact within ten days. This would then kick-in the procedures for personal contacts by the utilities before a shut-off of services can occur. In connection with this, it would be possible to forbid shut-offs unliess supervised by local fire, police or public safety officials. This would not only assure that shut-offs were mechanically safe, but these individuals would have authority to enter and inspect the dwelling assuring the safety of its occupants.

We believe these suggested changes would be of great benefit to the clients I represent--both in terms of their physical safety and their legal rights. Thank you for the time you spend reading and considering these comments. I hope they will be of some help to you.

Sincerely yours,

Francesca Chervenak

M. Francesca Chervenak
Attorney at Law
Senior Citizens Law Project



Southwest . . . .

REGIONAL DEVELOPMENT COMMISSION

Jerry Chasteen, Executive Director

Telephone 507-836-8549

25th & Broadway **Box 265** **Slayton, Minnesota 56172**

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October 26, 1979

Mr. Richard De Long
Office of the Hearing Examiner
1745 University Avenue, Room 300
St. Paul, MN 55104

Dear Mr. De Long:

I would like to submit some written comments on the proposed rule of the Public Service Commission which would change the practices of private electric and gas companies concerning winter shut offs of service.

The proposed rule greatly improves upon existing shut-off procedures and offers some protection to low-income and elderly consumers. The proposed prohibition of shut-offs from October 5 to April 15 is a necessary protection in our harsh winter climate. The prohibition of shut-offs when the temperature drops below freezing is also an improvement.

The proposed rule could be further strenghtened by specifying a minimum payment period of six months in a deferred payment plan, that interest charges are not allowed and the establishment of an appeal or arbitration procedure when the customer and utility cannot agree on a payment plan.

I urge the adoption of the proposed rule and the consideration, if possible, of the amendments herein stated.

Sincerely,

Fred J. De Jong

Fred J. De Jong
Director
Southwestern Area Agency on Aging

FJD/mf

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October 23, 1979

Mr. Richard DeLong
Hearings Examiner
Office of Hearings Examiners
1745 University Avenue
St. Paul, Minnesota 55104

In re: Public Service Commission Proposed Rules
Governing Disconnection of Service Hearing

Dear Mr. DeLong:

I am a member of the NSP Consumer Advisory Panel that was formed in late 1978. The purpose of the panel is to study company operations and make recommendations to the company. Although I am not speaking in my capacity as a panel member, my insight into this subject is partially derived from being a panel mamber. I am also a Legal Assistant at the Legal Aid Society of Minneapolis and these proposed Rules will greatly affect our clientele.

All of our clients are low-income people and would be affected by any revision of these Rules.

A specific example of a deficiency in your proposed Rules is illustrated in the following case. A client of ours incurred large utility bills during the winter of 1978-1979, used the available Emergency Fuel Assistance Program, which did not meet his entire need, and thereupon entered into an agreement with the utility company to pay the remaining balance of the utility bills. Subsequently, the client encountered financial difficulties and is now subject to immediate shut-off because the payment plan did not allow for unexpected financial hardship.

The proposed amendment will allow the utility companies to have control again and interrupt service.

If amended as stated, this Rule will be detrimental to the low-income and elderly population of Minneapolis.

United Way Agency

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JUSTICE

Mr. Richard DeLong

I therefore strongly urge you to incorporate a complete winter utility shut-off unconditionally.

If a deferred or alternative payment plan is to be instituted it should start April 15.

Thank you,

LEGAL AID SOCIETY

Matilda Howard
Legal Assistant

MH/sjp

Randy

TARGET AREA ADVISORY COUNCIL 'C'

TAAC 'C'

"ADVISING RAMSEY ACTION PROGRAMS ON ANTI-POVERTY EFFORTS"
REPRESENTING OVER 10,000 EASTSIDE-ST. PAUL RESIDENTS

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Dept. of Public Service
OCT 29 1979
Commission Support

October 24, 1979

To: PUBLIC SERVICE COMMISSION

Target Area Advisory Council 'C' at its regular September meeting voted unanimously to issue a challenge to the Public Service commission to create and enforce a tough, effective rule banning winter utility shut-offs in Minnesota.

The Public Service Commission's current proposal totally fails to meet the enormous crisis people are facing this winter and will face in the winters to come.

We challenge the Public Service Commission to:
-Ban all winter utility shut-offs from October 15 to April 15.
-Impose stiff penalties on companies that illegally shut people off.
-Adopt payment plans which encourage people to pay their bills without the barbarie threat of winter utility shut-offs.

We believe the Public Service Commission was created to serve and protect the public. We need more than concerned words and mild proposals. We need action by the PSC establishing a strong rule prohibiting all winter utility shut-offs in Minnesota.

Sincerely,

Target Area Advisory Council 'C'

Target Area Advisory Council 'C'

DOVN/bj

1575 AMES AVENUE - ST PAUL MINNESOTA 55106 - PHONE: 774-9647

LEGAL AID SERVICE OF NORTHEASTERN MINNESOTA

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__ WEST DULUTH OFFICE
404 N. CENTRAL AVE.
DULUTH, MINNESOTA 55807
(218) 628-1055
__ IRON RANGE OFFICE
204 CHESTNUT STREET
VIRGINIA, MINNESOTA 55792
(218) 749-3270
__ GRAND RAPIDS OFFICE
5 NORTHEAST FIFTH STREET
GRAND RAPIDS, MINNESOTA 55744
(218) 326-6290

October 18, 1979

Richard DeLong
Office of Hearing Examiners
1745 University Avenue
St. Paul, Minnesota 55104

RE: Proposed PSC Rule 299

Dear Mr. DeLong:

I work at Legal Aid Service of Northeastern Minnesota in the utility law area. I wish to comment on proposed PSC Rule 299 as a large number of my clients will be adversely affected or more precisely will not be affected by the proposed rule.

1. As I understand the rule a customer is required to enter into and comply with a payment plan for the shut-off ban to apply. This is wholly inadequate for low and fixed income consumers. For example if such a customer resided in a dwelling heated solely by electricity, the consumer could not afford to comply with the deferred payment agreement, and the electricity will be shut off. In addition, the electric company is not compelled to offer to enter into an alternative payment agreement, with lower payments. So, if the purpose of the proposed rule is to prevent people from freezing, the rule will not do so.

I respectfully request that the commission adopt a rule which will include an absolute moratorium on shut-offs during the heating season. (Defined in No. 3 below). This would be the only assurance that Minnesotans will not freeze.

In the alternative, I would suggest that utilities be compelled to negotiate alternative payment plans based upon the customer's ability to pay.

2. The rule contemplates protection from shut-offs when "the disconnection affects the primary heating source " of the residence. My concern here is that many oil burning furnaces and/or gas heating units require electricity to be operable, and that the utilities will not construe this language so as to include such situations in the shut-off ban. In addition, many people use electric space heaters to either supplement inadequately heated residences or heat residences because they cannot afford oil. Also to consider are persons with electric hot water heaters and lights. This proposed rule will not assist such people. I reiterate a moratorium on shut-offs is in order.

3. For unoccupied residences the rule restricts shut-offs between October 15 and April 15, while for occupied residences the rule restricts shut-offs only when the National Weather Service predicts 32° temperatures for 24 hours. Although this protects people from shut-offs during unseasonably cold weather, it appears that when temperatures are normal, unoccupied residences receive more protection than occupied residences. People, not residences, should be protected. Therefore, I would suggest that the shut-off ban for occupied presidences be enforced during the heating season and that the heating season be defined as the period of time beginning on October 1 and terminating on April 30 following. This would be consistant with heating season as defined by PSC rule 390 which is used when considering purchase gas adjustment provisions. In addition, a supplementary provision for unseasonably cold weather should be added.

In the alternative, if the commission is adamantly in favor of a temperature restriction, rather than a date restriction, I would suggest 45° rather than 32°. Senior Citizens, young children and unhealthy persons become ill in unheated residences, when faced with constant freezing temperatures. In addition, temperatures fluctuate greatly on a daily basis; that is, if during the warmest part of a day it is 32°, the coldest part of the day will, more than likely, be in the low 20's or high teens. That is too cold to be without any heat.

4. The deferred payment period "commences with the first day of the period covered by an outstanding bill." The problem here, is that many people have bills outstanding from a prior heating season. So if the outstanding bill is from February 1 and the utility sends a shut-off notice on October 16, the outstanding amounts plus the estimated cost of the remainder of the payment period must be paid by February 1 of the next year. The customer would then be faced with an astronomical bill which would have to be paid in three months. This would be impossible for the low and fixed income customer;

and as a result the customer's utilities would be shut off. To avoid this problem the payment period should begin when a notice of shut-off is sent. The payments should include the past due bill and estimated 12 month future use, using the immediately preceding year's utility cost for the residence involved. The payments should be in twelve equal monthly installments.

The determination of the initial payment should not be left to the utility's conception of reasonableness. Even considering the criteria set out for determining reasonableness, the possibility of abuse is obvious and overwhelming. I reiterate the need for equal monthly payments.

5. My final comment involves the public hearings for this proposed rule or the lack of a hearing in Duluth. Many of the people, most affected, are not being heard on this issue. It is already cold here and people are being shut off.

I urge the commission to adopt a rule which will effectively prevent people from freezing to death. A moratorium on shut-offs is the most effective and simple way to achieve this goal.

