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April 14, 2021

BY ELECTRONIC DELIVERY

Ms. Lora W. Johnson
Clerk of Council
Council of the City of New Orleans
City Hall, Room IE09
1300 Perdido Street
New Orleans, LA 70112

In Re: Resolution No. R-21-87 - A Forensic Investigation Into Entergy New Orleans, LLC Load Shed Protocols and All Events and Decisions Related to the February 2021 Winter Storm Uri Event

Dear Ms. Johnson:

Enclosed please find the *Council Utility Advisors' Initial Report* in the above referenced matter, which is being submitted for filing into the record along with this letter. As a result of the remote operations of the Council's office related to COVID-19, the Advisors submit this filing electronically and will submit the requisite original and number of hard copies once the Council resumes normal operations, or as you direct. Please file this submission in accordance with Council regulations as modified for the present circumstances.

Sincerely,

Jay Beatmann
Counsel

JAB/dpm
Attachment

cc: Council Utility Regulatory Office

RESOLUTION NO. R-21-87 - A FORENSIC INVESTIGATION INTO ENTERGY NEW ORLEANS, LLC LOAD SHED PROTOCOLS AND ALL EVENTS AND DECISIONS RELATED TO THE FEBRUARY 2021 WINTER STORM URI EVENT

COUNCIL UTILITY ADVISORS' INITIAL REPORT

I. Background

During the period February 12-17, 2021, Winter Storm Uri swept across North America resulting in and over 170 million Americans being placed under various winter weather alerts. For several days leading up to February 16, 2021, Entergy New Orleans, LLC ("ENO") received multiple notices, alerts, and other communications from the Mid-Continent Independent System Operator ("MISO") notifying ENO of a potential emergency event resulting from the extreme cold weather within the MISO territory. On Friday, February 12, MISO called for conservative operations due to extremely cold temperatures and generator fuel supply risks. Beginning Monday, February 15, at approximately 6:00 a.m. (CST) [1], MISO escalated the declaration to a maximum generation emergency alert ("Max Gen Alert") for its southern region, which includes New Orleans, and increased the level of its emergency operations notifications throughout that day.[2] Again, on Tuesday, February 16, at approximately 5:00 a.m. MISO declared a maximum emergency event level step 2 ("Max Gen Event Step 2") effective from 7:00 a.m., which was extended to 9:00 p.m. that evening. Member utilities were directed to reduce load and curtail load management resources ("LMRs"), and to implore customers to conserve energy and to prepare for extreme cold weather conditions.[3]

[1] All time references are Central Standard Time unless otherwise stated.
[2] ENO's response to Advisors' First Set of Data Requests 1-19.
[3] ENO's response to Advisors' First Set of Data Requests 1-19, and also Attachment 1 to this report.

On Tuesday, February 16 at approximately 6:43 p.m., MISO directed a *pro rata* load shed ("Event") to prevent more extensive, prolonged power outages that could severely affect the reliability of the bulk power grid. A "load shed" is the intentional disconnection of customers to temporarily reduce electricity demand to avoid a possible system collapse. ENO was advised that its share of the load shed was 26 megawatts ("MW").[4] However, during the execution of the Event, ENO actually shed 105 MW, which resulted in nearly three times as many customers losing power than would have been otherwise impacted, with the loss of service up to 1 hour and 40 minutes.[5] ENO customers were not alerted in advance that rolling blackouts were about to begin, nor were they provided any information during the blackout periods explaining what was happening, or when it might end.

In addition, the load shed included a feeder connected to the Sewerage & Water Board of New Orleans ("SWB"),[6] a critical customer, interrupting power to portions of SWB's potable water facilities. This feeder should not have been interrupted.

As a result of the Event having occurred and customers not having received sufficient, understandable warning and explanation from ENO, thousands of customers and businesses, including many vulnerable residents, lost power and were predictably distressed. The Council called a special emergency meeting to address the Event.

As Councilmember Helena Moreno put it at that special joint meeting of the Public Works, Sanitation and Environment Committee ("PWSEC") and the Utility, Cable, Telecommunications and Technology Committee ("UCTTC") held on February 23, 2021 ("Joint Meeting"):[7]

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[4] ENO's response to Advisors' First Set of Data Requests 1-5 and 1-19.
[5] Letter dated March 10, 2021 from David D. Ellis to all councilmembers ("Ellis Letter").
[6] *Id.*
[7] A second meeting of just the UCTTC further discussing the Event was held on March 16, 2012 ("UCTTC Meeting")

> Not one social media post or text alert or email to customers or news release was sent out. So that meant that businesses were scrambling trying to understand what was happening. Concern and confusion spread among families unsure of just how long they were going to be stuck in the cold....
>
> So, I mean, we left people in the cold then that didn't need to be left in the cold. Businesses shut down that evening. There were restaurants full of people because it was the evening of Mardi Gras. They were finally able to make some money during this pandemic, then had to shut down because they lost power and customers walked out of their business.[8]

