COMMERCE DEPARTMENT

May 24, 2018

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101-2147

RE: **Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E001/RP-17-374

Dear Mr. Wolf:

Attached are the Comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matter:

Interstate Power and Light Company's 2017 Integrated Resource Plan

The *Petition* was filed on February 1, 2018 by:

Michael S. Greiveldinger
Managing Attorney
Interstate Power and Light Company
200 First Street SE
P.O. Box 351
Cedar Rapids, IA 52406-0351

The Department recommends **acceptance** and is available to answer any questions that the Minnesota Public Utilities Commission may have.

Sincerely,

/s/ CHRISTOPHER T. DAVIS
Analyst Coordinator

CTD/lt
Attachment

COMMERCE DEPARTMENT

Before the Minnesota Public Utilities Commission

Comments of the Minnesota Department of Commerce

Docket No. E001/RP-17-374

I. BACKGROUND

A. INTERSTATE POWER AND LIGHT

Interstate Power and Light Company (IPL or Company) is a subsidiary of Alliant Energy Corporation (Alliant Energy), which serves approximately 490,000 electric customers and more than 220,000 natural gas customers in Iowa. IPL currently owns electric generation facilities that produce approximately 2,738 Zonal Resource Credits towards Midcontinent Independent System Operator (MISO) requirements for the 2017-2018 planning year. IPL also has power purchase agreements (PPAs) for approximately 450 MW of wind and 400 MW from the Duane Arnold Energy Center nuclear plant.

On July 31, 2015, IPL sold its electric retail service territory to Southern Minnesota Energy Cooperative (SMEC) and no longer provides retail electric service to any Minnesota customers.[1] IPL is no longer a "public utility" as defined by Minn. Stat. § 216B.02, Subd. 4, but remains a "utility" as that term is defined at Minn. Stat. § 216B.2422 Subd. 1(b).[2] IPL has a 10-year power purchase agreement (PPA) with SMEC through 2025. The Company's resource needs assessment, completed in 2017, included the assumption that IPL would continue to serve SMEC's load through the study period.

B. INTERSTATE POWER AND LIGHT COMPANY'S PREVIOUS INTEGRATED RESOURCE PLAN

The Minnesota Public Utilities Commission (Commission) approved Interstate Power and Light Company's (IPL or the Company) 2014 Integrated Resource Plan (Docket No. E001/RP-14-77) on August 7, 2015, with the following stipulations:

[1] SMEC took ownership of the distribution assets, services territory, and electric accounts from IPL on the closing date of July 31, 2015.
[2] Page 3 of the Commission's June 8, 2015 Order in Docket No. E-001/PA-07-540, stated: "Immediately following the closing, IPL would withdraw from providing retail electric service in Minnesota and cease being a public utility in the state."

1. The Commission hereby approves IPL's 2014-2029 resource plan, as filed.
2. The Commission finds that IPL's resource plan should use short term power purchase agreements to cover capacity deficits until IPL's new Marshalltown combined cycle unit comes on-line in 2017.
3. The Commission finds that the record demonstrates, at this time, that IPL's resource plan should acquire approximately 200 megawatts of wind resources in the 2017-2019 timeframe.
4. The Commission finds that IPL's proposed amount of DSM [demand-side management], which on an annual basis averages 1.44 percent of IPL's retail sales, is reasonable for planning purposes.
5. The Commission finds that IPL has monitored the important environmental regulations that will impact its resources and operations.
6. IPL shall file its next resource plan on July 1, 2017.
7. This order shall become effective immediately.

C. IPL's RESOURCE ACQUISITIONS IN IOWA SINCE 2014 IRP

IPL listed the following resource actions since its 2014 IRP:

1. IPL commissioned its 630-MW natural gas-fired, combined cycle generating unit in Marshalltown, Iowa on April 1, 2017.
2. IPL received Iowa Utilities Board approval (IUB) for up to 500 MW of wind by 2020 in the New Wind 1 project.
3. IPL acquired the 99-MW Franklin County wind farm on April 1, 2017.
4. IPL requested advance ratemaking principles for up to 500 MW of additional wind for the New Wind II project by 2020 (IUB Docket No. RPU-2017- 0002).

D. IPL's IRP PLANNING PROCESS

1. IPL started with a system load forecast that it provided to MISO in November 2016. Although IPL's current contract with SMEC expires in 2025, IPL assumed that the contract would be extended throughout the planning period.
2. IPL compared its MISO coincident peak, including system reserve requirements, to its existing resources to determine the preliminary resource needs.
3. IPL developed alternatives to fill the resource needs:
    a. renewable electricity;
    b. DSM;[3]
    c. conventional supply-side generation; and
    d. short-term power purchase agreements (PPAs).