If the commission does not see fit to adopt a moratorium on shut-offs, I suggest the commission adopt the changes suggested above. That is:

1. No shut-offs during the hearing season (October 1 through April 30).

2. Payment period of twelve months commencing at the time notice of shut-off is given.

3. Deferred payment plan of twelve equal payment installments.

4. An alternative payment plan which compels a utility to offer such a plan. This alternative payment plan would be for low and fixed income customers who cannot afford a deferred payment plan and would be based on such customer's ability to pay.

If you have any questions or comments please contact me.

Sincerely,

Susan Ginsburg

Susan Ginsburg
Reginald Heber Smith Fellow

SG:hmk

Department of Economic Security

Public Service Commission Proposed Rules

RECEIVED
OCT 30 1979
OFFICE OF HEARING
EXAMINERS

The increased cost of heating will affect every household in Minnesota this winter. This increase will be disastrous for people with limited incomes - for many it will require making a choice between food, and heat. The evidence of this unfortunate choice will be seen particularly in households on fixed incomes who are not able to meet the burden of heating costs. People living on fixed incomes fit primarily into the following categories: elderly, disabled and handicapped. None of the three can tolerate cold temperatures to the same degree as healthy active people.

State and Federal legislation on energy assistance remains uncertain. The dollar amount and schedule of availability of this money to low-income households is also uncertain. People in Minnesota must not face life or health threatening situations this winter. Thus it is imperative that a moratorium on shut offs be placed on regulated utilities in the state.

The office of Economic Opportunity which is a division of the Department of Economic Security serves as an advocate for all people of limited means; of particular concern are the previously mentioned groups who will suffer tremendous hardships this winter. In an effort to make resources available to alleviate some of the burden of increased heating costs, this department is administering the federal Energy Crisis Assistance Program. This program will provide assistance to economically disadvantaged households having incomes at or below 125% of Community Services Administration Poverty Guidelines.

It must be noted that the 1978-79 federal energy assistance program required shut off notices for program eligibility. This increased the number of delinquent utility accounts because many households were not eligible for federal assistance. The current ECAP program <u>does not</u> require shut off notices and <u>does</u> provide for extending lines of credit.

Anticipated State and Federal legislation should help households experiencing heating emergencies and should decrease delinquent utility accounts making shut offs an inappropriate way to enforce payment of bills.

It is suggested that all delinquent account notices be accompanied by a referral to the County Welfare office or local Community Action Agency. A sample of such notice is attached.

RD

TO: Department of Public Service, Public Service Commission

SUBJECT: PSC 299 Cold Weather Rule

RECEIVED
OCT 29 1979
OFFICE OF HEARING EXAMINERS

INTRODUCTION

Enclosed is a comment on the proposed rule governing disconnection of gas/utility service submitted by Vista Volunteers representing low-income residents of Cass and Beltrami counties (Wynn Wagenseil and Lisa Wrabek).

Recommended changes - PSC 299 Disconnection of service during periods of cold weather.

A. Purpose and authority. The ruling should stand without any temperature stipulation. Minnesota winters are typically and extremely variable from day to day. One day could be below zero and followed by a day with thawing temperatures. Senior Citizens and infants are vulnerable to the effects of cold temperatures whether it be subzero or 45° above.

B. Definitions - acceptable as proposed.

C. Disconnection restriction for occupied residential units.
   1. Minimum temperature restriction. Again there is no policy governing reconnection.

   2. Payment agreement restriction.

      a. Personal contact should be made by utility company representative once notice is sent to customer. Customer must be contacted in person in order to negotiate payment agreement before any disconnection.

      b. 30 days should be given to the customer so she/he can find alternative resources with which to pay his/her debt to the company. (The Energy Assistance Program often takes longer than 30 days to process an application). Utility ccompany representative should find most responsible person of the household to negotiate with.

      c. acceptable

      d. acceptable

D. Disconnection restriction for unoccupied residential units. Terms are acceptable if personal contact is attempted along with on-site inspection if <u>after one month</u> it remains unoccupied.

E. Payment agreements.

1. We support attempt to make agreement binding by use of signature but would support a notice indicating all customers have right to appeal negotiations to higher level. There is no provision for those who refuse to sign initial agreement.

2. Rates should not be increased for reasons other than rising costs of a utility to a company.

3. In the event of lower than anticipated consumption rates, the customer must be informed in writing that he can either receive a refund or credit excess payment to future billing.

4. acceptable

5. acceptable

F. Termination for failure to enter into or comply with payment agreement.

Suggested here would be notification of not only the Welfare Agency but of the local CAP or any other agency with energy assistance services. Again, 30 days would be more realistic for people to obtain such assistance.

The copy of the Commission's customer service rules and the telephone number of the Department of Public Service, etc. should be given to the customer at the time negotiations between him/her and utility company representative <u>begin</u>.

H. We support exemptions clause.

RD

Stearns County Social Service Center

(COUNTY WELFARE BOARD AGENCY)

— P. S. SERRANO, Director —

BOARD MEMBERS
HENRY DICKHAUS
CLARENCE KREMER
KEITH MAURER
ROBERT GAMBRINO
ARNOLD KONZ
CARLYN ELLERING
RITA HEIDGERKEN

700 St. Germain — Box 1107
St. Cloud, Mn. 56301
Tel. (612) 251-3272

October 19, 1979

RECEIVED
OCT 22 1979
OFFICE OF HEARING EXAMINERS

Richard Delong
Office of Hearing Examiner
1745 University Avenue
St. Paul, MN. 55104

Re: PSC 299

Dear Mr. Delong:

This agency would like to go on record in support of the proposed rule.

There have been some substantial positive changes from the previous rule. Particularly good are the 72-hour provision for written offer in - PSC 299-B-2A Disconnects - and the provision for negotiation on payments.

Further, the provision under (F) - 10 days written notice to Welfare Agency is a good one which allows more time for all concerned.

We would also like to encourage the rule to consider collection techniques by the utility to include legal action if necessary, in conciliation court if appropriate.

It certainly places the responsibility on both the consumer and the utility rather than tax funds thru Welfare or other resources and not on other consumers who ultimately pay the debt in subsequent billings. Most other creditors use the legal process and other creditors frequently do not have a monoply on the service.

We appreciate the opportunity to lend support to this rule.

Very truly yours,

P. S. Serrano
Director
STEARNS COUNTY SOCIAL SERVICE CENTER

PSS/lk

cc: Paula Erdman

AN EQUAL OPPORTUNITY EMPLOYER

PUBLIC HOUSING AGENCY OF THE CITY OF SAINT PAUL, MINNESOTA

339 Bremer Building, 419 North Robert Street, Saint Paul, Minnesota 55101, phone (612) 298-5068

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October 18, 1979

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

State of Minnesota
Department of Public Service
Public Service Commission
160 E. Kellogg Boulevard
Saint Paul, Minnesota 55101

Attention: Mr. Richard DeLong, Hearing Examiner

Re: Request for Exemption of
Public Housing Agency Dwelling Units
from the Proposed PSC Rule 299
Minn. 1-1 et al

Dear Mr. DeLong:

We have read the proposed rules of the Public Service Commission governing disconnection of service to gas and electric utility customers during periods of cold weather for the coming winter. The proposed rules present unique and serious problems for the federally funded PHA. The principle problem with the proposed PSC Rule 299 is that utilities can be shut-off during periods when the temperature is projected to be above freezing for the next twenty-four hours and they will then remain off during subsequent periods (the next 24, 48 or 72 hours) when the temperature can, and undoubtedly will drop well below freezing. (It is extremely unlikely that low-income families, most of whom must rely on seeking financial help from social service agencies, will be able to make the necessary arrangements to either pay up their delinquent accounts or satisfactorily conclude a mutually acceptable deferred payment agreement with NSP in a 24 hour period of time.) It is this critical time period during which the PHA faces clear and present dangers to its resident body and its property.

The PHA is the largest, single landlord in Saint Paul, dealing exclusively with the rental of properties to low-income families. (In addition to 16 hi-rises containing 2,660 dwelling units, the PHA presently owns and operates a total of 1,643 other units for the elderly and non-elderly and subsidizes the rents of an additional 1,489 low-income families and elderly in the private rental market in Saint Paul.)

The majority of the family dwelling units operated by the PHA are "row-houses". Our residents are given a utility allowance and electric and natural gas meters are in the name of the residents. The utility accounts, are kept in the name of the PHA residents in order to promote the residents prudent use of energy. This is in keeping with the energy-use philosophy of the Department of Housing and Urban Development (HUD). When utilities are shut off in a given row house

Mary Ann Sudeith, *chairperson* Frank J. Rodriguez, Sr., *vice chairperson* Helen Fish, Peg Fourre, Al Hester, Mamie Morgan, Grant West

unit such shut-off presents clear and present safety hazards for the affected family and for that family's adjacent neighbors. In addition, such shut offs present a clear, and present danger of property damage to the PHA's dwelling units resulting from the potential for a subsequent freeze-up of water piping after a shut-off. (Our water pipes in row houses are continuous to all units from one water meter. A freeze-up in one unit would affect other units and in the event that a freeze-up should occur in the unit with the water meter, as many as seven other families would be without water.)

Naturally the PHA is principally concerned with the threat to the safety of low-income families which results when individuals whose utilities have been disconnected seek, or devise, alternative methods of providing heat, light and cooking facilities. Such alternatives include: attempts to tamper with the disconnected meters; running extension cords from adjacent units which still have electric utility connections; using candles, kerosene lamps or Coleman lanterns for light and cooking or heating the unit with open flames in camp stoves, barbecue grills or in open pans using charcoal or wood as fuel. In row-house type buildings these alternatives threaten the safety of all building occupants.