Councilmember Cyndi Nguyen also expressed her reaction to the event:

> I am extremely disturbed about this information, so I just want to have a comment and then I have a question.
>
> So, I was just really on the phone with Becky [Knox] that night expressing that 160 senior citizens in my district that live at Peace Lake Towers, were impacted by this and then when it was shared with me that we needed to shed I understood.
>
> But then finding out today that maybe those senior citizens did not need to suffer that night. It is extremely disturbing. It is extremely disturbing to hear about this.[9]

Exacerbating the Council's extreme frustration with ENO's overall performance was ENO's lack of preparation and information during the Joint Meeting. ENO's representatives were painfully unable to respond to councilmembers' questions about the Event.

Councilmember Moreno expressed her frustration: "I'm -- it's rare that I'm speechless, but I'm just absolutely just amazed by this. I'm amazed. And then you all can't even explain today as to why it happened."[10]

Councilmember Jay Banks was similarly disturbed:

MR. BANKS:

> And sir, if you can just let me chime in. I am just sitting here just seething and bewildered at the same time. I have never heard anything about

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[8] PWSEC and UCTTC Special Meeting Transcript, February 23, 2021, ("Joint Meeting Transcript"), at 11, Lines 6-12 and at 34-35, Lines 19-2.
[9] *Id.* at 44-45, Lines 18-5.
[10] *Id.* at 36, Lines 2-5.

> this large of a number. I was told that MISO required the number that it required, so somebody please clarify why that number went up three times.
>
> And this is totally unacceptable. Somebody's got to say something and everybody can't look at everybody else and wonder. Somebody made a decision so somebody please own that now. Explain what happened and why it did, cause this is totally unacceptable.
>
> And I'm hearing crickets. Now maybe, I don't know if my mic is broken and nobody heard me, cause I usually have technical problems. But at the end of the day, somebody say something.[11]

Ultimately, every councilmember noted the same frustration over the stark lack of explanations by the ENO panel of representatives, which led to Councilmember Moreno requesting that Mr. David Ellis, President and CEO of ENO, join the meeting:

MS. MORENO:

> Mr. Hawkins, I know that from, I hope that CEO, David Ellis, is nearby. Mr. Ellis, if you can hear me, I actually want you now to be a part of this meeting. Because now we have a real, we had a major situation, but now we have a really significant situation here.
>
> So Mr. Ellis, if you are nearby, I'm actually calling for you to now be a part of this utility committee meeting. Can somebody from Entergy - - let Mr. Ellis know.[12]

As a result of the Joint meeting the Council directed that the Council's Utility Advisors "immediately initiate an Investigation of Entergy New Orleans relative to its response to the Winter Storm URI weather event and the MISO declared Maximum Generation Emergencies of Friday, February 12 through Saturday, February 20, including the load shed event of February 16, 2021."[13] The Council further directed the Advisors "to develop a public report on their findings

[11] *Id.* at 37-38, Lines 17-8.
[12] *Id.* at 38-39, Lines 18-2.
[13] City Council of New Orleans Resolution No. R-21-87 ("Resolution") at 5.

as a result of this Investigation including a recommendation to the Council as to whether or not more actions are needed."[14]

Pursuant to the Council's mandate, the Advisors initiated an initial investigation into all matters surrounding the Max Gen Alert and the Event with an understanding that the Advisors' report would be completed within forty-five (45) days of the adoption of the Resolution. Accordingly, the Advisors engaged in a discovery process directing more than 100 detailed discovery requests to ENO to obtain all relevant information.

The Advisors identified and divided the investigation into two main component parts:

1. Technical issues that related to the over-shedding of megawatts and customers; the interruption of service to the Sewerage & Water Board; the weatherization status of ENO generation resources; and the process for determining priorities and sequencing of feeders (customers); and
2. Communications related to ENO's messaging to customers and the City Council before, during, and after the Event.

Due to the limited time frame, efforts were made to expedite the discovery process by prioritizing requests that the Advisors determined would be most helpful in investigating the performance of ENO during the MISO Max Gen emergency conditions and load shed events. To supplement the written requests and expedite the responses, three discovery conference calls were held with the Advisors, ENO attorneys, and various ENO and Entergy personnel with knowledge, data, or experience relevant to the investigation. The Advisors note that they received a high level of cooperation from the ENO attorneys in the discovery process, including prioritizing and expediting discovery responses promptly and thoroughly.[15]

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[14] *Id.* at 8.

[15] The Advisors note, however, that there are still several data responses pending.