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[3] None of the DSM programs will be based in Minnesota.

4. IPL used the Electric Generation Expansion Analysis System (EGEAS)[4] model to develop its reference case by evaluating combinations of the resource alternatives to determine the optimal expansion plan considering a variety of risks and policy requirements.
5. IPL conducted sensitivity analysis under three different CO_2 costs: no carbon monetization; no carbon monetization, but adjusted the dispatch of existing units so that CO_2 emissions on these units ramp down 34 percent from 2012 levels by 2030; and Wood Mackenzie's fuel and market energy price forecasts, including ramping carbon price. Examples of the sensitivities included:
   - Load forecast;
   - Market economy energy availability;
   - Fuel costs;
   - Capital costs; and
   - Wind and solar costs.

E. IPL RESOURCE NEEDS

Table 1 below shows IPL's load and capability report both before and after generic additions from the base case.

Table 1: IPL Surplus/(Need) Before and After Generic Resource Additions

	Position Before Generic Additions MW Surplus/(Need)	Position After Generic Additions MW Surplus/(Need)
2017	285.1	285.1
2018	311.6	311.6
2019	481.9	481.9
2020	513.8	591.3
2021	498.2	606.7
2022	469.2	602.7
2023	453.2	611.7
2024	432.3	590.8
2025	124.0	282.5
2026	(296.7)	42.1
2027	(324.5)	14.3
2028	(348.9)	14.9
2029	(372.0)	16.8
2030	(389.1)	24.7
2031	(406.3)	32.5
2032	(493.1)	20.7

[4] EGEAS is a capacity expansion model.

The middle column above includes existing and committed resources.[5] The column on the right shows IPL's surplus/(need) after the addition of the following units:

- 500-MW New Wind II (2020);
- 200 MW of new wind (2021);
- 100 MW of new solar (2022-2023)[6];
- 192-MW combustion turbine (2026);
- 250 MW of solar (2028-2032); and
- 50-MW one-year peak PPA (2032 and 2033).

F. IPL'S ACTION PLAN

IPL's five year action plan is as follows:

- Continue to pursue DSM activities in Iowa;
- Continue to develop its PPA and owned wind portfolio, including:
  - Incorporating the 200-MW Turtle Creek PPA, which has an expected 2018 in-service date;
  - Developing up to 500 MW of new wind as approved by the Iowa Utilities Board (Board or IUB) in IUB Docket No. RPU-2016- 0005 (New Wind I) by 2020;
  - Developing up to 500 MW of additional new wind (New Wind II Project) by 2020, as proposed by IPL in IUB Docket No. RPU-2017-0002;
  - Pursue reasonable emission controls and/or natural gas conversions on its remaining coal-fired units;
  - Retire older peaking units;
  - Retire older intermediate steam units; and
  - Continue to investigate and pursue renewable energy.

The Department notes that in May 2018, Iowa Governor Kim Reynolds signed a bill (SF2311) that will curtail utility energy efficiency programs in Iowa. The new law removes any requirement for energy efficiency programs by municipal and cooperative utilities (which together serve about one-third of homes in Iowa), it imposes a spending cap on any requirements for energy efficiency by investor-owned utilities, and it set a policy of allowing customers to opt out of paying for utility efficiency programs if the utility's package of programs does not pass the Ratepayer Impact Measure (RIM) test. The Department recommends that IPL discuss the impact of this new bill on its resource acquisition plan in its Reply Comments.

[5] Includes the 200-MW Turtle Creek PPA and the 500-MW New Wind I project listed in IPL's 5-year action plan.
[6] The 700 MW of wind and 200 MW of solar are cost-effective in IPL's modeling even though there is no capacity shortfall until 2026.

II. DEPARTMENT ANALYSIS

A. REQUIREMENTS FOR 2017 IRP

When IPL closed on the sale of its Minnesota retail electric distribution assets in 2015, IPL ceased being a public utility as defined in Minn. Stat. S 216B.02, Subd. 4 and became a wholesale power provider to SMEC. The Minnesota Renewable Energy Standard (RES)[7] and the Solar Energy Standard (SES)[8] apply to public utilities.[9] Also, Since IPL is no longer a Minnesota public utility, the Company is not subject to Minnesota's RES and SES. The Conservation Improvement Program (CIP) applies to public utilities,[10] cooperative electric associations, and municipalities.[11] However, IPL is no longer a Minnesota public utility and also has no retail customers in Minnesota, and thus does not offer CIP programs in Minnesota. Under Minn. Stat. § 216B.2422 Subd. 2(b), the Commission's order on IPL's 2017 IRP will be advisory. Commission Staff made this observation on page 44 of its Briefing Papers filed in Docket No. E-001/PA-07-540 on April 30, 2015.[12]

Given IPL's role essentially as a wholesale supplier to SMEC, the Department concludes that the primary concern in this docket is to assess whether IPL has sufficient resources to ensure a reliable operating system while serving SMEC. This issue is discussed briefly below.