The PHA administers subsidized housing programs for low-income individuals and families and maintains its properties with the aid of federal tax dollars provided through HUD. Any property repair, resulting from utility shut-off damage, must be effected within our budget with those same limited dollars and such unnecessary repair costs result in a lowering of services to all of our residents. Our low-income families who do keep their utility payments current are thus punished by receiving reduced services along with those who do not do so. Even the residents in our hi-rises, where the PHA pays the utility bills, would suffer from service and maintenance reductions because they are affected by the same budget.

The PHA, because of its obligation to house low-income families, is inextricably involved with the question of utility shut-offs and the effect of the utility shut-offs on its general resident body and on its property. For this reason the PHA is in favor of an absolute moratorium on utility shut offs during the "cold weather months" beginning on October 15th and terminating on April 15th or such variation of this period as may be determined by the Public Service Commission for a given year, if the National Weather Service reports temperature variations of extreme amounts.

If the Public Service Commission, after conducting hearings on this matter determines that an absolute shut-off moratorium during the "cold weather months" cannot be imposed the PHA herewith formally requests that the Public Service Commission grant a variance from the proposed rule which would, in effect, allow the Public Housing Agency of the City of Saint Paul to make arrangements with the Northern States Power Company for the continuation of service to public housing dwelling units while the PHA actively pursues a resolution to the problem of unpaid utility bills by individual public housing families. Specifically the PHA proposes the following:

> The PHA would like the Public Service Commission to authorize the Northern States Power Company and the PHA to establish a policy under which NSP would, at the time of a pending utility shut-off

advise the PHA of such pending shut-off and allow the PHA to have the utilities placed in the name of the PHA, with the outstanding utility balance remaining in the name of the family. The PHA would then terminate the tenancy of the family for the lease violation and our staff would attempt to involve social service agencies such as the Ramsey County Welfare Department in getting the delinquent utilities account paid up or a payment agreement arranged.

Such a procedure would at least protect the PHA's property, prevent hazardous conditions and prevent water service interruption to adjacent dwelling units. (NSP now requires that the PHA pay the entire outstanding bill, if we want the utilities put back on and in the PHA's name. The cost of this would be prohibitive when dealing with a large number of PHA residents who have delinquent bills and are under threat of shut-off or have actually had utilities shut-off.)

We have previously discussed this proposal with representatives of NSP in Saint Paul. NSP has advised us that they cannot make such an arrangement with the PHA since the PSC requires NSP to treat all of their customers in their service area on an equal basis and they would, therefore, have to extend an opportunity for all landlords to make similar arrangements.

It is for this reason that the PHA formally requests consideration of an exemption from the proposed rule by the PSC.

As we have previously stated, we are required by federal regulations to house only low-income families and we, therefore, run a much greater risk of having the safety of our residents threatened and our property damaged than do private landlords who house tenants with higher incomes who are better able to pay high utility bills. As a public agency, we are unable to evict tenants quickly, as a private landlord can, in order to protect persons and property.

We wish to point out that there are certain inherent advantages to our proposal for NSP as well as for the PHA and its residents. These include:

1) Indemnification of NSP against further loss of revenue during the time period when the utilities would be in the name of the PHA.

2) Labor savings by not having to make the disconnect and reconnect.

3) Direct assistance from PHA staff in involving other social service agencies such as the Ramsey County Welfare Department in getting the delinquent utilities account paid up or in making mutually safisfactory arrangements for such payments between NSP and its customer.

The PHA hereby respectively asks for due consideration of the exemption request by the PHA from the proposed rule should the PSC fail to approve an absolute moratorium on utility disconnections during the "cold weather months".

Sincerely Yours,

Marshall D. Anderson

Marshall D. Anderson
Executive Director

cc: Mayor George Latimer
Mr. John Casper, NSP
Mary Ann Sudeith, PHA Board Chairperson
Al Hester, PHA Commissioner

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EXAMINERS

BEFORE THE MINNESOTA PUBLIC SERVICE COMMISSION

Katherine E. Sasseville	Chairperson
Roger L. Hanson	Commissioner
Richard J. Parish	Commissioner
Juanita R. Satterlee	Commissioner
Lillian Warren-Lazenberry	Commissioner

Public Service Commission Proposed Rules
Governing Disconnection of Service to
Gas and Electric Utility Customers During
Periods of Cold Weather and Repeal of
PSC 299 Cold Weather Rule.

Discussion of Issues Raised During Hearings

During the series of eight hearings held on the above captioned rule, many issues were presented by utility companies and consumers. This document is intended to summarize and clarify as well as respond to various positions taken by the Minnesota Recipients Alliance and other consumer groups, by the Public Service Commission and its staff, and by utility companies during the hearings.

Need for Strong Cold Weather Rule

There was extensive testimony received at each of the hearings demonstrating the need for protection against cold weather shutoffs of utility service. Some of this testimony was provided by the Public Service Commission staff, and some was provided by citizens. Minnesota Power and Light also submitted copies of weather data from last year from the Duluth area, which illustrates the severity of the weather in that area, and the need for adequate safe reliable utility service to survive. The most extensive discussion of the need for a strong cold weather rule which was submitted by a consumer group, was the testimony of Claudia Swendseid on behalf of the Minnesota Public Interest Research Group. That testimony outlines the need for cold weather rule very well, and I will not duplicate those efforts. The testimony of Ms. Swendseid covers many areas, including an analysis of Minnesota's climate and its threat to an unprotected person, beginning on page 1,

a discussion of the manner in which utility companies have used shutoffs as a collection device, and examples in which this device was used unreasonably, beginning on page 3, the psychological and financial impact of the rising cost of energy and the resulting potential shutoffs of service during winter months on consumers, and their efforts to deal with this situation by cutting back their use and by paying utility bills instead of other bills, beginning on page 7, a discussion of the effect upon the elderly of rising costs and resulting potential shutoffs at least some of which are unique to that group of consumers, beginning on page 14, and a discussion of the reaction and response of various other northern states attempting to deal with the problem of winter shutoffs, beginning on page 18.

The testimony received from citizens at the hearings also demonstrates the great lengths people will go to, to keep their utility bill at a manageable level, and the sacrifices people are willing to make to pay the bill. There was testimony that senior citizens sometimes ride the bus during cold weather because it is warmer than their homes. There was also testimony about a man who would prepare his supper by placing a wrapped potato above the pilot light of his stove and leave it there all day because he did not feel he could afford to turn the stove on to cook it. There was also a great deal of testimony concerning the rapid rise in fuel oil costs. Although this rise cannot be dealt with directly by this rule, the rising fuel oil costs will place a great financial burden on many households, making it more difficult for people to pay the electric bill necessary to run the furnace. The practice of fuel oil dealers requiring payment in cash prior to delivery will exacerbate the situation.

There was also testimony from Joel Martin from Dairyland Rural Electric Cooperative, in which he testified that his cooperative follows the current Public Service Commission Cold Weather Rule. From this testimony it can be seen that the Public Service Commission Rules on winter shutoffs can effectively serve as a model for unregulated utilities. Even though the Public Service Commission does not have actual authority to regulate municipal utilities and rural electric cooperatives, a Public Service Commission rule could have substantial impact upon the actual shutoff policies of these other companies, by serving as a model.

Historically, financial assistance for help with utility bills has been too late in the season to be of assistance during the winter itself, and has not been adequate enough to meet the needs of all the people who require assistance. Federal assistance has generally been distributed by the CAP Program, and has been available during the spring of the year. In the past it was required that an applicant be able to produce a shutoff notice to be eligible for assistance. The amount of assistance actually received was limited to the amount of a past due bill. These two requirements left many people with no possibility of receiving assistance because they had paid their utility bills and sacrificed in other areas of their budget. This year, the assistance will probably come sooner in the season, and the two limitations discussed above will not be part of the program. However, this illustrates the deficiencies of assistance programs, which will likely not be totally solved soon.

There has also been assistance available through the local welfare offices, primarily through the Emergency Assistance provision of the AFDC program. But, this assistance is only available to people with families. Other assistance is only available to people with no assets to meet the problem. Also, receipt of welfare assistance is potentially very embarrassing, and carries a social stigma with it. Combining these factors, welfare assistance will not be effective in assisting more than a relatively small number of consumers.

In recent days there has been much publicity in the media concerning efforts to improve the programs which will provide assistance for energy related costs. The reports seem to be conflicting, and create a situation of uncertainty for consumers and the utility companies. This state of uncertainty is harmful to both the consumers and utility companies. One effect is that hopes get raised very high, and frequently the programs are not able to deliver as much as the people have come to expect from reading the papers. A good example would be all of the stories that circulated to the effect that Minnesota would receive $12 million from the Energy Crisis Assistance Program. When the actual allocation became known, this figure was actually $5.6 million. People cannot and should not depend on uncertain programs such as this as the sole means of providing them with heat through the winter.

The evidence clearly demonstrates the need for a strong cold weather rule.

The reasonableness of the dates involved, October 15 and April 15 can be seen from the following data obtained from the National Weather Service:

	Average date of first occurance of 32°	Date normal low temp. drops to 32°	Date normal low temp. rises to 32°	Average date of last occurance of 32°
International Falls	N/A	Oct. 19	April 25	N/A
Duluth	Oct. 3	Oct. 26	April 21	May 13
Minneapolis-St. Paul	Oct. 13	Oct. 31	March 8	April 29

The October 15 and April 15 dates represent a fairly good compromise among these dates, although the time period may be somewhat too short for the northern areas of the state.

