

**STATE OF IOWA
DEPARTMENT OF COMMERCE
IOWA UTILITIES BOARD**

IN RE:	DOCKET NO. INU-2022-0002
INVESTIGATION INTO IOWA UTILITIES' 2022-2023 WINTER PREPAREDNESS PLANS	

UPDATED STATEMENT OF PARTICIPATION

COMES NOW, the Iowa Association of Municipal Utilities (“IAMU”), and submits this updated pleading regarding a Notice of Intent to Participate and Responses to Board Questions in the above-captioned proceeding pursuant to the “Order Requesting Information on Winter Preparedness Plans for 2022-2023” (“Order”) issued by the Iowa Utilities Board (“Board”) on December 1, 2022.

As part of the Order, the Board scheduled a technical conference on December 19, 2022, at 1:00 p.m. and requested that persons wishing to attend the technical conference file a pleading with the Board indicating whether they plan to attend in person or virtually.

The individuals from the IAMU who will be attending and participating in the status conference in person include: Timothy Whipple, Greg Fritz, Don Kom and Ben Gentz.

It is possible that additional individuals from IAMU may attend the technical conference either in person or virtually, but participation will include, at a minimum, the above-referenced individuals.

**IAMU MEMBER UPDATED INFORMATION
AND RESPONSES TO BOARD QUESTIONS**

As an initial matter, IAMU notes that according to the Order opening this docket, it is being conducted pursuant to Iowa Code § 476.17 and 199 IAC 20.11. Pursuant to Iowa Code

§ 476.1B, municipal utilities are not subject to regulation under § 476.17. Similarly, Iowa Administrative Code chapter 20 applies only to rate-regulated utilities. However, IAMU members take seriously the subject matter of this docket and have elected to participate in this docket in order to help the Board understand how municipal utilities will manage load-shedding events.

Additionally, IAMU notes that the requirements the Board places on larger, vertically integrated utilities with regard to peak-load management generally are not well designed for application to most municipal utilities that generally do not have the same resources and facilities to manage or the same ability to implement such requirements. While some municipal utilities own local generation and backup power supplies, many do not. Similarly, while some municipal utilities own transmission facilities, many do not. Frequently, municipal utilities that do own generation and transmission own it jointly through municipal joint action agencies and are often minority owners of facilities operated by other utilities, including investor-owned utilities such as MidAmerican Energy Company or generation and transmission cooperatives such as CIPCO and Corn Belt.

Finally, IAMU notes that in addition to the operational differences noted above, many utilities in Iowa are part of the Southwest Power Pool (“SPP”), rather than MISO. Also, as there are 135 municipal electric utilities in Iowa, it is clearly not feasible to arrange participation in this docket from “all electric utilities” and, as noted above, municipal utilities have no obligation to do so.

IAMU instead elected to collect information from a few members and submit it as one filing in this docket. Thus, while the information provided by IAMU is broadly representative of the peak-load management practices of municipal utilities in Iowa, it is not comprehensive and

the Board is cautioned about making assumptions regarding any utilities not submitting information below.

Dated: December 19, 2022

Respectfully submitted,

By: /s/ Timothy J. Whipple

Timothy J. Whipple, AT0009263
Ahlers & Cooney, P.C.
100 Court Avenue, Suite 600
Des Moines, IA 50309-2231
Telephone: (515) 246-0379
Email: twhipple@ahlerslaw.com

ATTORNEY FOR IOWA
ASSOCIATION OF MUNICIPAL UTILITIES

**INFORMATION SUBMITTED BY
DENISON MUNICIPAL UTILITIES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Yes. We will continue to work with Missouri River Energy Services (“MRES”) and with our RTO Southwest Power Pool (“SPP”) and our load balancing authority (“LBA”) the Western Area Power Administration (“WAPA”).

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

Yes.

- a. What are the plans?

We have come up with a plan that has been submitted and approved by WAPA.

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

Yearly, or whenever SPP would ask us to through WAPA.

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

No other Iowa utilities, but with WAPA who is the LBA for the Denison Municipal Utilities.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

We are in the SPP footprint so, therefore, we participate in SPP drills that were conducted in the spring and fall of 2022. After the final one this fall, WAPA and MRES coordinated a webinar for the Iowa MRES member communities to review and learn from them.

4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri?

We will be better prepared now that it has happened. A plan with steps has been implemented.

What changes have been made in the planning and preparation from the lessons learned in winter 2021?

We have come up with a plan with SPP and WAPA.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

Yes, we have an email list to larger and critical customers, and to the media.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

N/A

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

Not to shut down coal and nuclear to go green so fast. Wind and solar are not a reliable source of generation currently. More emphasis needs to be given to the lowest cost options and reliability to keep the lights on.

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

We will participate to the extent that is needed to prevent the transmission grid from going down.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities?

N/A

What steps have been taken to address the issue?

N/A

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Lead times are very long on most everything we order, especially transformers and plastics. There have not been any labor issues.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability?

Weather is very unpredictable; we plan for the worst.

What are the weather characteristics of the reasonable worst-case scenario?

Extended periods of below normal temperatures over a widespread area.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

See MRES' reply.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

CAT, diesel, 1825 KW

**INFORMATION SUBMITTED BY
THE CITY OF HAWARDEN**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Yes

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

- a. What are the plans?

