



Alliant Energy Corporate Services
Legal Department
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Kent M. Ragsdale
Managing Attorney - Regulatory

July 1, 2013

Dr. Burl W. Haar, Executive Secretary
Minnesota Public Utilities Commission
121 Seventh Place East, Suite 350
St. Paul, MN 55101-2147

RE: Interstate Power and Light Company
Docket No. G001/M-13-_____
Demand Entitlement Filing

Dear Dr. Haar:

Enclosed for e-filing with the Minnesota Public Utilities Commission, please find Interstate Power and Light Company's (IPL) Annual Demand Entitlement Filing in accordance with Minnesota Rule 7825.2910, subpart 2.

Copies of this filing have been served on the Minnesota Department of Commerce, Division of Energy Resources, the Minnesota Office of the Attorney General – Residential and Small Business Utilities Division and the attached service list.

Respectfully submitted,

/s/ Kent M. Ragsdale
Kent M. Ragsdale
Managing Attorney - Regulatory

KMR/tao
Enclosures

cc: Service List

Interstate Power and Light Co.
An Alliant Energy Company

Alliant Tower
200 First Street SE
P.O. Box 351
Cedar Rapids, IA 52406-0351

Office: 1.800.822.4348
www.alliantenergy.com

STATE OF MINNESOTA

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger
David C. Boyd
Nancy Lange
J. Dennis O'Brien
Betsy Wergin

Chair
Commissioner
Commissioner
Commissioner
Commissioner

<p>IN THE MATTER OF INTERSTATE POWER AND LIGHT COMPANY'S ANNUAL DEMAND ENTITLEMENT FILING PURSUANT TO MINN. RULE 7825.2910, SUBP. 2</p>	<p>DOCKET NO. G001/M-13-_____</p>
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AFFIDAVIT OF SERVICE

STATE OF IOWA)
) ss.
COUNTY OF LINN)

Tonya A. O'Rourke, being first duly sworn on oath, deposes and states:

That on the 1st day of July, 2013, copies of the foregoing Affidavit of Service, together with Interstate Power and Light Company's Demand Entitlement Filing, were served upon the parties on the attached service list, by e-filing, overnight delivery, electronic mail, facsimile and/or first-class mail, proper postage prepaid from Cedar Rapids, Iowa.

 /s/ Tonya A. O'Rourke
Tonya A. O'Rourke

Subscribed and Sworn to Before Me
this 1st day of July, 2013.

 /s/ Kathleen J. Faine
Kathleen J. Faine
Notary Public
My Commission Expires on February 20, 2015

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Bobby	Adam	bobby.adam@conagrafoods.com	ConAgra	Suite 5022 11 ConAgra Drive Omaha, NE 68102	Paper Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
City	Attorney	N/A	City of Albert Lea	221 E Clark St Albert Lea, MN 56007	Paper Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
William A.	Blazar	bblazar@mnchamber.com	Minnesota Chamber Of Commerce	Suite 1500 400 Robert Street North St. Paul, MN 55101	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Michael	Bradley	bradley@moss-barnett.com	Moss & Barnett	4800 Wells Fargo Ctr 90 S 7th St Minneapolis, MN 55402-4129	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500 Saint Paul, MN 551012198	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Ronald	Giteck	ron.giteck@ag.state.mn.us	Office of the Attorney General-RUD	Antitrust and Utilities Division 445 Minnesota Street, BRM Tower St. Paul, MN 55101	Electronic Service 1400	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
David	Grover	dgrover@itctransco.com	ITC Midwest	444 Cedar St Ste 1020 Saint Paul, MN 55101-2129	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Annete	Henkel	mui@mutilityinvestors.org	Minnesota Utility Investors	413 Wacouta Street #230 St. Paul, MN 55101	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Linda	Jensen	linda.s.jensen@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street St. Paul, MN 551012134	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Jim	Krueger	jkrueger@fmcs.coop	Freeborn-Mower Cooperative Services	Box 611 Albert Lea, MN 56007	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Kavita	Maini	kmains@wi.rr.com	KM Energy Consulting LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Paper Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Jenny L.	Myers	jmyers@iwla.org	Izaak Walton League of America	1619 Dayton Ave. Suite 202 St. Paul, MN 55104	Paper Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Steven	Nyhus	swnyhus@flaherty-hood.com	Flaherty & Hood PA	525 Park St Ste 470 Saint Paul, MN 55103	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Kent	Ragsdale	kentragsdale@alliantenergy.com	Alliant Energy-Interstate Power and Light Company	P.O. Box 351 200 First Street, SE Cedar Rapids, IA 524060351	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	12 S 6th St Ste 1137 Minneapolis, MN 55402	Paper Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Matthew J.	Schuerger P.E.	mjpub@earthlink.net	Energy Systems Consulting Services, LLC	P.O. Box 16129 St. Paul, MN 55116	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Ron	Spangler, Jr.	rlspangler@otpc.com	Otter Tail Power Company	215 So. Cascade St. PO Box 496 Fergus Falls, MN 565380496	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List
Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	Electronic Service	No	GEN_SL_Interstate Power and Light Company_Interstate Power and Light Company General Service List

