

BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Dan Lipschultz  
Matthew Schuerger  
Katie J. Sieben  
John A. Tuma

Commissioner  
Commissioner  
Commissioner  
Commissioner

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

ISSUE DATE: April 4, 2019

DOCKET NO. E-001/RP-17-374

In the Matter of Interstate Power and Light Company's (IPL) 2017 Integrated Resource Plan

The above-entitled matter was considered by the Commission on February 7, 2019, and the following disposition made:

1. Accepted IPL's 2017 Integrated Resource Plan.
2. Required IPL to file its next resource plan by February 1, 2026, if IPL renews its agreement under which IPL sells electric power to Southern Minnesota Energy Corporation.
3. Required IPL to file, by July 1, 2023, a load and capability report.
4. Varied Minn. R. 7843.0300, subp. 2, to extend the time by which IPL must file its next resource plan.<sup>1</sup>

The Commission agrees with and adopts the recommendations of the Department of Commerce, as modified above, which are attached and hereby incorporated into the order. This order shall become effective immediately.

BY ORDER OF THE COMMISSION



Daniel P. Wolf  
Executive Secretary

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<sup>1</sup> The Commission grants a variance under Minn. R. 7829.3200, finding that enforcement of the rule would impose an excessive burden on the applicant or others affected by the rule; granting the variance would not adversely affect the public interest; and granting the variance would not conflict with standards imposed by law.

May 24, 2018

Daniel P. Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> 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

## Before the Minnesota Public Utilities Commission

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### 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.<sup>1</sup> 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).<sup>2</sup> 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:

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<sup>1</sup> SMEC took ownership of the distribution assets, services territory, and electric accounts from IPL on the closing date of July 31, 2015.

<sup>2</sup> 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;<sup>3</sup>
  - c. conventional supply-side generation; and
  - d. short-term power purchase agreements (PPAs).

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<sup>3</sup> None of the DSM programs will be based in Minnesota.

4. IPL used the Electric Generation Expansion Analysis System (EGEAS)<sup>4</sup> 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<sub>2</sub> costs: no carbon monetization; no carbon monetization, but adjusted the dispatch of existing units so that CO<sub>2</sub> 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

<sup>4</sup> EGEAS is a capacity expansion model.

The middle column above includes existing and committed resources.<sup>5</sup> 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)<sup>6</sup>;
- 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.

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<sup>5</sup> Includes the 200-MW Turtle Creek PPA and the 500-MW New Wind I project listed in IPL's 5-year action plan.

<sup>6</sup> 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)<sup>7</sup> and the Solar Energy Standard (SES)<sup>8</sup> apply to public utilities.<sup>9</sup> 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,<sup>10</sup> cooperative electric associations, and municipalities.<sup>11</sup> 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.<sup>12</sup>

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.

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<sup>7</sup> Minnesota Statutes 216B.1691, Subd. 2a.

<sup>8</sup> Minnesota Statutes 216B.1691, Subd. 2f.

<sup>9</sup> Minnesota Statutes 216B.1691, Subd. 1 (b).

<sup>10</sup> Minnesota Statutes 216B.241, Subd. 1a.

<sup>11</sup> Minn. Stat. 216B.241, Subd. 1b.

<sup>12</sup> The Department appreciates the meetings that IPL organized to discuss the requirements for its instant resource plan.

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Analyst assigned: Christopher T. Davis

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### **III. THE DEPARTMENT'S RECOMMENDATION**

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



## **CERTIFICATE OF SERVICE**

I, Robin Benson, hereby certify that I have this day, served a true and correct copy of the following document to all persons at the addresses indicated below or on the attached list by electronic filing, electronic mail, courier, interoffice mail or by depositing the same enveloped with postage paid in the United States mail at St. Paul, Minnesota.

### **Minnesota Public Utilities Commission ORDER**

Docket Numbers: **E-001/RP-17-374**

Dated this **4th** day of **April, 2019**

/s/ Robin Benson

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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
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