We have different responses to each Energy Emergency Alert that would come from SPP

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

Annually with MRES, NIPCO

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Missouri River Energy Service and NIPCO

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

No

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

Coordinated load shedding to ease the pressure on the RTOs

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

We use social media, local cable TV channels, text alert, website and phone calls to critical customers.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

Our WAPA rates have increased but that is due to drought conditions.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

N/A

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

Only on EEA 3

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

N/A

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Pad mount transformers

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

No wind and very cold temperatures

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

I believe all members of MRES already do this internally.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

We only have small generators at the nursing home, hospital and wastewater treatment plant.

**INFORMATION SUBMITTED BY
THE CITY OF WEST POINT**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

I believe we are ready.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

We have no plan that I am aware of. I just started this job in May.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

No

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

I believe we would be prepared. I am unaware of any issues from 2021.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

Yes

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

We expect higher prices.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

No suggestions.

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

Not much. The only blackouts we have are failures, not overloads.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

None

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Yes, we have faced all of them.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

We typically have no issues.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

N/A

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

N/A

**INFORMATION SUBMITTED BY
WAVERLY UTILITIES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Yes

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

We have no comprehensive plan. However, Waverly Utilities has enough local generation to cover the entire load for as long as necessary or until we can no longer acquire diesel fuel.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

No, we are too small of an entity.

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

Yes, we are prepared. Waverly Utilities did not have a problem during Storm Uri.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

Coal and natural gas are four times higher. We expect higher wholesale costs.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

No suggestions.

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

Minimal reliance

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

No

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

36 MW. Dual fuel diesel/natural gas generators.

**INFORMATION SUBMITTED BY
MCGREGOR MUNICIPAL UTILITIES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

We hope to be. Our winter peak is usually much less than summer. Our generators will cover this.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

No.

- a. What are the plans?

We would need to schedule shifting outages to accommodate.

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

No

4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

We would need to schedule shifting outages to accommodate.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

We would use the media availability (television, radio) and our Facebook account. We would ask the City to get information out, too.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

Higher due to natural gas, LP and diesel prices being higher.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities?

N/A

What steps have been taken to address the issue?

N/A

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

N/A

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

None planned at this time.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

Diesel

**INFORMATION SUBMITTED BY
MOUNT PLEASANT MUNICIPAL UTILITIES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Mt. Pleasant Municipal Utilities (“MPMU”) is ready for peak winter load.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

- a. What are the plans?

We are a member of a joint action agency, RPGI.

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

Annually

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Yes, through RPGI.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

We have completed drills with MISO in the past.

4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

MPMU is prepared for cold weather

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

We recently contracted a text messaging service.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

We are expecting PCAs to continue to be higher than years past.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

We have diesel generation that can serve all of our customers.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

No

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Yes, we have had labor and material shortages this year. It did not affect our completion of work.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

**INFORMATION SUBMITTED BY
THE CITY OF FONTANELLE**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Yes

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

Yes

- a. What are the plans?

Generation

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

Once per year

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Yes (Greenfield Utilities)

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

MISO

4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

Yes and no. We are keeping people updated and getting them on board to lower their usage.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

CIPCO does this for us

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

Facebook, postings around town, and town meetings

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

Much higher

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

No

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

No demand response program

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

No

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

No

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

**INFORMATION SUBMITTED BY
MAQUOKETA MUNICIPAL ELECTRIC UTILITY**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Our Joint Action Agency and wholesale electric supplier, WPPI Energy, carries sufficient capacity to meet or exceed the MISO established planning reserve margin requirement for the entire year for all its members, including those located in Iowa. As one of WPPI's Iowa members, Maquoketa Municipal Electric has sufficient local generation if needed to serve our customers in the event of emergency.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

In such event, MISO initiates the emergency event, which may include systemwide load shed depending on the circumstances. MISO communicates instructions during the event to the Local Balancing Authority, which would in turn communicate instructions to WPPI.

a. What are the plans?

To implement MISO's instructions delivered by the Local Balancing Authority.

b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

Annually or as needed.

c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Yes, with MISO.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

Yes, through WPPI Energy. Participating in drills is a key to performing successfully in an actual emergency. Actual emergencies are rare, so drilling is key to being prepared.

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

WPPI's Iowa members are prepared to follow MISO reliability procedures to preserve the integrity of the power system. Additionally, at the local level, Maquoketa has ensured that their generators are ready to perform and has secured sufficient fuel delivery arrangements.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

The plan is reviewed annually or as needed.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

We expect winter 2022/2023 energy prices will be similar to winter 2021/2022 energy prices, higher than those of the years preceding 2021, and closely linked to the price of natural gas.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

Be mindful of the coming need for more capacity, with a portion of system resources consisting of dispatchable generation, compared to all the generation being dependent on the weather (i.e., the wind blowing or the sun shining).

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

As a WPPI Iowa member, our generators are considered emergency resources and are available to MISO if MISO calls on those resources to avoid blackouts.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

N/A

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Transformer and meter availability have been very limited. Finding experienced Journeyman line workers has been difficult.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

N/A. WPPI provides sufficient capacity to cover projected peak demand plus the MISO established planning reserve margin requirement.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

N/A

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel and capacity of those generation assets

Type/Fuel	Capacity (Nameplate)
Diesel/Gas	3.1 MW
Diesel/Gas	3.1 MW
Diesel/Gas	2.0 MW
Diesel	1.8 MW
Diesel/Gas	1.9 MW
Diesel/Gas	2.5 MW
Diesel/Gas	6.5 MW
Diesel	1.8 MW
Diesel	1.8 MW
Diesel	2.0 MW
Diesel	2.0 MW
Diesel	2.0 MW
Diesel	2.0 MW
Total	32.5 MW

**INFORMATION SUBMITTED BY
CEDAR FALLS UTILITIES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Cedar Falls Utilities (“CFU”) stands ready to reliably serve its customers during the 2022-2023 winter peak load period, barring any interruption in natural gas. Much of the BES in and around Waterloo/Cedar Falls area has been rebuilt with larger conductors, stronger structures and higher voltages; the system is very robust in this area. CFU invested in the local BES by upgrading substation relaying and circuit breakers in its service territory and has local electric generating facilities in Cedar Falls.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

Yes. CFU established a task force comprised of personnel from engineering, generation, energy services, marketing and senior management and developed a comprehensive plan to monitor the BES warnings and event declarations from MISO and communicate to the public if there was a BES emergency event that required load shedding. CFU also sent letters to customers explaining the situation, what to expect and encouraged them to sign up for text messaging if there was emergency information that needed to be communicated. In addition, larger key accounts were solicited to voluntarily shed load if needed.

a. What are the plans?