Authority to Promulgate a Cold Weather Rule

The authority of the Public Service Commission to promulgate any rule regarding winter shutoffs has been called into question by Jay Meister of Otter Tail Power Company at the Little Falls hearing. There can be little doubt that the Public Service Commission has rulemaking authority. That authority is contained in three specific

grants of rulemaking authority, M.S.A. §216A.05 (1978 Supp.), which describes the functions and powers of the Public Service Commission, M.S.A. §216B.08 (1978 Supp.), which describes the duties of the Commission and M.S.A. §216B.09 (1978 Supp.), which gives the Commission authority to regulate standards, classifications, regulations, and practices of the public utilities.

The Statement of Need and Reasonableness filed by the Commission also refers to M.S.A. §216B.23 (1978 Supp.), which allows the Commission to order that any "regulations, measurements, practices, acts or service" found to be "unjust, unreasonable, insufficient, preferential, unjustly discriminatory, or otherwise unreasonable or unlawful" be eliminated, and to order appropriate changes. However, this section is not a grant of rulemaking authority, but is part of the complaint and hearing provisions which begin with M.S.A. §216B.17 (1978 Supp.). As a result it is not required that the Commission show that one of their existing regulations is "unjust, unreasonable, insufficient, preferential, unjustly discriminatory or otherwise unreasonable or unlawful" to promulgate a new rule. The Commission need only demonstrate the need and reasonableness of the Proposed Rule.

State statutes set out the public policy considerations which the Commission is to consider. M.S.A. §216B.01 (1978 Supp.) declares it to "be in the public interest that public utilities be regulated as hereinafter provided in order to provide the retail customers of natural gas and electric service in this state with adequate and reliable service" to be balanced with the needs of the utility companies. M.S.A. §216B.04 (1978 Supp.) says that "Every public utility shall furnish safe, adequate, efficient and reasonable service; provided that service shall be deemed adequate if made so within 90 days after a person requests service." This section requires the Commission to look to the safety and reasonableness of service provided by utility companies, and effectively mandates that the Commission consider the health, welfare, and safety of consumers in determining the standards of service to which the utility company will be held. On a federal level, the Public Utilities Regulatory Act of 1978, 16 U.S.C. 2601, sections 115(g) and 304(a) require the Public Service Commission to consider the issue of winter shutoffs of service to electric and gas customers.

In addition to these formal statements of public policy contained in statutes, there are other indications of the public policy considerations that ought to apply to winter shutoffs. There is the letter of October 1978 from David Bardin of the Department of Energy, which was attached to the Public Service Commission Statement of Need and Reasonableness. Susan Stewart of the Minnesota Energy Agency testified at the St. Paul hearing, among other things that Governor Quie also recognizes the need for a winter shutoff rule. Also, there was testimony from many representatives of citizen and consumer groups, and other members of the public, which almost unanimously supported the existence of a strong winter shutoff rule.

The Commission has the statutory authority to promulgate a Cold Weather Rule. Public policy, contained in statutes, statements of public officials, and citizen testimony also supports the promulgation of a Cold Weather Rule.

Prohibition Against Shutoffs

One of the two major provisions of the Proposed Rule is proposed PSC 299C.1, which prohibits winter shutoffs if the predicted temperature is to be 32° Fahrenheit or lower. This provision received a great deal of discussion, and many proposals were made to modify it.

The most frequently voiced modification would be to eliminate the restriction based upon temperature and replace it with a prohibition during the cold weather months. This amendment would eliminate one of the major problems of any temperature based rule, which is extreme day to day fluctuations which can occur in temperature in Minnesota. It is not reasonable to allow a person to be shutoff on the one warm day which can happen during the course of a winter, and which can be followed by below zero temperatures and harsh weather. The possibility of a shutoff under a temperature based rule, however rare, would still produce some of the psychological trauma and anxiety as exists under the existing Rule. The low income person in addition to being a budget watcher also would have to be a thermometer watcher.

The dates of October 15 and April 15 bear a reasonable relation to the 32° Fahrenheit Proposed Rule, as can be seen from the weather data discussed above. So, switching to dates instead of temperature will result in a relatively minor deviation from the Proposed Rule.

There is also the experience of last year's moratorium on which to draw. Utility companies have claimed that a complete prohibition on shutoffs during the cold winter months will have a detrimental financial impact. The data from last year do not support this conclusion. This is discussed in Ms. Swendseid's testimony, beginning on page 5. Also, there has been a change in the financial assistance programs administered by CAP Program. A shutoff notice is not required to be eligible for assistance, and the amount of assistance received will no longer be limited to the amount of a past due bill. This will remove the incentive that people have had to build up past due bills and to receive shutoff notices that has existed in the past. This will help to improve the collection situation over last winter.

Other extensions of the prohibition on shutoffs have been proposed, such as raising the temperature to 40° or 45° Fahrenheit. This would be an improvement over the existing Proposed Rule, but would not address the problem of fluctuating temperatures. It has also been suggested that the definition of cold weather months be extended to allow for the increased period of cold weather in the northern part of the state. This suggestion deserves consideration.

Utility companies have complained that any strong winter shutoff rule would eliminate the incentive to pay and would result in abuse. This complaint could be partially satisifed by allowing utility companies to petition the Public Service Commission to allow a shutoff if good cause can be shown. Nonpayment of the bill, despite the ability to pay, should be good cause. There are also other techniques the utility companies can use to minimize nonpayment despite the ability to pay. Most utilities now charge late charges for bills which are not paid on time. This point is discussed in Ms. Swendseid's testimony on page 29. Utility companies also

have the normal debt collection methods available to them. They can negotiate with customers, bring actions to collect debts, garnish wages and execute on judgments. Utility companies in the past have not taken advantage of these techniques because of the almost complete reliance on the shutoff threat to collect bills. The companies also have the threat of shutoffs at the end of cold weather periods to use as a collection device. The mere existence of deferred payment plans and alternative plans with payments in amounts which the customer will be able to rely on should result in better payment records. One of the reasons that people have gotten behind on utility bills in the past has been that large winter bills do not seem payable, and utilities have not always been receptive to partial payments. As a result the consumer has made no payment, in some situations when a smaller payment may have been possible. There has been much testimony received at these hearings about the extreme lengths people will go to pay their utility bills, and there is no reason to think this attitude will change.

It has been proposed that a customer be required to establish inability to pay the entire amount of the monthly bill as a requirement to be eligible for protection under the provision prohibiting shuttoffs. This is not a workable suggestion. Interstate Power Company testified at the Albert Lea hearing that they and other utilities do not want to become involved in evaluating the customer's ability to pay. It has been suggested that social service agencies could perform this function. However, these agencies are beyond the jurisdiction of the Public Service Commission. So, any rule which would rely on social service agencies to establish eligibility of customers, depends upon performance of groups of people over which the Public Service Commission has no control. This does not make good sense. The Public Service Commission staff is much too small

to even begin to deal with all of these situations. All of this only reinforces the Commission's finding that the inability to pay requirement found in PURPA is "too cumbersome."

It has also been suggested that a customer be required to enter into, and remain current on a payment plan to receive the protection of the shuttoff prohibition. This view has been expressed by Interstate Power Company, Minnesota Power and Light, and Otter Tail Power Company. This change would effectively eliminate the Cold Weather Rule. It is very common for a utility company to have some sort of budget or equal monthly payment plan. As long as a customer would remain current one of these plans, that customer would be protected from a winter shutoff. So, the cold weather rule would not offer any protection other than that which the customer could already receive by entering into a budget plan. If the utility companies are allowed to ask for an initial payment in addition to the monthly payments, a utility company could effectively avoid the Cold Weather Rule entirely by demanding an initial payment which the customer could not afford to pay. It is not good policy to establish a rule which invites being avoided.

Payment Plans

The second major portion of the Proposed Rule is proposed PSC 299C.2. dealing with payment agreements. The idea of a payment agreement is an excellent one, and has received much support during the hearing. However, there have been some suggestions which would improve upon the payment plan provisions in the Proposed Rule.

The largest amount of citizen testimony centered around elimination or limitation of the initial payment requirement of a deferred payment plan. It is essential that this be done. A utility company can effectively defeat the idea of a payment

plan by asking for an initial payment which the customer cannot afford. The Proposed Rule does set out factors to determine the reasonableness of this initial payment. However, in day to day practice it will be extremely difficult if not impossible for the customer and the utility companies to apply these factors. The utility companies do not have the desire or the expertise to obtain the information necessary to apply the criteria. So, as a practical matter the factors will only be applied when the Commission staff is called in for assistance. This leaves the customer entirely at the mercy of the utility company. In the past the companies have shown a very hard nosed negotiating position, as has been testified by many people. Retaining this initial payment will only continue the practice of utility companies strong arming customers, and will maintain the adversarial relationship between the customer and the company. This adversarial relationship is not in the best interest of either the customer or the company.

It has been suggested that annual usage be added as a factor to consider in determining reasonableness of the initial payment. In testimony at the Grand Rapids hearing Minnesota Power and Light testified that this factor would probably tend to increase the amount of the initial payment. Since the initial payment will likely be the major obstacle to a customer and the company being able to agree on a payment plan, it would do no good to add factors which would tend to increase the size of that obstacle.