B. IPL's ABILITY TO PROVIDE SUFFICIENT CAPACITY

As shown in Table 1 above, even without additions to its existing and committed resources, IPL has sufficient resources through the current contract that IPL has to supply SMEC. With resources identified through its planning process, IPL has sufficient resources through its Minnesota IRP planning period to cover SMEC's needs. Consequently, the Department concludes that IPL is able to provide SMEC with its resource needs in a reliable manner.

[7] Minnesota Statutes 216B.1691, Subd. 2a.
[8] Minnesota Statutes 216B.1691, Subd. 2f.
[9] Minnesota Statutes 216B.1691, Subd. 1 (b).
[10] Minnesota Statutes 216B.241, Subd. 1a.
[11] Minn. Stat. 216B.241, Subd. 1b.
[12] The Department appreciates the meetings that IPL organized to discuss the requirements for its instant resource plan.

III. THE DEPARTMENT'S RECOMMENDATION

The Department recommends that the Commission accept IPL's 2017 IRP.

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

Minnesota Department of Commerce
Comments

Docket No. E001/RP-17-374

Dated this 24th day of May 2018

/s/Sharon Ferguson

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	OFF_SL_17-374_RP-17-374
William A.	Blazar	bblazar@mnchamber.com	Minnesota Chamber Of Commerce	Suite 1500 400 Robert Street North St. Paul, MN 55101	Electronic Service	No	OFF_SL_17-374_RP-17-374
City	Clerk	dmaras@ci.albertlea.mn.us	City of Albert Lea	221 E Clark St Albert Lea, MN 56007	Electronic Service	No	OFF_SL_17-374_RP-17-374
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_17-374_RP-17-374
Daniel R	Culhane	DanielCulhane@alliantenergy.com	Alliant Energy Corporate Services, Inc.	4902 North Biltmore Ln Madison, WI 53718-2148	Electronic Service	No	OFF_SL_17-374_RP-17-374
Ian	Dobson	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_17-374_RP-17-374
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280 Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_17-374_RP-17-374
Michael	Greiveldinger	MichaelGreiveldinger@alliantenergy.com	Wisconsin Power and Light	4902 North Biltmore Lane Madison, WI 53718	Electronic Service	No	OFF_SL_17-374_RP-17-374
David	Grover	dgrover@itctransco.com	ITC Midwest	901 Marquette Avenue Suite 1950 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_17-374_RP-17-374
Annete	Henkel	mui@mnutilityinvestors.org	Minnesota Utility Investors	413 Wacouta Street #230 St.Paul, MN 55101	Electronic Service	No	OFF_SL_17-374_RP-17-374

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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	OFF_SL_17-374_RP-17-374
Jim	Krueger	jkrueger@fmcs.coop	Freeborn-Mower Cooperative Services	Box 611 Albert Lea, MN 56007	Electronic Service	No	OFF_SL_17-374_RP-17-374
Kavita	Maini	kmaini@wi.rr.com	KM Energy Consulting LLC	961 N Lost Woods Rd Oconomowoc, WI 53066	Electronic Service	No	OFF_SL_17-374_RP-17-374
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_17-374_RP-17-374
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_17-374_RP-17-374
Carl	Nelson	cnelson@mncee.org	Center for Energy and Environment	212 3rd Ave N Ste 560 Minneapolis, MN 55401	Electronic Service	No	OFF_SL_17-374_RP-17-374
Samantha	Norris	samanthanorris@alliantenergy.com	Interstate Power and Light Company	200 1st Street SE PO Box 351 Cedar Rapids, IA 524060351	Electronic Service	No	OFF_SL_17-374_RP-17-374
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	OFF_SL_17-374_RP-17-374
Larry L.	Schedin	Larry@LLSResources.com	LLS Resources, LLC	332 Minnesota St, Ste W1390 St. Paul, MN 55101	Electronic Service	No	OFF_SL_17-374_RP-17-374

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Elizabeth	Wefel	eawefel@flaherty-hood.com	Missouri River Energy Services	3724 W Avera Drive PO Box 88920 Sioux Falls, SD 57109-8920	Electronic Service	No	OFF_SL_17-374_RP-17-374
Robyn	Woeste	robynwoeste@alliantenergy.com	Interstate Power and Light Company	200 First St SE Cedar Rapids, IA 52401	Electronic Service	No	OFF_SL_17-374_RP-17-374
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_17-374_RP-17-374