STATE OF MINNESOTA

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IN THE MATTER OF INTERSTATE POWER AND LIGHT COMPANY'S ANNUAL DEMAND ENTITLEMENT FILING PURSUANT TO MINN. RULE 7825.2910, SUBP. 2	DOCKET NO. G001/M-13-_____
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Statement Providing Justification for Trade Secret Information

Interstate Power and Light Company (IPL) is providing a non-public version of IPL's Petition for approval of its Demand Entitlement in the above captioned docket.

The non-public version of the filing contains trade secret information, as defined by section 13.37 subd. 1(b), of the Minnesota Statutes in that the data is the subject of efforts by IPL that are reasonable under the circumstances to maintain its non-disclosure, and derives independent economic value, actual or potential from not being generally known to, and being readily ascertainable by proper means by, other person who can obtain economic value from its disclosure or use. IPL has marked the information pursuant to the Commission's Revised Procedures for handling Trade Secret and Privileged Data. Minn. Rule, pt. 7829.0500.

Specifically, IPL respectfully requests that raw hourly weather data from DTN be treated as trade secret information. Public release of this information would harm IPL and its customers by violating the terms of contract between IPL and DTN. Because disclosure of the information would compromise IPL's ability to negotiate future contracts on terms and conditions most favorable to IPL and its customers, the harm of public disclosure outweighs the benefits of such disclosure.

Additionally, IPL respectfully requests that daily transport customer data and daily system gas be treated as trade secret information. Public release of this information would harm IPL and its customers since there are only two transport customers and releasing their data or the ability to calculate their data based on the difference between system and system net of transport, would allow competitors to reasonably estimate individual customer daily usage. Because disclosure of the information would compromise IPL's ability to maintain the confidentiality of individual customer data, the harm of public disclosure outweighs the benefits of such disclosure.

Accordingly, IPL believes the marked information contained in IPL's filing meets the definition of trade secret under Minn. Stat. § 13.37.

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**IN THE MATTER OF INTERSTATE
POWER AND LIGHT COMPANY'S
ANNUAL DEMAND ENTITLEMENT
FILING PURSUANT TO MINN. RULE
7825.2910, SUBP. 2**

DOCKET NO. G001/M-13-_____

SUMMARY OF FILING

Please take notice that on July 1, 2013, Interstate Power and Light Company (IPL) filed with the Minnesota Public Utilities Commission (Commission) a request to change its demand entitlements, effective November 1, 2013, in compliance with Minn. Rule 7825.2910, subp. 2. IPL requests Commission approval to implement the rate impact of this filing in the Purchased Gas Adjustment (PGA) factor, effective with November 1, 2013 usage. IPL will provisionally place the PGA changes into effect on November 1, 2013, subject to later Commission approval.

STATE OF MINNESOTA

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IN THE MATTER OF INTERSTATE
POWER AND LIGHT COMPANY'S
ANNUAL DEMAND ENTITLEMENT
FILING PURSUANT TO MINN. RULE
7825.2910, SUBP. 2

DOCKET NO. G001/M-13-_____

INTERSTATE POWER AND LIGHT COMPANY'S
DEMAND ENTITLEMENT FILING

COMES NOW, Interstate Power and Light Company (IPL), and hereby submits its Demand Entitlement filing pursuant to Minn. Rule 7825.2910, subp. 2.

In support of its filing, IPL states the following:

I. INTRODUCTION

IPL is filing a request to change its demand entitlements, effective November 1, 2013, for customers served with natural gas in the State of Minnesota, in compliance with Minn. Rule 7825.2910, subp. 2.

II. PROCEDURAL MATTERS

A. Summary of Filing

A one-paragraph summary of the filing accompanies this Petition pursuant to Minn. Rules Pt. 7829.1300, subp. 1.