Also, it has been suggested that the deferred payment period be shortened so that it would end prior to the beginning of the next cold weather period. Individual consumer's situations will likely be quite different, so it is difficult to make a blanket statement whether this change would be beneficial to or adverse to consumers. The term of the deferred payment plan should be

such that the amount of monthly payments can be kept as small as possible.

It has been suggested by many people that the companies be required to offer more than one plan with the customer given the choice of which plan to accept. The most frequently proposed second plan would require the consumer to pay 10% of the total outstanding bill each month with the customer to be current by a given date, either August 15 or August 31. A plan of this type could be very beneficial where a family is facing a very severe brief financial crisis as can be the case because of sickness or injury, temporary layoff from a job or being on strike. This plan would also help people with seasonal income or who expect future income such as an income tax refund. In these situations a customer may not be able to make the payments on a deferred payment plan, but may be able to make these payments which would undoubtedly be smaller, at least at the beginning of the plan. This plan should receive serious consideration for this reason. At the Little Falls hearing, Minnesota COACT proposed that another option be available to consumers, that the consumer could pay 5% of his income monthly toward the utility bill and that this payment would be sufficient to remain connected. The customer would have to be current as of a specified date. A payment plan based on income would probably be ideal, but there are problems with privacy considerations and with administrative costs, which must be considered.

Minnesota Power and Light proposed that a customer be required to pay at least a base amount determined by looking at bills incurred during previous years, and that only increases over that base amount could be deferred. This proposal makes absolutely no sense. There are many people for whom circumstances have changed drastically over the past few years and are not in a position comparable to that in a base year. People have moved, have changed jobs, increased income, decreased income, and may have changed the

source of their heat. So, it would be extremely costly to go through the administrative procedure necessary to establish the amount of this base payment for each customer.

Miscellaneous Issues

During the hearings there were many other issues discussed which are of importance to consumers.

The Proposed Rule contains a requirement that the utility company notify the local welfare agency prior to a shutoff. The Minnesota Recipients Alliance has taken a strong position opposing this provision. Many people become very angry when it is suggested that they need to receive welfare benefits, or that information about them has been given to the welfare agency. Welfare benefits can only be made available upon application, and many people refuse to apply for welfare benefits. Welfare offices do not do a very good job of outreach and dissemination of public information concerning welfare programs. In fact, this outreach and public education function has been almost totally ignored by many welfare agencies. There is no reason to expect that this attitude will change on this issue. It is very unlikely that welfare workers will actually make the visits contemplated by this notice requirement. Most welfare agencies are understaffed and overworked, and as a result have developed a disregard for the dignity and needs of welfare recipients and others, and have developed a primary interest in such things as work flow and administrative convenience. This situation was amply demonstrated by the testimony of the Social Services Director of Sherburne County, who testified that his agency is opposed to any limitation on shutoffs during the winter and cited the primary reason for the position as the unmanageable work load which will occur at the end of any moratorium period. This position and this testimony is a good example of callous disregard welfare agencies have for their clients. It is highly unlikely that an agency with this attitude would make very many, if any, of the home visits contemplated by this notice requirement. Instead, these notices will merely be placed in files of welfare recipients along with much other irrelevant information, with the primary anticipated use being in proceedings to take away the

with the primary anticipated use being in proceedings to take away the recipient's children or proceedings to institute vendor payment because of alleged financial irresponsibility. Since notifying the welfare department will probably not have the desired effect, and will cause other problems for welfare recipients and others, this notice requirement should be eliminated.

It has also been suggested that the CAP programs be notified prior to a shutoff. This makes much more sense than notifying the welfare departments. The CAP programs have been much more effective in doing outreach and coming to people's homes and neighborhoods than have the welfare agencies. It is far more likely that a CAP program will actually make the contemplated home visit to discuss the situation with the consumer and to inform the consumer of assistance programs that may be available. The programs administered by the CAP programs have not developed the stigma that has been attached to welfare programs, so people will be less likely to object when contacted by an outreach worker than by a welfare worker. CAP programs do not have the reputation of maintaining large files with vast amount of information about recipients like the welfare agencies do, so that the possibility of using the information obtained to the detriment of the consumer is substantially smaller. As a result, it would be a very reasonable and excellent change to delete the requirement that the welfare agency be notified, and substitute the notification of the CAP program.

It has also been suggested that the utility companies provide the customer with information concerning assistance programs which may be available. This suggestion could be implemented in two ways. The companies could provide the consumer with a list of sources of possible assistance, or companies could provide the consumer with a telephone number at the utility at which this

information can be obtained. It would be much more reasonable to give the information directly to the customer in the form of a list. Many customers who may be interested in the information may not call the utility company for fear of being dunned or strong armed during the course of the conversation. Some utility companies in the past have provided these lists to consumers, particularly listing the CAP program in their area and how to contact them for assistance. It is almost always best to give the information directly to the consumer in writing and not require the consumer to call the utility company for information.

It has also been suggested that a plain language notice accompany the offer of a deferred payment plan. This plain language notice should outline the rights and responsibilities of the customer under a payment plan, would outline the possibility of negotiating an alternative payment plan, the possibility of getting assistance from the Public Service Commission staff (together with a telephone number) and a description of the circumstances under which no shutoff could occur. This suggestion seems as much superior to provisions in the Proposed Rule which would require sending a copy of the Public Service Commission Rule to the customer. Rules tend to be written very formally, and many people may not read or may not be able to understand this sort of legal mumbo jumbo. However, it is essential to notify each consumer of his rights and responsibilities in a manner in which he is most likely to understand.

It has been suggested that the notice clause required to be contained in any payment agreement be changed from that set out in the Proposed Rule. This suggestion has come primarily from utility companies who do not believe that any customer who is in arrears on a bill would ever be satisfied. From the testimony received at hearings concerning the customer's desire to pay bills including utility bills, it would appear that most

customers would be satisfied with reasonable payments which they could afford. However, it may still be advantagous to change the wording of this notice clause, and the following is suggested: DO NOT SIGN THIS AGREEMENT UNTIL YOU HAVE READ AND UNDERSTAND ITS TERMS. IF YOU ARE NOT SATISFIED WITH THIS AGREEMENT, YOU MAY CONTACT THE PUBLIC SERVICE COMMISSION AT (add the appropriate phone number) FOR INFORMATION AND POSSIBLE ASSISTANCE. IF YOU DO SIGN THIS AGREEMENT, YOU AGREE TO MAKE PAYMENTS IN ACCORDANCE WITH THIS PLAN. This suggested language should eliminate the concerns of the utility companies, and provide the customer again with notice that the Public Service Commission staff is available for possible assistance. This proposed language would also remove the admission by th customer that he owes the entire amount of the past due bill. This language would likely be interpreted as creating an account stated, which would cut off the customer's possible defenses in a subsequent court action. A person's defenses to a bill should not be taken from him unless there has actually been a clear determination by the customer that the amount of the bill owed is correct, and it is made very clear to the customer what the effects of this admission are. It will not be possible to do this in most of the normal circumstances on which the Cold Weather Rule will be applied. Many customers will feel intimidated into signing the agreement, even though they may dispute the amount outstanding, in order to avoid a possible shutoff. They should not lose the opportunity to dispute the bill under these circumstances.

It has been suggested that the utility company be required to make a home visit to discuss the situation with the consumer prior to any shutoff. A home visit such as this would undoubtedly be of assistance to some people. However, it is likely that the utility companies would use this visit as another opportunity to take collection action, and not as anticipated by the people who proposed this change. Their concerns would probably be taken care of by a provision requiring notification of the CAP program, which is very likely to actually make a home visit.

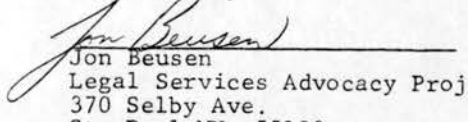
Some provision must be made in the Proposed Rule for people who move during the period of a payment agreement. This ought to be considered to be a change in circumstances which would require adjustment of the monthly payments if the move will result in substantially greater or substantially less consumption than had originally been estimated. The Rule should clearly state this, since another possible interpretation of the Proposed Rule would be that the payment agreement only applies to the location at which it was made, and that the customer would have to become current at his old address before service could be extended to his new address. Also, a utility company should not be allowed to consider whether or not a person has been on a payment plan as part of the factors which can be considered in determining whether or not a deposit will be required.

There is also another change which should be made if the deferred payment period is allowed to extend into a second cold weather period, and if a time-based prohibition on shutoffs is not adopted. As the Proposed Rule currently reads, a customer who is on a deferred payment and who defaults on a payment, even at the end of the deferred payment period, could be shut off without being offered another deferred payment plan. A customer should get credit for having made payments on a plan, and the company should be required to offer a customer a new payment plan if the customer defaults on a payment plan during the second winter of a deferred payment period. Otherwise, a customer could be facing the possibility of a winter shut-off of utility service without being offered the protection contemplated by a deferred payment plan, despite the fact that the customer has shown the willingness and desire to make all of the payments up to that point.

CONCLUSION

The Minnesota Recipients Alliance favors the adoption of a strong Cold Weather Rule. The Proposed Rule with the changes advocated herein, can provide the protection that Minnesota consumers need and deserve.

Submitted by



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BEFORE THE MINNESOTA PUBLIC SERVICE COMMISSION

Katherine E. Sasserville	Chairperson
Roger L. Hanson	Commissioner
Richard J. Parish	Commissioner
Juanita R. Satterlee	Commissioner
Lillian Warren-Lazenberry	Commissioner

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OCT 30 1979
OFFICE OF HEARING EXAMINERS

Public Service Commission Proposed Rules Governing Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather and Repeal of PSC 299 Cold Weather Rule.