CFU meets PRC-006-2 automatic underfrequency load shedding (UFLS) programs on the electric distribution system. In addition, the CFU task force prioritized all distribution breakers for load shedding and rolling black outs if needed. Circuits that were excluded contained the hospital and the city public safety department. CFU is a Transmission Owner, but NOT a Transmission System Operator. MidAmerican Energy Company is the Transmission Operator and LBA for CFU and is subject to NERC EOP-011-1; they will direct CFU to shed load during a MISO Step 5 Emergency Event.

b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

The CFU task force reviews its load shedding plan before summer and winter times. Specifically, they review circuit loads provided by engineering department, and communication procedures via internet, social media, phone and the local news media, and review the larger customers that have voluntarily offered to shed load if needed. NERC has

published an updated emergency procedures EOP-011-2 that takes effect in March, 2023.

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

CFU follows any orders issued by MidAmerican Energy Company, the LBA.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills?

CFU participates in monthly MISO LMR drills pertaining to dispatching behind-the-meter generation in Cedar Falls; this tests the MISO communication system and reviews procedures if MISO were to declare a Step 2 Emergency Event. CFU is not a member of SPP and does not participate in any drills. MidAmerican Energy Company participates in MISO load shedding drills as the LBA.

What lessons have been learned from this participation?

CFU set up alarms to alert operators that a MISO message was received.

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

CFU has always had dual fuel generating units in Cedar Falls. The Streeter Station steam generating plant can burn coal or natural gas, and the combustion turbines can burn natural gas or fuel oil. At this time however, it is not possible to burn fuel oil in the combustion turbines. During Winter Storm Uri, CFU operated its steam plant on coal and is prepared to do the same thing if needed this coming winter. CFU has added more power plant personnel since Uri to ensure it can fulfill its obligation to serve.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

CFU is not an LBA, but would receive load shedding orders via phone and the MISO Communication System.

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

As mentioned earlier, CFU established a task force and developed plans for the company spokesperson to communicate to local news media, city officials, customers and board members if MISO declared an Emergency Event. Communications will be sent out via the CFU website, social media platforms, text messages that customers are encouraged to sign up for and local news media.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

Wholesale electricity prices track with natural gas prices due to the increasing amount of electricity generated by natural gas. Based on natural gas futures, CFU is expecting MISO wholesale electricity pricing in Cedar Falls to be three to four times higher than they were in prior years before Winter Storm Uri.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

CFU believes we all need to be good stewards of the environment and conserve our natural resources where it makes sense. According to the latest MISO data, wind capacity has a 16.3% accreditation rate compared to dispatchable fossil fuel generation. CFU would suggest that the IUB support better policies that will keep thermal generation from retiring and promote the use of these units when increased threats of outages are looming. Changes to MISO's market rules so that longer lead time units (>24 hours) will be committed when grid forecasts show the grid will be under stress. The balance between most efficient cost and reliability must skew towards reliability in stressful times. In recent months, MISO has supplied written comments to EPA regarding its proposed regulations. CFU would urge IUB to also endorse those comments.

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

CFU has two DRR Type 1 resources coming online in February and March 2023 that are currently in operation; they make up approximately 15-25% of the load depending on the day. These two customers are interruptible and will be curtailed first if MISO declares an emergency event.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

CFU has several weeks of coal in its inventory if needed and is not concerned about running out of coal.

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

CFU recently completed a turbine overhaul on Streeter Station Steam Unit #7. All local generating units have completed all scheduled maintenance and is not waiting on any components that would prohibit the operation of the generating units.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

Nobody predicted or foresaw what happened in February 2021. It is assumed that, like most years, there will be short periods where temperatures are below -20°F. On January 30, 2019, actual air temperatures neared all-time record lows of -34°F in Cedar Falls. It was a clear night and there was very light wind. Loads were high and real-time MISO pricing escalated over \$1,500 per MW. CFU believes this is the most likely worst-case scenario we need to prepare for in Cedar Falls.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

CFU has no planned maintenance outages scheduled in the next six months.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

- a. Streeter Station Unit #6 – 16.5 MW, GE Steam Turbine, Coal/Natural Gas.
- b. Combustion Turbine #1 – 19.6 MW @80°F, Westinghouse Gas Turbine, Natural Gas/Fuel Oil (Fuel oil currently not available).
- c. Combustion Turbine #2 – 23.8 MW @80°F, Westinghouse Gas Turbine, Natural Gas/Fuel Oil (Fuel oil currently not available).
- d. University of Northern Iowa (by contract to CFU) – 7.5MW, Electric Machinery Steam Turbine, Coal/Natural Gas.