B. Service on Other Parties

Pursuant to Minn. Rules Pt. 7829.1300, subp. 2, IPL has served a copy of this Petition on the Minnesota Department of Commerce, Division of Energy Resources (Department), the Minnesota Office of the Attorney General - Residential and Small Business Utilities Division and all parties on IPL's miscellaneous gas service list.

C. General Filing Information

Pursuant to Minn. Rules Pt. 7829.1300, subp. 3, IPL provides the following required information.

1. Name, Address, and Telephone Number of Utility

Interstate Power and Light Company
Alliant Tower
200 First Street S.E.
P.O. Box 351
Cedar Rapids, Iowa 52406-0351
(319) 786-4268

2. Name, Address, and Telephone Number of Utility Attorney

Kent M. Ragsdale
Managing Attorney – Regulatory
Interstate Power and Light Company
Alliant Tower
200 First Street S.E.
P.O. Box 351
Cedar Rapids, Iowa 52406-0351
(319) 786-7765

3. Date of Filing and the Date the Proposed Rate or Service Change Will Go into Effect

IPL is submitting this filing on July 1, 2013. IPL requests the Minnesota Public Utilities Commission (Commission) approval to implement the rate impact of this filing in the Purchased Gas Adjustment (PGA) factor, effective with November 1, 2013 usage. IPL will provisionally place the PGA changes into effect on November 1, 2013, subject to later Commission approval.

4. Statute Controlling Schedule for Processing the Filing

The applicable statute is Minnesota Stat. § 216B.16, subp. 7. This statute does not state a specific timeframe for Commission action. The applicable rules are Minn. Rules 7825.2910, subp. 2, 7829.1300, 7829.1400 and 7825.2910. Under Minn. Rules 7829.0100, subp. 11, the Commission treats all filings that do not fall into a specific category as miscellaneous tariff filings. Pursuant to Minn. Rule 7829.1400, subparts 1 and 4, initial comments on a miscellaneous tariff filing are due within 30 days of the filing, with replies due 10 days thereafter.

5. Utility Employee Responsible for Filing

Kent M. Ragsdale
Managing Attorney – Regulatory
Interstate Power and Light Company
Alliant Tower
200 First Street S.E.
P.O. Box 351
Cedar Rapids, Iowa 52406-0351
(319) 786-7765

Robyn Woeste
Manager, Regulatory Affairs
Interstate Power and Light Company
Alliant Tower
200 First Street S.E.
PO Box 351
Cedar Rapids, Iowa 52406-0351
(319) 786-4384

III. DESCRIPTION AND PURPOSE OF FILING

IPL, in compliance with Minn. Rule 7825.2910, subp. 2, is filing for a change in its demand entitlements. See the following items supporting this filing:

- Attachment A for detailed summary calculations
- Attachment B for detailed forecast methodology

- Accompanying electronic files used in developing the forecast¹.

The main contributing factor for the revision in demand levels is related to changes in IPL's contract with Northern Natural Gas (NNG) which will be effective November 1, 2013. IPL will submit a supplemental filing on November 1, 2013 reflecting the revised demand level.

Additionally, IPL is including in this filing, responses to the following Department recommendations from its November 28, 2012, *Response to Supplemental Comments* in Docket No. G001/M-12-737 for inclusion in future demand entitlement filings:

- provide an attachment listing all interruptible sales customers who switched between the interruptible sales class to either transportation or firm service, and vice versa, and the average annual usage by each customer over the previous three years; and
- provide hourly raw weather data, in Microsoft Excel and Access format, used to create the weather variables in the Company's design-day analysis.

In regard to the Department's recommendations identified above, IPL provides the following information:

A. *Changes in Interruptible Sales Class*

There were no changes since the last Demand Entitlement filing.

B. *Provide Hourly Raw Weather Data*

The forecast calculations, including the trade secret hourly raw weather data are provided electronically.

¹ IPL is only providing the Minnesota Department of Commerce with a copy of the CD at this time; due to the CD containing files that are in a format that cannot be eFiled with the Commission. IPL will provide a copy of the CD to other parties upon request.

IPL is also providing a written description of its Design Day Forecast Methodology in Attachment B to assist the parties in their analyses.

IV. CONCLUSION

WHEREFORE, IPL respectfully requests the Commission approve this filing in compliance with Minn. Rule 7825.2910, subp. 2.

DATED this 1st day of July, 2013.

Respectfully submitted,

Interstate Power and Light Company

By: /s/ Kent M. Ragsdale

Kent M. Ragsdale
Managing Attorney – Regulatory
Interstate Power and Light Company
Alliant Tower
200 First Street S.E.
P.O. Box 351
Cedar Rapids, Iowa 52406-0351
(319) 786-7765

Per Rule # 7825.2910
Subpart 2. B.