Memorandum On Substantial Change

During the recent hearings on proposed Public Service Commission Rule 299 governing disconnection of service to gas and electrict utility customers during periods of cold weather, the Minnesota Recipients Alliance and other organizations suggested that the Proposed Rule be amended to change the prohibition on terminations of utility service from one based upon temperature, to one based upon the time of year. The question has arisen whether this change would be a substantial change which would require the Commission to hold additional hearings, were the Commission to adopt this proposal. This memorandum speaks to that concern.

The Proposed Amendment

The proposed change would probably best be accomplished by amending Proposed PSC Rule 299C.1, which had been entitled Minimum temperature restriction. This section would be amended to read as follows:

1. Cold Weather Months Restriction

Disconnection shall not take place during the cold weather months.

Other provisions of the Proposed Rule, 299A, 299C, 299D.3.a., and 299F, which refer to this provision, would have to be amended to reflect the change in title of PSC 299C.1.

Limitation on Substantial Change

Minnesota law requires the Chief Hearing Examiner to promulgate procedural rules for hearings "relating to recessing and reconvening new hearings when the proposed final rule of an agency is substantially different from that which was proposed at the public hearing." M.S.A. §15.052, Subd. 4 (1978 Supp.). The Chief Hearing Examiner has done this by adopting H.E. 111. This Rule sets out factors which the Chief Hearing Examiner considers in determining whether a proposed final rule is substantially different from the Proposed Rule on which public hearings were held. The Chief Hearing Examiner must consider the degree to which the proposed final rule:

a. Affects classes of persons not represented at the previous hearings;

b. Goes to a new subject matter of significant substantive effect; or

c. Makes a major substantive change that was not raised by the original Notice of Hearing in such a way as to invite reaction at the hearing; or

d. Results in a rule fundamentally different from that contained in the Notice of Hearing.

9 M.C.A.R. §2.111.

Discussion and Analysis of Factors

The first factor to consider is whether the proposed final rule affects classes of persons not represented at the previous hearing. The proposed amendment would not affect any persons other than utility companies and customers of utility companies. These two classes of persons are precisely those which were represented at the series of hearings held on the Proposed Rule.

The second factor to consider is whether the Proposed Final Rule goes to a new subject matter of significant substantive effect. The proposed amendment does not deviate in subject matter from the Proposed Rule. Both the proposed amendment and the Proposed Rule address the subject of terminations of utility service during periods of cold weather. The Proposed Rule defines periods of cold weather as days on which the temperature is predicted to fall to 32° Fahren-

heit or below, while the proposed amendment defines periods of cold weather as the cold weather months. However, the subject matter remains the same.

The third factor to consider is whether the Proposed Final Rule makes a major substantive change that was not raised by the original Notice of Hearing in such a way as to invite reaction at the hearing. The substance of the proposed amendment was raised in such a way that reaction at the hearing was not only invited, but was received. Substantial amounts of citizen testimony were received to the effect that the Proposed Rule should be amended to prohibit utility shutoffs during the cold weather months. Utility companies also testified concerning the substance of the proposed amendment. In fact, various utility company representatives characterized the Proposed Rule as effectively being a prohibition against shutoffs during the cold weather months, and based their testimony on this perceived effect of the Proposed Rule. Testimony along these lines was received from Interstate Power Company at the Albert Lea hearing, from Larry Esko of Minnesota Power and Light, at the Grand Rapids hearing, and Jay Meister of Otter Tail Power Company at the Little Falls hearing. Since much of the testimony received, from both citizens and from utility companies, centered around the substance of the proposed amendment, it cannot reasonably be asserted that the proposed amendment would make a substantive change that was not raised by the original Notice of Hearing in such a way as to invite reaction at the hearing. The presentation of the Commission staff also addressed the substance of the proposed amendment and requested that people comment upon it. This was done both by the initial statement of Stewart Mitchell given at each hearing, and by comments of Randy Young at all hearings after the proposed amendment was first suggested in Albert Lea. Statements made by the staff in this manner also effectively invited public reaction to the proposed amendment. Also, many utility companies which did not offer oral testimony at the hearings had representatives

attending the hearings. These companies have had the opportunity to submit written comments after the close of the final hearing, and in this way have an opportunity to discuss and react to the proposed amendment. Since the bulk of the testimony centered around the substance of the proposed amendment, it cannot reasonably be argued that it was not presented in such a way to invite reaction at the hearing.

The fourth factor to consider is whether the proposed final rule would result in a rule fundamentally different from that contained in the Notice of Hearing. The proposed amendment would not change the fundamental character or philosophy of the Proposed Rule viewed as a whole. The Proposed Rule contains two essential provisions. The first is the prohibition on shutoffs under the specified circumstances, and the second is the payment plan provision. The inclusion of the proposed amendment would not alter this structure at all. The prohibition on shutoffs would merely be based upon different circumstances, that is, upon the time of year instead of upon the temperature on a particular day. And, the payment plan provision would not be disturbed.

In looking at the prohibition alone, the practical effect of the proposed amendment is similar to that of the Proposed Rule. The proposed amendment would not significantly expand the number of days on which the prohibition against shutoffs would be effective. In examining the weather data submitted by Minnesota Power and Light Company, from the Duluth office of the National Weather Service, covering the months of October 1978 to April 1979, under the currently existing rule, there would be 94 days on which a shutoff could occur, under the Proposed Rule, 30 days on which a shutoff could occur, and under the proposed amendment, 21 days on which a shutoff could occur (assuming that the actual temperatures were predicted). This is out of a total of 212 days during that period. The Proposed Rule

would prohibit shutoffs on 64 more days than the existing Rule, and the proposed amendment would add only 9 days. Additional data is being submitted on this question by Ms. Swendseid.

Additional data obtained from the National Weather Service shows the close relationship which exists between the October 15 and April 15 dates and 32° Fahrenheit. This data is set out below:

	Average date of first occurance of 32°	Date normal low temp. drops to 32°	Date normal low temp. rises to 32°	Average date of last occurance of 32°
International Falls	N/A	Oct. 19	April 25	N/A
Duluth	Oct. 3	Oct. 26	April 21	May 13
Minneapolis-St. Paul	Oct. 13	Oct. 31	March 8	April 29

These dates establish the period over which the Proposed Rule will be expected to prohibit shutoffs. These dates are very close to the dates of the cold weather months.

Considering all of the items above, there is not a large enough difference to say that the proposed amendment would result in a Rule fundamentally different than the Proposed Rule.

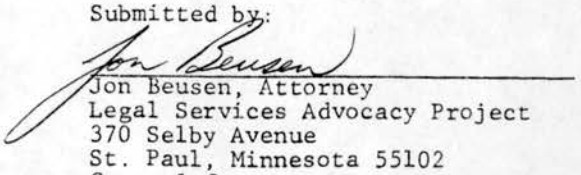
The intent of the proposed amendment is identical to that of the Proposed Rule. Each is intended to protect the health and safety of customers by prohibiting shutoffs of utility service necessary to maintain the primary heat source of the customer's dwelling during the harsh Minnesota winters. At the Minneapolis hearing, Commissioner Parish expressed essentially this view.

The testimony of the utility companies that the Proposed Rule effectively creates a prohibition against shutoffs during the cold weather months is another indication that the proposed amendment would not result in a fundamentally different Rule than the Proposed Rule.

The rationale behind the requirement that rules hearings be reconvened if the Chief Hearing Examiner determines that the final rule as proposed by the agency is substantially different from the Proposed Rule on which hearings were held, is to prevent an agency from effectively avoiding the public hearing requirement by making substantial amendments without giving the public an opportunity to be heard. The situation presented here is essentially different. Here, the proposed amendment actually resulted from, and is supported by, the testimony received at public hearings. To call the proposed amendment a substantial change which would require further hearings, would not protect the public from an abuse of the public hearing requirement, but would be a hindrance to effective public participation in rulemaking. An administrative agency would be much less likely to adopt suggestions made by the public during public hearings, even though the proposed changes may be reasonable and supported by the evidence, if the agency might be faced by the cost and time required to hold additional public hearings. This would discourage an agency from adopting public suggestion and would dilute the effectiveness of public participation in rulemaking. This would be contrary to the obvious intent of the public hearing requirement.

In summary, the proposed amendment which would remove the prohibition upon shutoffs of utility service based on temperature and would replace it with a prohibition on shutoffs during the cold weather months would not be a substantial change under the factors required to be considered by the Rules of the Office of Hearing Examiners. The proposed amendment would also not violate the spirit or the intent of the rulemaking procedure as set out in the Minnesota Administrative Procedures Act. On the contrary, adoption of the proposed amendment, which is necessary and reasonable and supported by the evidence received at public hearings, would further the cause of effective public participation in the rulemaking process, and would enhance the health and safety of utility consumers in Minnesota.

Submitted by:



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STATE OF MINNESOTA
OFFICE OF HEARING EXAMINERS
FOR THE PUBLIC SERVICE COMMISSION

In the Matter of the Proposed Adoption of a Rule Governing Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather and Repeal of PSC 299 Cold Weather Rule.	HE Docket No. PSC-80-020-RD PSC Docket No. A-8117-27

SUPPLEMENTAL COMMENTS OF
MINNESOTA GAS COMPANY

Minnesota Gas Company ("Minnegasco") is the largest retail gas distributor in Minnesota, providing service to over 380,000 customers, of which over 347,000 are residential customers. Minnegasco is vitally interested in, and would be seriously affected by, the Commission's action in this docket.