**INFORMATION SUBMITTED BY
INDEPENDENCE LIGHT & POWER**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Our Joint Action Agency and wholesale electric supplier, WPPI Energy, carries sufficient capacity to meet or exceed the MISO established planning reserve margin requirement for the entire year for all its members, including those located in Iowa.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

In such event, MISO initiates the emergency event, which may include systemwide load shed depending on the circumstances. MISO communicates instructions during the event to the Local Balancing Authority, which would in turn communicate instructions to WPPI.

- a. What are the plans?

To implement MISO's instructions delivered by the Local Balancing Authority.

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Yes, with MISO.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

Yes. Through WPPI Energy, participating in drills is a key to performing successfully in an actual emergency. Actual emergencies are rare, so drilling is key to being prepared.

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

WPPI's Iowa members are prepared to follow MISO reliability procedures to preserve the integrity of the power system.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

We annually update our ERP, Emergency Response Plan in accordance with our Wholesale Power Supplier, including Public Appeal to reduce Load; Mandatory Load Reduction; Load Restoration

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

We expect winter 2022/2023 energy prices will be similar to winter 2021/2022 energy prices, higher than those of the years preceding 2021, and closely linked to the price of natural gas.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

Be mindful of the coming need for more capacity, with a portion of system resources consisting of dispatchable generation, compared to all the generation being dependent on the weather (i.e., the wind blowing or the sun shining).

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

N/A

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Transformer costs and lead times have led to slowed maintenance and repair schedules.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

N/A. WPPI provides sufficient capacity to cover projected peak demand plus the MISO established planning reserve margin requirement.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

N/A

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

N/A

**INFORMATION SUBMITTED BY
LAMONI MUNICIPAL UTILITIES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Yes

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

Yes, for the City of Lamoni

- a. What are the plans?

Backup generators

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills?

No

What lessons have been learned from this participation?

N/A

4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri?

Yes

What changes have been made in the planning and preparation from the lessons learned in winter 2021?

None

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

Posting on website or via phone

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

Slightly higher

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future?

No

If so, what are the policy suggestions?

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

We plan to use our own generators.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities?

No

What steps have been taken to address the issue?

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

We have experienced shipping and manufacturing delays.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability?

We are prepared for whatever happens with the weather.

What are the weather characteristics of the reasonable worst-case scenario?

Possible downed powerlines

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

N/A

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

N/A

INFORMATION SUBMITTED BY MUSCATINE POWER AND WATER

Muscatine Power and Water (“MPW”) is the board managed municipal utility serving the City of Muscatine and surrounding areas. MPW supplies drinking water, electric and communication services. The City of Muscatine has about 24,000 residents and is home to numerous manufacturing, agricultural and food production businesses. After December 31, 2022, MPW’s local generation will be made up of three coal fired boilers and three turbines with 276 MW of nameplate generation capacity. MPW is a member of the Midcontinent Independent System Operator (“MISO”) and subject to various NERC Reliability Standards and Critical Infrastructure Protection requirements.

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

MPW typically sees a winter peak load in the 120-125 MW range, so we currently have excess capacity to serve our peak this winter. In addition, MPW has multiple transmission ties to neighboring systems and recently completed construction of an additional 161 kV line to further support our system. MPW should be in an excellent position to serve our peak load from the perspective of our local assets and ties to our neighbors.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

a. What are the plans?

MPW’s load shed plans are contained in System Operations procedures (e.g., SO-164 addresses Emergency Operations). MPW plans are well prepared and we do regular drills. The MPW System Operator on shift (NERC certified operators who staff the system control desk 24/7) has authority to implement all provisions contained within the plans, including manual load shedding, when necessary to cope with operating emergencies. MPW’s plans include a procedure to determine load-shed blocks by prioritizing its loads. This process also tracks the real-time loading of these circuits for accurate load-shed data. The load at the time of the shed is also tracked allowing us to plan for restoration. In recent years, MPW scaled up our incident command response to ensure readiness by taking steps like updating the MPW load-shed priority list and pre-planning distribution of customer information messages about what to expect and how to best handle the outages.

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

MPW's plans for load shed are reviewed annually and drilled annually during the MISO Market Capacity Emergency Drills. Earlier this year, MPW expanded MPW's Incident Command response to drill on these exact situations. The MISO Emergency Response group at MPW started meeting in January and has conducted three drills and one actual event. MPW has a formal process to meet with the internal group, review plans, collect NERC compliance evidence, and be sure staff are taking the right steps to manage the situation. MPW's Incident Command group meets each time MISO reaches a Maximum Generation Alert, Warning or Event. The group stays in contact regularly until the event is terminated.

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Yes, MPW participates in the MISO drills. The MISO drills are valuable in getting to work with neighboring utilities, practicing three-part communications and verifying that contact information is up to date. MISO has also been transparent in the outcome of the capacity auction and the implications for more frequent maximum generation events. MPW's participation keeps staff familiar with the process and ready to act. In the recent event on May 12, 2022, the event didn't terminate until 8:00 PM. This timing allowed staff the opportunity to test MPW's communications protocols after hours.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

Yes, MPW participates in MISO drills. These events provide an opportunity for practice and repetition of the procedures, should actions be needed. Drills build System Operator skills and confidence, so they are ready to act without hesitation in an actual incident.

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri?

MPW is prepared to handle a prolonged period of cold weather, as we did with the prior "Polar Vortex" and winter storm Uri. Our history of maintaining reliable service through the prior extreme weather events in recent years and ongoing preparations show how our system and staff are capable of addressing such events.

- a. What changes have been made in the planning and preparation from the lessons learned in winter 2021?