IPL Minnesota Gas
Demand Sales Volumes
FIRM DESIGN DAY

<u>Customer Class</u>	<u>Firm Design Day-Dth</u>	<u>No. of Firm Customers</u>
Residential	8,704	9,465
Commercial	4,139	1,201
Industrial	192	10
TOTAL	13,035	10,676

See Attachment
A Page 4 of 8
for calculations

Per Rule # 7825.2910
Subpart 2. C

IPL Minnesota Gas
Demand Sales Volumes
One Year by Customer Class

Therms Rate 010	Firm Rate 010			Total
	Jun-12 Residential	to Commercial	May-13 Industrial	
Jun	175,169	89,378	2,942	267,489
Jul	142,698	92,421	3,434	238,553
Aug	139,608	64,998	2,970	207,576
Sep	148,685	84,965	3,879	237,529
Oct	257,013	173,101	6,923	437,037
Nov	592,839	279,689	12,043	884,571
Dec	1,026,850	464,199	20,759	1,511,808
Jan	1,581,369	751,887	34,814	2,368,070
Feb	1,533,101	744,251	33,566	2,310,918
Mar	1,278,444	603,554	26,565	1,908,563
Apr	961,103	491,371	19,787	1,472,261
May	599,353	266,041	8,437	873,831
Annual Vol.	8,436,232	4,105,855	176,119	12,718,206
Winter	6,012,603	2,843,580	127,747	
Summer	2,423,629	1,262,275	48,372	
Total	8,436,232	4,105,855	176,119	12,718,206

1. Peak-day / Design-day study by class for the twelve-months ending one year from the proposed implementation date of the changes.

See Attachment A page 4 of 8.

2. Heating Degree Day (HDD) data for the most recent 12 months ending March 31 or September 30.

	<u>HDD</u>
Apr-12	479
May-12	119
Jun-12	26
Jul-12	0
Aug-12	35
Sep-12	171
Oct-12	577
Nov-12	852
Dec-12	1,294
Jan-13	1,510
Feb-13	1,306
Mar-13	<u>1,267</u>
	7,636

IPL utilizes an 88 HDD to calculate its peak design day. This is the highest HDD experienced over the last 20 years.

3. Historical and Projected Design-Day and Peak Demand Requirements

(1)	(2)	(3)	(4)	(5)
Heating Season Identify the upcoming heating season and the past four.	Number of Firm Customers	Design Day Requirement (Dth)	Total Entitlement plus Storage plus Peak Shaving (Dth)	Firm Peak Day Sendout (Dth)
Proposed 13-14	10,676	13,035	14,219	n/a
12-13	10,608	13,442	14,219	9,912
11-12	10,649	12,927	17,490	8,412
10-11	10,583	16,694	17,490	10,242
09-10	10,583	16,561	17,490	11,973

4. Demand Profile

Type of Capacity or Entitlement	Current Amount Dth	Proposed Change Dth	Proposed Amount Dth	Contract Expiration Date
TF-12 Base	3,377	0	3,377	10/31/22
TF-12 Variable	6,036	0	6,036	10/31/22
TF-5	4,006	0	4,006	10/31/22
TFX	800	0	800	10/31/22
FDD Reservation*	5,984	0	5,984	5/31/17
FDD Capacity*	68,992	0	68,992	5/31/17
SMS *	1,676	0	1,676	10/31/22
SBA *	0	0	0	
TFF*	0	0	0	
Other Storage *	0	0	0	
LP Peak Shaving	0	0	0	
LNG Peak Shaving	0	0	0	
Other	0	0	0	
Heating Season Total	14,219	0	14,219	---
Non-Heating Season Total	9,413	0	9,413	---
Total Capacity	14,219	0	14,219	---
Heating Season Forecasted Design Day	13,442	(407)	13,035	---
Non-Heating Season Forecasted Design Day	n/a	n/a	n/a	---
Heating Season Capacity Surplus/Shortage	777	407	1,184	---
Non-Heating Season Capacity Surplus/Shortage	n/a	n/a	n/a	---

* Not included in total.