Minnegasco previously filed Comments in this docket on April 13, 1979 ("Initial Comments"). At that time, a proposed rule had not yet been formulated. Minnegasco requests that the Hearing Examiner and the Commission again review these Initital Comments, particularly pages 8-13 which contain specific information on Minnegasco's credit and collection experience.

Minnegasco has joined in filing Joint Comments with nineteen gas and electric utilities requesting amendments to portions of the Commission's proposed rule. These Supplemental Comments more specifically express Minnegasco position on two issues:

- customers disconnected after April 15 will be reconnected only upon payment of the past due amount; and
- the Commission lacks jurisdiction to change the proposed rule to impose a complete ban on shut-offs.

Minnegasco agrees with the Commission that those persons who are unable to pay their fuel bills need assistance to protect them against hardship. However, this problem--along with that of fuel oil users who cannot pay their fuel oil bills--is a social welfare problem of greater dimension than the Commission has authority or resources to remedy. The Commission's proposed action is an inappropriate solution and will merely delay effective legislative action on this problem.

Minnegasco has never had a shut-off policy which would endanger the health or safety of its customers. During the 1978-79 heating season, for example, Minnegasco did not disconnect a residential hearing customer for a delinquent bill after November 9, 1978.

As pointed out in Minnegasco's Initial Comments, a rule--such as the one proposed--which results in a prohibition of utility shut-offs is not in the public interest. It will

result in increased working capital requirements (Initial Comments, p. 11) as well as increased costs of collection and bad debt losses (Initial Comments, pp. 11-13). These are all legitimate costs of doing business which will be passed on to all ratepayers. The result is that those who pay continuously will also pay more.

1. Customers disconnected after April 15 will be reconnected only upon payment of the past due amount.

As pointed out at the public hearings, the Commission's proposed rule has failed to address the situation of a customer disconnected at the end of one cold weather period who is still off-line at the beginning of the next cold weather period. These customers must not be reconnected unless the full amount of the delinquency is paid.

A customer who has not paid for utility service in the winter will be terminated in the spring. The disconnected customer has up to six months to arrange for payment of the bill. This is a very different situation from that of a customer facing disconnection during cold weather. To ensure that everyone will have a reasonable minimum amount of time to obtain assistance, the provision could be drafted so that it applies only to those customers disconnected between April 15 and September 1. This would allow all customers at least six weeks to obtain assistance through private or public assistance agencies if they could not pay their bills themselves.

If the Commission fails to adopt such a provision and continues with its proposed cold weather rule, it will create--maybe unwittingly--a class of customers who become second and third generation or permanent delinquents. Imposing these costs upon prompt paying ratepayers casts an undue economic burden on them and is unreasonable and unduly discriminatory. To balance the interests of protecting the health of those who cannot pay and the financial integrity of those who do, the Commission must, if it adopts the proposed rule, require payment in full before reconnection.

2. The Commission lacks jurisdiction to change the proposed rule to impose a complete shut-off ban.

The Public Utilities Act (Minn. Stat. §216B.06) clearly states that "no public utility shall directly or indirectly, by any device whatsoever, or in any manner, charge, demand, collect, or receive from any person a greater or less compensation for any service..." Additionally, Minn. Stat. §216B.03 and .02, subd. 5, state that rates, including "any rules, regulations, practices, or contracts..." shall not be "unreasonably preferential, unreasonably prejudicial or discriminatory, but shall be sufficient, equitable and consistent in application to a class of consumers." A complete ban on winter shut-offs for a six-month period would violate these sections, allowing preferential treatment for those who choose not to pay. Clearly the Commission is without jurisdiction to act in such a fashion.

3. Conclusion.

The problem of low and moderate income persons facing high energy bills with no means to pay them is one which requires legislative action.

The Commission's proposed cold weather rule must address the issue of customers disconnected after April 15 who have not paid their bills by October 15, requiring that such customers need only be reconnected after they have paid the full amount of the delinquency.

The Commission is without jurisdiction to propose a rule completely banning shut-offs.

Respectfully submitted,

Minnesota Gas Company

By Patricia Ann Burke

Patricia Ann Burke, Attorney
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Kate

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Cold Weather Rule

RECEIVED
OCT 31 1979
MINN... ...SION
SERVICE COMMISSION

October 30, 1979

Mr. Richard DeLong
State Office of Hearing Examiners
1745 University Ave.
St. Paul, MN

Dear Mr. DeLong:

This is a letter to clarify in writing the position of Minnesota Citizen Action and its member organizations with regard to a proposed rule governing disconnection of service to gas and electric utility customers.

First and foremost, we are convinced that the "Minimum temperature restriction" (clause C1) should be modified to a "Winter months restriction" which would disallow all residential utility shutoffs from October 15th to April 15th. (Our people from the Iron Range support expansion of those dates to September 1 to May 31.) This protection against winter shutoffs must apply to every residential customer in Minnesota. No rule which requires each individual customer to prove his/her need for protection or which requires agreement to some payment plan could ever adequately protect Minnesotans from freezing in the winter.

However, we also believe that the rule should include an incentive for people to pay their bills. Extending protection from shutoffs beyond the winter months (April 15) to persons complying with payment agreements would provide such an incentive. The rule should require that a utility company offer at least two specific payment agreement options to any residential customer who falls behind on winter utility bills.

1) One of these options should be the 12 month deferred payment agreement with the deletion of "the payment of a reasonable amount of the outstanding bill at the time the agreement is entered into"(clause 3a).
2) The second specific payment agreement option would have residential customers paying 10% (or more if the customer chooses) of their entire bill each month and would require total payment of the outstanding bill by August 31.
3) In addition, the customer and company may come up with some other alternative payment agreement.

No interest or penalties should be charged under any of the payment agreements and the choice of payment agreements must be left up to the customer. Any customer who agrees to one of the payment options could not be shut off at the end of the winter ban (April 15). Thus there would be a strong incentive for people to comply with a payment agreement and avoid being shut off on April 15.

cc: Meredith FOR Rule file.

Finally, the PSC rule should provide for appeals against companies or customers for abusing the intent of this rule. Thus the PSC could review cases where specific companies are charged with violating the rule or where individual customers are accused of falling behind unnecessarily when they have the ability to pay. Fines of $500 or more should be levied against companies for cases of harassment of customers or violations of the rule.

This letter should be considered a final clarification of our position which was somewhat mistakenly presented in Grand Rapids on October 22, 1979.

Sincerely,

Martha Ballou

Martha Ballou, Staff Director
Minnesota Citizen Action
MB/hdm

cc: Katherine E. Sasseville
Roger L. Hanson
Richard J. Parish
Juanita R. Satterlee
Lillian Warren-Lazenberry

COMMISSION ORIGINAL

NSP

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

October 30, 1979

Ms. Mary Louise Harty
Executive Secretary
Public Service Commission
7th Floor American Center Bldg.
Kellogg & Robert Sts.
Saint Paul, Minnesota 55101

RECEIVED
Dept. of Public Service
OCT 30 1979
Commission Support

Re: A-8117-27/PSC-80
Adoption of a Cold Weather Rule

Dear Ms. Harty:

On this date, we have filed with the Hearing Examiner in the above docket a Statement in Opposition to the Adoption of a Cold Weather Rule.

Enclosed for your information and convenience are nine copies of the Statement.

Yours very truly,

Richard J. Lebens

Richard J. Lebens
General Manager of Rates

Encs.

10-30-79
5 - comm.
1 - R. Jones
1 - Mary Harty
1 - Meredith Erickson
1 - E.

RECEIVED
Dept. of Public Service
OCT 30 1979
Commission Support

STATE OF MINNESOTA
OFFICE OF HEARING EXAMINER
FOR THE MINNESOTA PUBLIC SERVICE COMMISSION

In the Matter of the Proposed Adoption of a Rule Governing Disconnection of Service to Gas and Electric Utility Customers During Periods of Cold Weather and Repeal of PSC 299 Cold Weather Rule.	HE Docket No. PSC-80-020-RD PSC Docket No. A-8117-27

COMMENTS OF

NORTHERN STATES POWER COMPANY

October 30, 1979

I.

NSP OPPOSES THE PROPOSED COLD WEATHER RULE BECAUSE IT WILL NOT ACCOMPLISH ITS INTENDED PURPOSES AND CAN PLACE A SUBSTANTIAL FINANCIAL BURDEN ON THOSE IT PURPORTS TO HELP.

On September 14, 1979, the Public Service Commission of Minnesota announced public hearings on the adoption of a proposed rule regarding disconnection of utility services during cold weather months and repeal of the current cold weather rule. Northern States Power Company opposes the proposed rule because it will not accomplish its intended purpose. In addition to demonstrating the deficiencies in the proposed rule, NSP will offer an alternative cold weather proposal. Although NSP's proposal does not provide a permanent solution to the problem under consideration, it is NSP's opinion that the proposal more satisfactorily reduces the ultimate financial impact of high winter fuel costs.