MPW has implemented some of the recommendations identified in NERC Alert Cold Weather Events II – dated 9/12/22 in preparation for the upcoming cold weather season. Examples include proactively performing preventative maintenance to check operational capability of SF6 tank heaters in the fall to ensure breakers will trip at extreme cold weather temperatures. Additional heater elements have been added to stores to ensure availability if one or more fail to operate properly. Generation personnel are preparing BES generation for NERC Standard EOP-011-2 which requires Cold Weather Preparedness actions to be taken by NERC registered Generator Owners.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

MPW is the only Load Serving Entity within MPW's LBA area.

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

In the past, MPW performed the required notifications and due to the increased likelihood of load shed, MPW is increasing customer communications through social media, commercials, and other means. MPW also reached out to large industrial customers to ensure they understand MPW's requirements of MPW's being a MISO member and how grid issues could impact their operations. MPW's large customers have their own contingency plans to ensure plant safety and response should load shed be necessary. While MPW may have adequate capacity, MPW fully understands that it must comply with any instructions from MISO to shed load to ensure the integrity of the bulk electric system.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

We anticipate higher prices due to natural gas prices being higher, although not as high as we were recently anticipating.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

None at this time.

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

MPW is prepared to implement emergency response plans if the situation requires it. MPW has no plans to depend on economic demand response programs as MPW does not implement this type of plan on our system.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

MPW relies on coal delivered by rail to fuel the local generation. MPW has taken active efforts to conserve coal and has reasonable inventory going into the winter. With the rail worker strike averted by legislation, there is less possibility of shipping interruptions; however, weather, railroad staffing issues, Canadian Pacific Railway congestion or other labor disruption could cause supply interruptions.

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Yes, component availability, shipping and contract labor are significant issues.
Examples of component availability delays:

- Transformer delivery estimates are 80–84 weeks. Currently no effect on O&M as we incorporated these timelines into our plans.
- 69kV Connection at Muscatine North delayed from August 2022 to January 2023; connecting hardware was unavailable for months.
- 161/69 kV autotransformer maintenance delayed from October 2022 to February 2023; unavailability of replacement oil pump.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

MPW relies on Short Term Load Forecasting based on current weather forecasts to predict system load needs and aid in committing appropriate generation to cover native system load. Reasonable worst case scenarios include extended periods of extreme weather (e.g., snow, ice, wind and freezing temperatures) that could impact MPW's ability to keep sufficient levels of generation online or that trip critical transmission lines. MPW has sufficient transmission import capability provided external generation is available to support our system.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

N/A. MPW submits its outage schedule and plans to MISO, but does not have any scheduled outages that would affect MPW's ability to serve the community.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

MPW currently has limited behind the meter generator installations made up of small residential and commercial installations and one pending large industrial installation. There is about 0.3 MW of capacity in service, with up to 1.16 MW expected going into service this winter, for a total of 1.5 MW.

**INFORMATION SUBMITTED BY
MISSOURI RIVER ENERGY SERVICES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

MRES and its member utilities are committed to providing reliable service to their customers. MRES engages in extensive internal generation and transmission resource planning and is actively engaged in Midcontinent Independent System Operator, Inc. (“MISO”) and Southwest Power Pool, Inc. (“SPP”) transmission planning efforts, all in an effort to enable MRES’s members to provide reliable, cost-effective service to their businesses and residents. MRES is also working with its members to specifically prepare for winter energy alerts and load shedding events ordered and implemented by applicable regional transmission organizations (“RTO”) and local balancing authorities (“LBA”), including the adoption of load shed plans or programs.

For MRES and its members to provide reliable service during winter energy alerts, it is crucial that these alerts and any associated load shedding requirements are timely and effectively communicated by the RTOs and LBAs to the individual load serving entities, including all municipal utilities. As described below, some MRES members are actively working with their LBA, Western Area Power Administration (“WAPA”), to plan and test communication procedures and systems. This communication is an important component of an effective response to winter peak alert events.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

a. What are the plans?

MRES has 18 Iowa members, two of which are located in MISO and the remainder of which are in SPP. In SPP, two members – Denison and Sioux Center – have adopted detailed load shed plans and are actively working with their applicable LBA, WAPA, to conduct tests of the plans and communications systems used to activate the plans. The plans specifically identify the notices and actions to be taken by the utility at the different Energy Emergency Alert (“EEA”) levels declared by SPP.

The other MRES Iowa members in SPP either have peak loads of less than 10 MW or, in the case of one member, are part of an Under Frequency Load Shedding plan. WAPA’s current manual load shed program does not anticipate calling for those utilities to participate in manual load shedding. As noted below, however, MRES is encouraging and working with all of its members to adopt utility-specific load shed plans.

MRES has worked with all of our members, in both MISO and SPP, to develop load shed plans for their communities. As part of this process, members have been

encouraged to document their critical loads, generators owned by retail customers, loading on various circuits, communications methods, customers on life support equipment, and contact information for each of these groups.

MRES monitors all alerts issued by MISO and SPP and uses an emergency communication software service to send text alerts to our members when the alert levels reach a Max Gen Event-EEA 2 in MISO or EEA 2 in SPP. These are the levels where MRES members must issue public appeals to reduce energy, activate load management, and request retail customer generation under contract to operate. MRES members also must prepare for rolling blackouts with community leaders, critical loads and key accounts. The actions taken are unique to each member based on its individual resources and equipment, and are detailed in its individual emergency plan.

b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

MRES member load shed plans are reviewed and updated regularly, and tested as described above to correspond with the testing program of the applicable RTO and/or LBA. Tests of the emergency alert system noted above are conducted by MRES twice annually in the spring and fall.

c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

See responses to question number 1 above.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

MRES participates in MISO's monthly drills related to the operations of load modifying resources ("LMR"), which is how the bulk of member municipal generation is registered in MISO. These drills help MRES better prepare for resource call-out situations.