9.08% Reserve Margin

INTERSTATE POWER AND LIGHT COMPANY
FIRM PEAK DAY REQUIREMENTS FORECAST
NNG EF - MN

Line	Calculate Model Inputs - Customers*				Calculations	
1	Customers 2009-10	10,648		0.00526		
2	Customers 2012-13	10,704		0.00175		
3	2009-2013 CAGR	0.18%			((line 2 - line 1) / line1)) / 3	
4	Forecasted Total Customers	10,723			line 2*(1+line 3)	
Estimate Design Day Throughput						
5	Years	2008-13	2007-2012	2006-2011	2006-2011	
6	Months	Nov-Mar	Nov-Mar	Nov-Mar	Nov-Mar	
7	Intercept	0.1387	0.1632	0.1922	0.1922	
8	HDD Coefficient	0.0149	0.0147	0.0144	0.0144	
9	R2	0.8736	0.8850	0.8924	0.8924	
10	Design Day HDD	88				
11	Modeled Throughput (Dth)	15,585			(line 7+(line 8 * line 10)) * line 4	
12	Design Day Interruptible (Dth)	2,550			Cell AA57 on 2013 Interruptible tab	
13	Modeled Firm Throughput (Dth)	13,035			(line 11- line12)	
Compare to historical data						
14	Heating Season	<u>2013-12</u>	<u>2011-12</u>	<u>2010-11</u>	<u>2009-10</u>	
15	Peak days	1/31/2013	1/19/2012	02/08/11	01/04/10	
16	Total Customers	10,704	10,663	10,683	10,648	
17	System Gas (Dth)	13,108	11,169	13,259	14,085	
18	Transport (Dth)	646	700	428	147	
19	Throughput (Dth)	12,462	10,469	12,831	13,938	line 17- line 18
20	Weather (HDD)	69	65	70	75	
21	Design Day (HDD)	88	88	88	88	
22	HDD Difference from Design Day	19	23	18	13	(line 21 - line 20)
23	Weather Adjustment to Throughput (Dth)	3,038	3,595	2,769	1,993	(line 22 * line 16 * line 8)
24	Weather Normalized Throughput (Dth)	15,500	14,064	15,600	15,931	(line19+line 23)
25	Interruptible (Dth)	2,550	2,057	3,065	3,004	= line 12
26	WN Firm Throughput (Dth)	12,950	12,007	12,535	12,927	(line 24 - line 25)
27	2013-2014 Firm Throughput Forecast (Dth)	13,035				max(line 13, line 26)
Allocate to classes - Customer						
28	2013 Residential Firm Customers	9,448				
29	2013 Commercial Firm Customers	1,199				
30	2013 Industrial firm Customers	10				
31	2013 Firm Customers	10,657			sum(lines 28,29,30)	
32	2013 Interruptible Customers	47			(line 16 - line 31)	
33	2014 Forecasted Total Customers	10,723			= line 4	
34	2014 Interruptible Customers	47			= line 32	
35	2014 Firm Customers	10,676			(line 4 - line 34)	
36	2014 Firm Residential Customers	9,465			(line 28 / line 31) * line 35	
37	2014 Firm Commercial Customers	1,201			(line 29 / line 31) * line 35	
38	2014 Firm Industrial Customers	10			(line 30 / line 31) * line 35	
Allocate to classes - Design Day Throughput						
39	2013 Residential Jan Sales (Dth)	158,137				
40	2013 Commercial Jan Sales (Dth)	75,189				
41	2013 Industrial Jan Sales (Dth)	3,481				
42	2013 Total Jan Sales (Dth)	236,807			sum(lines 39,40,41)	
43	2014 Residential Throughput (Dth)	8,704			line 39 / line42 * line 27	
44	2014 Commercial Throughput (Dth)	4,139			line 40 /line 42 * line 27	
45	2014 Industrial Throughput (Dth)	192			line 41 / line 42 * line 27	
46	2014 Total Firm Throughput(Dth)	13,035			sum(lines 43,44,45)	
Estimate Reserve Margin						
47	Standard Deviation of Residuals (Dth/customer)	0.0753				
48	95% Critical Value (1 sided)	1.64				
49	Critical Use per customer (Dth/customer)	0.1236			line 47 * line 48	
50	Customers	10,723			line 33	
51	Estimated reserve (Dth)	1,325			line 49* line 50	
52	Design Day Forecast (Dth)	13,035			Line 46	
53	Allowable reserve margin	10.2%			line 51 / line 52	
54	Allowable Peak + reserve (Dth)	14,360				

*Total customers include interruptible

Estimate of MN Interruptible load (Dth)