NSP's major objections to the proposed rule are:

1. It does not help customers pay rising utility bills.

2. It fails to identify the class of customers it intends to protect.

3. It does not require customers to make payments during the cold weather months.

4. It will create substantial hardships for those it intends to protect.

A. The Proposed Rule Does Not Help Customers Pay Rising Utility Bills.

In explaining the need for protection against disconnection of utility service in the PSC Statement of Need and Reasonableness (hereinafter "Statement"), the Commission recites geometrically increasing fuel costs and the harshness of Minnesota winters. The threshold issue not addressed by the proposed rule is does the rule intend to protect persons against disconnection of service because of inability to pay the increase in utility bills or because of inability to pay any utility bills? Harsh winters are not new to Minnesota, nor are utility bills; and it must be assumed that the discovery of these two ingredients did not precipitate the proposed rule. The proposed rule must have been deemed necessary because of the increased cost of utility service during cold weather periods. Yet the rule does not provide that utility customers must pay for utility service during cold weather periods at a minimum level perhaps some level established at a date prior to the recent inflationary trends. The rule establishes a blanket prohibition to the disconnection of

utility service from October 15 to April 15, a period of six months. This moratorium has nothing to do with increased costs of fuel. The position of the Commission, as evidenced by the proposed rule, is, apparently, that because of rapidly accelerating utility costs, utility customers need not pay for any service during six months of cold weather.

This conclusion is clearly supported by the rejection of the standard set forth in the Public Utilities Regulatory Policy Act of 1978 (hereinafter "PURPA") that a customer must prove his inability to pay all or part of his utility bills. In lieu thereof, the proposed rule adopts a 32° minimum temperature restriction which prohibits the termination of utility service for all customers without regard to their ability to pay. If the Commission intended that relief be given for the incremental increase in utility costs, the PURPA requirement should not have been disregarded. Perhaps an explanation is that the Commission, recognizing that many other costs, including food and clothing, have also increased because of the current inflation, intends to provide relief through the one service it can control.

B. The Proposed Rule Fails To Properly Identify The Class Of Customers It Intends To Protect.

The proposed rule does not distinguish between

those who can pay for increased utility costs and those who can not. Although relying on PURPA to justify the proposed rule, the Commission then abandons the total philosophy of PURPA.

PURPA's intent is clearly portrayed in the recently published proposed Department of Energy guidelines. These proposed guidelines, in part, provide:

> "Section 115(g)(2) of PURPA provides that service may not be terminated if a consumer establishes inability to pay for service in accordance with the requirements of the utility's billing, or ability to pay only in installments during any period when termination would be especially dangerous to health, as determined by the State regulatory authority or nonregulated utility.
>
> In DOE's opinion, the following are periods especially dangerous to health: The entire winter season and/or a period when the consumer or party residing at the consumer's address is or is likely to become seriously ill as a result of, or a serious threat to human safety may result from service termination. <u>To provide reasonable protection during such situations, the State regulatory authority or nonregulated utility should define or establish the following</u>:
>
> (1) Periods when postponement of termination should be granted,
>
> (2) All steps required of a consumer asserting the presence of serious illness or that serious illness may follow termination,

(3) Number of times postponement of termination of service for health related reasons may be granted,

(4) All steps required of a consumer asserting inability to pay or ability to pay only in installments,

(5) All steps required of a utility in responding to assertions of inability to pay or ability to pay only in installments,

(6) Procedure for resolving disputes about assertions of inability to pay or of serious illness,

(7) An installment plan which permits flexibility based on the amount of money owed, consumer's ability to pay, consumer's payment history, time that the debt has been outstanding, reasons why the debt has been outstanding, and any other relevant factors, and

(8) All steps required of a utility in the event a consumer does not meet the requirements of the agreed upon installment plan."
(Emphasis added.)

These guidelines clearly contemplate identification of those customers who can establish they are unable to pay for the increased cost of fuel and installment plans which place an obligation upon the customer to meet the terms of said installment plans.

By failing to limit its application, the proposed rule encourages those who are able to pay for utility service not to do so during the moratorium period. During the 1978-79

moratorium 39,019 NSP customers ceased paying their utility bills. Within a few weeks following the end of that moratorium approximately 32,000 (over 80%) satisfied their arrears obligations. While some customers did have difficulty with utility bills during the last moratorium, NSP provided them with reasonable deferred payment arrangements. It is evident that thousands of NSP customers ceased paying simply because they were not required to. The proposed rule will compound this undesirable result by extending the non-payment period from 4 to 6 months. The increased costs associated with the non-payment of bills must be borne by all those customers who continue to pay.

C. The Proposed Rule Does Not Require Customers To Make Payments During A Six Month Period.

The proposed rule establishes a complicated scheme of "deferred payment agreements" and "alternative payment agreements". The Commission offers the following explanation for these payment arrangements:

> "The Deferred Payment Agreement of proposed rule PSC 299 B 3 is necessary and reasonable to protect customers from ending up with an unmanageable bill at the close of the heating season if no payments have been made. Compelling payment in installments increases the likelihood of payment and decreases the likelihood of eventual shutoff. If delinquent customers are not compelled to pay, all ratepayers would have to bear the burden." (Statement, page 10)

Not only has the Commission correctly identified the problems associated with unpaid utility bills, this statement is totally consistent with the policy of the United States Congress as set forth in the PURPA standards. However, the proposed rule neither compels the customer to enter into a payment arrangement nor compels him to make payments once an arrangement is made. Since the rule proposes a six month blanket moratorium, it does not even provide an incentive for the customer to enter into, or make payments under, a payment arrangement. To the contrary, the six month moratorium invites customers to have "unmanageable bills" at the end of the heating season by placing no obligation upon them to either prove they are unable to pay all or part of their bills or to make any payments. As NSP's experience during the 1978-79 moratorium shows, the only incentive to enter into a payment arrangement occurs near the end of the moratorium to prevent termination of service when the moratorium is lifted.

D. The Repayment Provision Of The Proposed Rule Will Create Substantial Financial Hardships For Those Who Are Unable To Pay For Increased Winter Fuel Bills.

The proposed rule allows customers up to 12 months to repay accumulated arrears. By so doing it allows customers

to pyramid arrears into successive cold weather periods. The effect will be utility bills which customers will never be able to pay. As stated above the only incentive to enter into a payment arrangement occurs near the end of the moratorium to prevent termination of service when the moratorium is lifted. If a customer enters into a 12 month payment arrangement in March with the first payment due in April, the repayment period totally overlaps the next succeeding cold weather period when **his** utility bills will again increase and during which period a blanket moratorium is again imposed.

NSP is opposed to the lengthy repayment period because it creates the danger of pyramiding of past-due balances so that some customers may never be able to pay their arrears. This situation not only creates great anxiety for the customer, it also accomplishes exactly that which the Commission has stated it wants to avoid - "If delinquent customers are not compelled to pay, all ratepayers would have to bear the burden." (Statement, p. 10, emphasis added.)

On the other hand, in operation the proposed rule can create payments so high that customers will never be able to satisfy them. Section B.4 defines "Deferred payment period" as the "12 month period commencing with the first day of the period covered by an outstanding bill." Assume that date is October 1 and the customer enters into a 12 month payment plan

calling for the first payment on November 1. Then assume the customer makes no payments during the moratorium because there is no provision therein compelling him to do so. If the customer commences payments on April 15, when the moratorium ends, he will have only six months to satisfy his entire arrears. We submit that many customers could be faced with "unmanageable arrears".

II.

CONCLUSION

NSP reaffirms its support of the Joint Comments of Minnesota Investor-Owned Utilities. The rule proposed in the Joint Comments not only meets the requirements of PURPA, it more satisfactorily helps Minnesotans who have difficulty in paying winter utility bills. The real problem is one of income and income distribution and its solution is beyond the legal and technical authority of the Commission. Resolution must derive from other branches and agencies of government.

Any rule adopted in this proceeding can not address <u>how</u> utility bills will be paid. It can only address <u>when</u> they will be paid for those who use utility service must ultimately pay for it. In NSP's opinion, the rule proposed in the Joint Comments better solves the "when" problem than does the proposed Commission rule.

NSP proposes another alternative, which it also feels is better than the proposed Commission rule. This alternative simply provides:

1. Where the residential primary heat source is affected, a moratorium on the disconnection of utility service from December 1 to March 31.

2. Installment payment arrangements which require that all customer arrears shall be satisfied on or before December 1 of the succeeding year (prior to the commencement of the moratorium).

The areas where this alternative proposal improves upon the proposed Commission rule are:

First, it recognizes that December 1 to March 31 encompasses the winter period. The last 15 days of October account for only 3.68% of the total average annual heating requirements, as measured by degree days. The first 15 days of April account for only 4.33%. In fact the entire 30 days of November account for only 11.98% of the total average annual heating requirements. Climatological data supplied from the National Weather Service facility at the Twin City Airport for calendar year 1978 indicates that the average temperature was above 32° starting the third week of March and went below 32° in the third week of November.

Second, a reduction in the length of the moratorium reduces the size of arrears at its end. It is recognized

that this proposal does not require payments during the moratorium period. However, it is NSP's opinion that the shortening of the non-payment period from 6 to 4 months will potentially reduce the accumulation of unmanageable arrears which must be paid before the commencement of the next moratorium.

Third, a reduction in the length of the moratorium increases the time for repayment of arrears.

Fourth, the requirement that all arrears be satisfied prior to the next moratorium prevents pyramiding of payments and provides an incentive to make payments.

Fifth, although this proposal does not identify the class of people who are unable to pay for winter utility services in full, it limits the period of time that those who can pay but chose not to, can withhold payment. It is suggested that a future, better prepared rule can address this problem.

Respectfully submitted,

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