MRES members in SPP in the WAPA LBA subject to potential manual load shedding have participated in SPP drills, which entail WAPA contacting members to ask to simulate manual load shedding.

MRES's two Iowa members in MISO do not yet have load shed plans and have not participated in MISO load shed drills. As noted above, MRES worked with all of its members to develop utility-specific plans. These members are in the process of documenting their critical loads, customer-owned generators, circuit loading, communications methods, customers on life support equipment, and related contact information. MRES provided templates for members to use in adopting load shed plans and to otherwise prepare for an EEA event.

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

Lessons learned from the 2021 winter storm Uri are being implemented at MRES generation assets, including the addition of a liquid fuel heater, adding additional insulation to areas susceptible to freezing, and formalizing cold weather preparation checklists.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

MRES does not serve as an LBA in either SPP or MISO.

In SPP, WAPA, as the LBA for MRES's Iowa members in SPP, has implemented and tested communications plans with their customers to make sure they have accurate contact information and sufficient means of communication.

In MISO, MRES understands there to be different approaches on manual load shedding programs associated with EEA events between the different entities with operational responsibilities. MRES is working with our two Iowa members in MISO to implement manual load shed plans so they are ready if called upon. MRES reached out to Iowa operating entities to inquire about how they will work with our members. Thus far, only high level information has been provided to MRES.

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

MRES provides social media posts, graphics and a radio public service announcement to all of its members for use during EEA conditions if load reductions are requested. As discussed above, MRES monitors all alerts issued by MISO and SPP and uses an emergency communication software service to provide an additional avenue of communication to members on these events. Also as noted above, MRES worked with its members to develop load shed plans, including communications plans and lists.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

MRES anticipates winter energy prices to be higher than previous years. Because natural gas fueled generators are often the units on the margin in MISO and SPP, higher natural gas prices are expected to drive higher locational marginal prices ("LMP") in both applicable RTO markets than recent years. Additionally, several coal facilities in the region have expressed challenges with coal delivery limiting supply, which has had upward pressure on market pricing.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

The reality of EEA events underscores the need for a sensible transition to non-dispatchable energy technologies. This transition must be balanced and must not sacrifice reliability, as we are now experiencing with the retirement of so many dispatchable resources. The risk to human life and livelihood caused by an unreliable system is significant, as is the tremendous economic impact on customers. Retirement of additional dispatchable resources should be done only when viable technologies exist that can replace it, such as long-term storage.

MRES also encourages the adoption of rules that would better allow for the utilization of backup generation resources of retail customers, and distributed reciprocating internal combustion engines operated very limited hours during EEA events. These are readily available resources that could be utilized to help mitigate the harmful effects of load shedding events. Steps should be taken to encourage their use or, at a minimum, remove liability risks, including air permit-related liability, associated with their use during an EEA level 2 or higher event.

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

MRES has worked with several of its members to implement coordinated demand response programs, but these programs are not expected to have a material effect with respect to potential blackouts.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

MRES does not anticipate coal transportation issues with respect to Laramie River Station, a coal-fired generation facility located in Wyoming from which MRES obtains a portion of its power. MRES member, Atlantic Municipal Utilities, does not anticipate coal shortages at Walter Scott Generating Station, from which it receives some of its power.

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Some component availability has longer lead times and contract labor can be difficult to obtain. However, no planned outage had to be rescheduled due to component availability or labor shortage for any of the MRES generation assets.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability?
What are the weather characteristics of the reasonable worst-case scenario?

MRES member, the City of Pella, has one generation unit that is limited to operations at 0 degrees due to plant design limitations for diesel fuel heating. Pella, however, is currently completing a project that will mitigate this issue. This project is expected to be completed soon.

All other member and MRES-owned resources are prepared to operate in the most extreme weather events our region experiences. MRES is prepared to operate its resources in these events in the 2022/2023 winter. In cases with on-site fuel oil storage for MRES-owned generation, MRES has proactively filled its fuel storage to near 100% in advance of the winter.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

Planned outages for MRES asset Exira Station in Iowa has scheduled a planned outage for the late spring in one of the 3 units within SPP.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

All MRES member behind-the-meter generation are reciprocating engines that operate on diesel fuel. A list of the unit locations and capacities are as follows:

Atlantic Municipal Utilities – 8.7 MW
Denison Municipal Utilities – 1.8 MW
Lake Park Municipal Utilities – 4 MW
Pella Municipal Electric Utility – 25.6 MW
Rock Rapids Municipal Utilities – 2.5 MW

**INFORMATION SUBMITTED BY
THE CITY OF READLYN**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?
2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?
 - a. What are the plans?

None
 - b. How often are the plans for firm load shed reviewed and updated, and what is the review process?
 - c. Are these plans coordinated with other utilities in Iowa and/or RTOs?
3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

No
4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?
5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?
6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?
7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

Same
8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?
10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

No generation

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

N/A

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?
13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

No generation

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

**INFORMATION SUBMITTED BY
THE CITY OF AMES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Yes

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

- a. What are the plans?

AMES follows the MRO & MISO guidelines using Underfrequency Load Shedding as required by MISO and the MRO.

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

Annually

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Yes

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

AMES is not a Transmission Owner nor a Generation O and is not required to participate. However, we would be included in load shedding activities through MidAmerican Energy Company, our Load Balancing Authority.