Customer	Total Summer Base	Daily Avg Base	Weather Sensitive Jan	Weather Sensitive Use/DD	2013 WS Load	Design WS load	Total 2013	Total Design Day
1	0	0	856	0.6	41.6	53.0	42	53
2	0	0	0	0.0	0.0	0.0	0	0
3	0	0	759	0.5	36.9	47.0	37	47
4	0	0	402	0.3	19.5	24.9	20	25
5	254	3	1271	0.9	61.7	78.7	65	82
6	0	0	468	0.3	22.7	29.0	23	29
7	1756	19	1406	1.0	68.3	87.1	87	106
8	18	0	406	0.3	19.7	25.1	20	25
9	740	8	845	0.6	41.1	52.4	49	60
10	5049	55	3638	2.6	176.8	225.4	232	280
11	9296	101	872	0.6	42.4	54.1	143	155
12	0	0	747	0.5	36.3	46.3	36	46
13	4	0	1941	1.4	94.3	120.3	94	120
14	1284	14	1475	1.0	71.6	91.4	86	105
15	0	0	586	0.4	28.5	36.3	28	36
16	6258	68	1081	0.8	52.5	67.0	121	135
17	2482	27	3092	2.2	150.3	191.6	177	219
18	379	4	-128	-0.1	-6.2	-7.9	0	0
19	819	9	424	0.3	20.6	26.2	29	35
20	0	0	314	0.2	15.2	19.4	15	19
21	19	0	1520	1.1	73.9	94.2	74	94
22	175	2	1302	0.9	63.2	80.7	65	83
23	8524	93	1367	1.0	66.4	84.7	159	177
24	4760	52	1279	0.9	62.2	79.3	114	131
25	782	8	906	0.6	44.0	56.2	53	65
26	226	2	1558	1.1	75.7	96.6	78	99
27	0	0	0	0.0	0.0	0.0	0	0
28	120	1	403	0.3	19.6	24.9	21	26
29	0	0	0	0.0	0.0	0.0	0	0
30	0	0	0	0.0	0.0	0.0	0	0
31	1576	17	319	0.2	15.5	19.7	33	37
32	0	0	0	0.0	0.0	0.0	0	0
33	0	0	0	0.0	0.0	0.0	0	0
34	0	0	299	0.2	14.5	18.5	15	19
35	0	0	0	0.0	0.0	0.0	0	0
36	0	0	0	0.0	0.0	0.0	0	0
37	0	0	791	0.6	38.5	49.0	38	49
38	23	0	521	0.4	25.3	32.3	26	33
39	0	0	0	0.0	0.0	0.0	0	0
40	0	0	0	0.0	0.0	0.0	0	0
41	0	0	0	0.0	0.0	0.0	0	0
42	0	0	0	0.0	0.0	0.0	0	0
43	0	0	0	0.0	0.0	0.0	0	0
44	40	0	976	0.7	47.4	60.5	48	61
45	133	1	148	0.1	7.2	9.2	9	11
46	65	1	422	0.3	20.5	26.2	21	27
47	0	0	0	0.0	0.0	0.0	0	0
48	0	0	0	0.0	0.0	0.0	0	0
49	0	0	0	0.0	0.0	0.0	0	0
50	0	0	404	0.3	19.6	25.0	20	25
51	0	0	0	0.0	0.0	0.0	0	0
52	0	0	561	0.4	27.3	34.8	27	35
							2,104	2,550

ALBG			
Days	Weather (HDD)		
	Jan	Jan 1/31/2013	Design
31	1420	69	88

5. Rate Impact

Please use the following table to illustrate the financial effects of the proposed change, based on the most recent Purchased Gas Adjustment (PGA), the first PGA which implemented the most recently approved demand change, and the last rate case.

Date to implement proposed change: 11/1/2013
 Date of previously filed demand change: 11/1/2012
 Docket No. of previously filed demand change: G001/M-12-737
 Date of last rate case: 5/1/1995
 Docket No. of last rate case: G001/GR-95-406

GENERAL SERVICE (ALL FIRM CUSTOMERS)

Dollars per Dth	Last Rate Case	Last Demand Change	PGA (as filed)	Proposed Changes	Result of Proposed Change			
					Change From Last Rate Case	Change From Last Demand Change	Change From PGA (as filed)	Change From PGA (as filed) \$\$
Date	May-95	Nov-12	Jul-13	Nov-13				
Commodity Cost of Gas (WACOG)	\$2.1346	\$3.7051	\$3.8899	\$3.8899	82.23%	4.99%	0.00%	\$0.0000
Demand Cost of Gas	\$1.1976	\$1.1227	\$1.2378	\$1.2378	3.36%	10.25%	0.00%	\$0.0000
Commodity Margin	\$1.9769	\$1.9769	\$1.9769	\$1.9769	0.00%	0.00%	0.00%	\$0.0000
Total Cost of Gas	\$5.3091	\$6.8047	\$7.1046	\$7.1046	33.82%	4.41%	0.00%	\$0.0000
Average Annual Usage (Dth)	168	95	119	119	(29.17%)	25.26%	0.00%	
Average Annual Demand Cost of Gas	\$201.20	\$106.66	\$147.30	\$147.30	(26.79%)	38.10%	0.00%	\$0.0000
Average Annual Total Cost of Gas	\$892	\$646	\$845	\$845	(5.27%)	30.80%	0.00%	\$0.0000