4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

The winter of 2021/2022 was not unique to AMES. AMES continues to plan for the 2022/2023 winter season as we planned for in previous years.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

In addition to using traditional media and social media, AMES has added two-way texting services.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

AMES believes that with higher natural gas prices, energy prices will be approximately 10% higher than winter 2021/2022. AMES is only exposed to these prices through MISO market energy.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

Streamline the approval process for new transmission and generation requested by utilities. Continue to regulate in a predictable manor following consistent policies.

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

AMES does not “rely” on emergency nor economic demand response programs. AMES attempts to avoid blackouts using sound engineering planning, redundant transmission infrastructure, dispatchable generation, and trained individuals.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

N/A

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

AMES continues to face long lead times for transformers and other substation equipment. AMES did not forego any outage or planned maintenance as a result of this. However, we are watching out inventory levels closely and ordering well in advance of our projected needs.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability?

Similar to Winter 2021/2022

What are the weather characteristics of the reasonable worst-case scenario?

Freezing rain with high winds

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

AMES is not planning any generation maintenance to occur during the winter 2022/2023 time period.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

Unit 8 – 70 MW natural gas/RDF Unit 7 – 38 MW natural gas/RDF GT 1 – 22 MW low sulfur diesel fuel GT 2 – 29 MW low sulfur diesel fuel SunSmart AMES – 2 MW solar

**INFORMATION SUBMITTED BY
MANNING MUNICIPAL UTILITIES**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Yes

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

- a. What are the plans?

Run our Generation plant

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

Manning Municipal Utilities (“MMU”) follows NIPCO

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Yes, NIPCO.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

No.

4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

Yes, MMU is prepared. Nothing changed for MMU in 2021. Our generation plant ran for over 50 hours.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

No

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

Through NIPCO

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

Steady at this time

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

No

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

None

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

No

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

No

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

MMU doesn't depend on weather modeling. Our plant is ready to run 24/7/365.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

None are planned in the next six months.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

We do not have any behind the meter generation that is available to the plant.

**INFORMATION SUBMITTED BY
NORTH IOWA MUNICIPAL ELECTRIC COOPERATIVE ASSOCIATION**

The North Iowa Municipal Electric Cooperative Association (“NIMECA”) is a municipal joint action agency serving thirteen municipal electric utility members that own and operate their own electric distribution systems. Since 1965, NIMECA has provided wholesale power supply, transmission, and related services to these utilities. NIMECA and its members are located within the Upper Missouri Zone of the Southwest Power Pool (“SPP”). NIMECA and its members have ownership or purchase power agreements for numerous generation facilities that are used to serve these municipal utilities and have joint ownership in various transmission facilities throughout the state of Iowa.

The utilities represented by NIMECA include the following members:

- Algona Municipal Utilities
- Alta Municipal Utilities
- Bancroft Municipal Utilities
- Coon Rapids Municipal Utilities
- Graettinger Municipal Light Plant
- Grundy Center Municipal Utilities
- Laurens Municipal Power & Communications
- Milford Municipal Utilities
- New Hampton Municipal Light Plant
- Spencer Municipal Utilities
- Sumner Municipal Light Plant
- City of Webster City
- West Bend Municipal Utilities

NIMECA is responding to the questions on behalf of the thirteen utilities it represents to provide the Board with a comprehensive view of the situation with Iowa utilities.

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

NIMECA and its members are adequately prepared to reliably serve its peak load for Winter 2022-2023. NIMECA's members have a peak load of approximately 135 MW, while having generation resources of over 312 MW. NIMECA's balanced generation portfolio includes hydro, coal, natural gas, wind, and diesel power generation. At any time, NIMECA may call upon all its resources to provide energy to its member utilities, as well as provide surplus energy to support the bulk electric system. For example, during Winter Storm Uri, NIMECA's generation fleet at times was producing nearly three times NIMECA's load and averaged slightly over two times its load throughout the winter storm event. We would expect similar results during a winter event in 2022-2023.

Having said that, we operate in a larger grid, and we have no control over what SPP, MISO or others do that could negatively impact the ability of NIMECA and its members to serve their customers.

2. Does your utility have a comprehensive plan for managing and initiating a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

NIMECA believes this falls under the purview of transmission operators, rather than load serving utilities, and is not applicable to NIMECA or its members.

In the event a transmission operator would choose to curtail load at a NIMECA member, the retail load would be served by the member's local peaking generation. A curtailment at a NIMECA member could actually make the situation worse as it would limit our ability to export surplus energy from peaking units to the grid.

3. Does your utility participate in Midcontinent Independent System Operator, Inc. and Southwest Power Pool, Inc. emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

We do not participate in MISO or SPP emergency drills. NIMECA believes this falls under the purview of transmission operators, rather than load serving utilities, and is not applicable to NIMECA or its members.

4. Are Iowa utilities prepared for a prolonged period of severe cold similar to February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

NIMECA and its members believe we are prepared for a prolonged period of severe cold. Our generation units generally operated reliably throughout winter storm Uri. After Uri, NIMECA and its members identified various operational issues that could be

improved and made improvements to those processes or systems (e.g., improvements to fuel systems to better work in cold weather).

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing area?

NIMECA and its members are not an LBA.

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

NIMECA will communicate with its members via emails and conference calls to provide timely updates on current conditions. NIMECA members will use multiple methods to communicate with their customers including emails, texts, phone calls, social media, and radio, among others.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

NIMECA expects that SPP market energy prices will be at least double compared to recent winter energy prices. Due to having a diversified resource portfolio with limited exposure to natural gas, the NIMECA members believe the impact to their customers will be more limited.