SMALL VOLUME INTERRUPTIBLE CUSTOMERS

Dollars per Dth	Last Rate Case	Last Demand Change	PGA (as filed)	Proposed Changes	Result of Proposed Change			
					Change From Last Rate Case	Change From Last Demand Change	Change From PGA (as filed)	Change From PGA (as filed) \$\$
Date	May-95	Nov-12	Jul-13	Nov-13				
Commodity Cost of Gas (WACOG)	\$2.1346	\$3.7051	\$3.8899	\$3.8899	82.23%	4.99%	0.00%	\$0.0000
Demand Cost of Gas	\$0.0000	\$0.0000	\$0.0000	\$0.0000	n/a	n/a	n/a	\$0.0000
Commodity Margin	\$0.4620	\$0.4620	\$0.4620	\$0.4620	0.00%	0.00%	0.00%	\$0.0000
Total Cost of Gas	\$2.5966	\$4.1671	\$4.3519	\$4.3519	67.60%	4.43%	0.00%	\$0.0000
Average Annual Usage (Dth)	6,978	7,549	7,303	7,303	4.66%	(3.26%)	0.00%	
Average Annual Demand Cost of Gas	\$0	\$0	\$0	\$0	n/a	n/a	n/a	\$0.00
Average Annual Total Cost of Gas	\$18,119	\$31,457	\$31,782	\$31,782	75.41%	1.03%	0.00%	\$0

LARGE VOLUME INTERRUPTIBLE CUSTOMERS

Dollars per Dth	Last Rate Case	Last Demand Change	PGA (as filed)	Proposed Changes	Result of Proposed Change			
					Change From Last Rate Case	Change From Last Demand Change	Change From PGA (as filed)	Change From PGA (as filed) \$\$
Date	May-95	Nov-12	Jul-13	Nov-13				
Commodity Cost of Gas (WACOG)	\$2.1346	\$3.7051	\$3.8899	\$3.8899	82.23%	4.99%	0.00%	\$0.0000
Demand Cost of Gas	\$0.0000	\$0.0000	\$0.0000	\$0.0000	n/a	n/a	n/a	\$0.0000
Commodity Margin	\$0.8085	\$0.8085	\$0.8085	\$0.8085	0.00%	0.00%	0.00%	\$0.0000
Total Cost of Gas	\$2.9431	\$4.5136	\$4.6984	\$4.6984	59.64%	4.09%	0.00%	\$0.0000
Average Annual Usage (Dth)	705,880	0	0	0	(100.00%)	n/a	n/a	
Average Annual Demand Cost of Gas	\$0	\$0	\$0	\$0	n/a	n/a	n/a	\$0.00
Average Annual Total Cost of Gas	\$2,077,475	\$0	\$0	\$0	(100.00%)	n/a	n/a	\$0.00

INTERSTATE POWER COMPANY
Demand Allocation based on Firm Customers Peak Day
Per District NNG System Operating Report
PEAK DAY
31-Jan-13

HEATING SEASON: 2012-2013
Sales Gas - Firm Only

Minnesota TBSs		Dth	Transported
733-011-01	AL LEA - West	6,951	
733-012-01	AL LEA - North	3,843	
733-014-01	AL LEA - N.E.	0	
733-015-01	AL LEA - #1-C	94	Customer #1
733-016-01	AL LEA - #1-D	13	243
733-020-01	GENEVA	198	
733-022-01	CLARKS GROVE	261	Customer #2
733-023-01	CONGER	71	403
733-025-01	HOLLENDALE	186	
733-091-01	ADAMS	926	
733-101-01	ROSE CREEK	174	
733-116-01	WYKOFF	173	
	LYLE	218	
		13,108	646
Interruptible Sales			2550
TOTAL FIRM SENDOUT		9,912	

IPL Minnesota Gas Design Day Forecast Methodology

Overview

IPL produces the design day forecast to ensure that it has sufficient gas to meet the needs of its firm Minnesota customers even under extreme weather conditions. IPL uses the following steps to forecast Minnesota firm customer design day throughput:

- 1) Calculate model inputs
- 2) Estimate firm design day throughput
- 3) Compare to historical data
- 4) Allocate to classes
- 5) Calculate reserve margin

Calculate model inputs

The three main calculations for model inputs for the design day forecast are number of customers, daily throughput, and design day weather.

- IPL forecasts the future number of customers by applying a historical growth rate to the prior year customer count.
- IPL calculates daily throughput using system gas and transport customer usage for the period of November 2008 to March 2013. Since transport service is not firm, transport usage is subtracted from system gas resulting in daily throughput. Daily throughput is then divided by the number of customers resulting in a daily throughput per customer¹
- IPL estimates extreme weather conditions by assuming a design day of 88 heating degree days (HDD), the coldest day in the last 20 years. Gas day

¹ The calculations of throughput per customer are performed in the SAS program *IPL-2013-5yr-MN.sas*, which produced the throughput data found in the Trade Secret Excel file *MN Reserve Calculation 2013.xlsx* on the tab named Database.

weather is computed using hourly weather from Albert Lea² for the 24 hour period ending at 10 am, matching the overnight temperatures to the timing of the gas throughput. Using the gas day weather, daily HDD are calculated using a base of 65 degrees³. To reduce variability in the model data, IPL removes days that are not representative of design day conditions such as weekdays, holidays, and days with average temperatures over 50 degrees⁴.

Estimate Firm Design Day Throughput

The daily throughput per customer is then regressed with weather⁵, using Ordinary Least Squares. To forecast the design day throughput, the design day HDDs and number of customers⁶ are substituted into the regression model.

In order to calculate firm design day throughput, interruptible load⁷ is estimated and subtracted from modeled throughput. To estimate interruptible load, individual customer data is split into base and weather sensitive load. The weather sensitive load is adjusted to design day conditions. Total interruptible load is then the sum of the base and adjusted weather sensitive load.

Compare to historical data

The regression model also allows the computation of weather normalized sales which are then compared to the modeled forecast. Specifically, the change in HDDs from the design

² Weather at the Albert Lea airport station as provided by third party provider DTN and is provided in the Trade Secret file *AL Hourly Weather.xlsx*. An example of the gas day weather calculations are found on rows 18,897 and 18,921.

³ HDD values can be found in the Trade Secret file *MN Reserve Calculation 2013.xlsx*.

⁴ Per the teleconference on March 20, 2013, inclusion of weekends, holidays, and warm days adds to the variability of the design day estimate.

⁵ Statistical Results of the regression are found in the file *Listing – IPL–2013 – 5yr – MN.lst* and on Attachment A line 7-9.

⁶ Forecasted customers are based on average growth rate and are found on Attachment A, page 4 line 4.

⁷ Estimation of interruptible load occurs in the Excel file *MN Dem Ent Peak Day Calc 2013-14.xls* on the tab labeled *2013 Interruptible*. Note this file is also the electronic version of Attachment A, page 5 of 8.

day is multiplied by the HDD coefficient from the model and by the historical number of customers to provide the weather adjustment.⁸ The weather adjustment is added to throughput to arrive at weather normalized throughput. The estimated interruptible load available under design day conditions is subtracted to arrive at estimated firm weather normalized (WN) design day throughput.

The modeled design day firm throughput is then compared to WN history. The WN throughput is considered the minimum forecast because it is based on observed values adjusted only for weather. Changes in the number of customers or customers changing rates could also impact the design day throughput.

Allocate to classes

The next step is to allocate the forecasted firm customers and the forecasted firm sales to the individual classes⁹. Customers are allocated based on the number of firm customers in the month of the highest throughput in the prior year. Please see Attachment A, page 4 of 8, for a summary of the calculations.

Estimate Reserve Margins

The regression analysis also calculates residuals for each daily observation. The standard deviation of the residuals provides a means of tying the historical actuals to the reserve margin calculation. For the 2013-2014 heating season, IPL calculates an allowable reserve of 10.2%¹⁰.

⁸ Calculations of weather normalized sales are found on Attachment A, page 4 line 14 through 26

⁹ This allocation occurs in Attachment A, page 4 on lines 28 to 46.

¹⁰ This calculation of the reserve margin follows IPL's recommended method to tie reserve margins to operational history. Calculations are found in the Trade Secret file *MN Reserve Calculation 2013.xlsx* on the tab labeled *Calculations as well as on Attachment A, page 4.*