8. Do you have short-term or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

In the aftermath of Winter Storm Uri, the Iowa Department of Natural Resources issued an order waiving some of the emission rules on peaking and other backup generation. This was helpful to ensure that an emergency did not cause increased monitoring of emissions or trigger other regulations. Assurances that this would be done when responding to future events would be helpful.

The IUB could become more active in proceedings at FERC, SPP and MISO to ensure that decisions do not hamper the ability to maintain a diversified resource mix, to ensure new transmission is built in a timely manner, and to fix the broken generation interconnection queue processes.

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

In the event SPP would declare an Emergency Energy Alert (“EEA”), NIMECA and its members would implement any demand response programs/agreements to reduce demand.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

NIMECA and its members are joint owners in coal-fired generation units Neal 4 and Walter Scott 4 that are majority owned and operated by MidAmerican Energy Company. As MidAmerican Energy Company is the operator of these facilities, we defer to its response to this question.

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Supply chain and labor constraints continue to be an ongoing issue. We are seeing delays in parts and labor issues for maintenance work. No planned maintenance was delayed, but maintenance outages have been extended while waiting for parts.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

We rely on National Weather Service short- and long-term forecasts for operations. A worst-case scenario would likely be from an ice storm causing significant damage to the transmission network followed by an extended period of cold with high electric demand.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

For the joint owned coal units, we defer to MidAmerican Energy Company to provide the outage and maintenance schedules. For the NIMECA member operated peaking units, there are no set schedules for maintenance and outages. Units are exercised regularly and any maintenance issues are dealt with as they arise.

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

NIMECA and its members do not have any behind the meter generation. All the NIMECA generation is registered in front of the meter.

**INFORMATION SUBMITTED BY
PRESTON MUNICIPAL ELECTRIC**

1. Is your utility ready to reliably serve peak load for winter 2022-2023?

Yes. Our Joint Action Agency and wholesale electric supplier, WPPI Energy, carries sufficient capacity to meet or exceed the MISO established planning reserve margin requirement for the entire year for all its members, including those located in Iowa. As one of WPPI's Iowa members, Preston Municipal Electric has sufficient local generation if needed to serve our customers in the event of emergency.

2. Does your utility have a comprehensive plan for initiating and managing a systemwide load shed to protect the bulk electric system in the event of an imbalance of electricity supply and demand?

In such an event, MISO initiates the emergency event, which may include systemwide load shed depending on the circumstances. MISO communicates instructions during the event to the Local Balancing Authority that, in turn, would communicate instructions to WPPI.

- a. What are the plans?

To implement MISO's instructions delivered by the Local Balancing Authority.

- b. How often are the plans for firm load shed reviewed and updated, and what is the review process?

- c. Are these plans coordinated with other utilities in Iowa and/or RTOs?

Yes, with MISO.

3. Does your utility participate in Midcontinent Independent System Operator, Inc., and Southwest Power Pool, Inc., emergency drills, including the firm load shed drills? What lessons have been learned from this participation?

Yes, through WPPI Energy. Participating in drills is key to performing successfully in an actual emergency. Actual emergencies are rare, so drilling is key to being prepared.

4. Are Iowa utilities prepared for a prolonged period of severe cold like February 2021 winter storm Uri? What changes have been made in the planning and preparation from the lessons learned in winter 2021?

WPPI's Iowa members are prepared to follow MISO reliability procedures to preserve the integrity of the power system. Additionally, at the local level, Preston Municipal Electric

ensured that their generators are ready to perform and secured sufficient fuel delivery arrangements.

5. If your utility serves as a Local Balancing Authority, how do you communicate firm load shed plans to load serving entities within your balancing areas?

N/A

6. How has your utility prepared and updated its communication plan to provide timely information to customers, regulators, and other stakeholders?

The Preston Electric Utility uses social media, newspaper and personal contact.

7. What are your expectations on winter 2022-2023 energy prices compared to prior years?

We expect winter 2022/23 energy prices will be similar to winter 2021/22 energy prices, higher than those of the years preceding 2021, and closely linked to the price of natural gas.

8. Do you have short-term and/or long-term policy suggestions that the Utilities Board could implement to ensure Iowa customers experience minimal impact from possible capacity shortages in the future? If so, what are the policy suggestions?

Yes, be mindful of the coming need for more capacity, with a portion of system resources consisting of dispatchable generation, compared to all the generation being dependent on the weather (i.e., the wind blowing or the sun shining).

9. To what extent do you plan to rely on emergency and/or economic demand response programs to avoid blackouts?

As a WPPI Iowa member, our generators are considered emergency resources and are available to MISO if MISO calls on those resources to avoid blackouts.

10. Do you have any coal or coal transportation (rail) issues that are hindering the winter preparedness for the thermal generation fleet of the utilities? What steps have been taken to address the issue?

N/A

11. Have you faced any component availability, shipping delays, or labor shortage issues in spring/summer 2022 and did your company forego any outage or planned maintenance?

Yes we experienced some shipping delays. No, we did not forego any outage or planned maintenance.

12. What are the weather assumptions for 2022-2023 winter operations and resource availability? What are the weather characteristics of the reasonable worst-case scenario?

N/A. WPPI provides sufficient capacity to cover projected peak demand plus the MISO established planning reserve margin requirement.

13. Iowa utilities that have registered generator assets are requested to provide outage and maintenance schedules for the next six months.

N/A

14. Iowa utilities with behind the meter generation are requested to provide the type, fuel, and capacity of those generation assets.

Type/Fuel	Capacity (Nameplate)
Diesel/Gas	1.6 MW
Diesel	1.8 MW
Total	3.4 MW