The Advisors received hundreds of documents over the course of the discovery period, totaling thousands of pages. However, it should be noted that most of the discovery responses were designated as Highly Sensitive Protected Material ("HSPM"), which severely restricts the use of the data contained therein. As a result, much of this public report relies upon the Advisors' summaries and adaptation of information that support the report's conclusions and recommendations, but without the ability to attach specific documents and other data production. However, the docket recommended below would provide a process whereby an appropriately protected HSPM record could be developed and made a part of the proceedings.

As will be reported in more detail below, the Advisors' initial conclusions are that ENO was responsible for technical and communications failures that resulted in adverse consequences for its customers, which were avoidable.

II. Summary of Issues

ENO's automatic load shedding computer program was incorrectly programmed, and it relied on outdated or incorrect data, perhaps for decades. These programming and data errors, coupled with errors in reading actual load at the time of the Event, resulted in ENO shedding 105 MW of power rather than the 26 MW assigned to it in the original directive. This resulted in approximately 18,000 additional customers losing power than was required. These programming and data errors were not discovered and corrected during the ENO's required annual system reviews, again, perhaps for decades. In addition, an error in the development, maintenance, and updating of ENO's priority classifications of distribution feeders and critical customer lists resulted in an interruption of power to some SWB facilities during the event, without warning.

There were also technical flaws in ENO's sequencing of feeders included during the Event, which seemingly allowed higher classification category feeders to be disrupted.

With respect to communications, although there are numerous deficiencies in the communication procedures employed by ENO, the main problem discovered by the Advisors is that ENO has abdicated its communications responsibility to Entergy Services, LLC ("ESL") and/or other Entergy companies to the detriment of ENO customers. ESL and other Entergy companies clearly acted as though ENO specific communications were an afterthought, quite literally, and ENO did nothing to prevent that result either structurally, organizationally, or during the event.

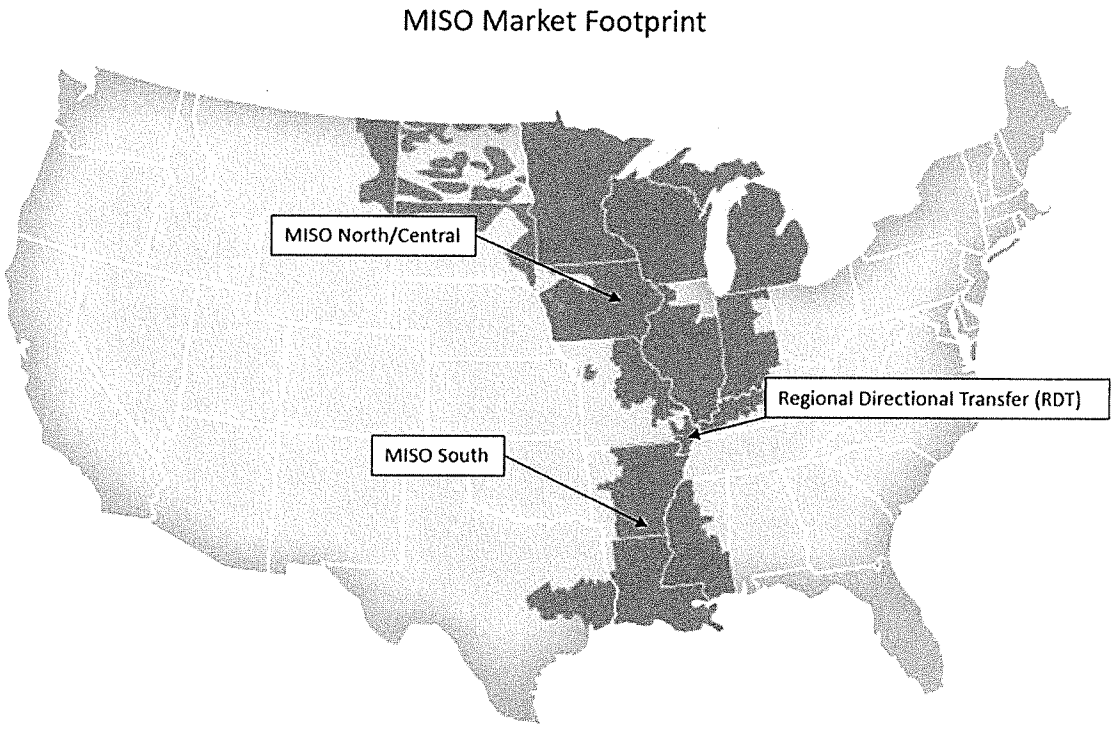
III. Technical Issues

The Entergy Operating Companies ("EOCs")[16] joined the Midcontinent Independent System Operator, Inc. (MISO) in December of 2013. In general, MISO operates capacity and energy markets, plans transmission in coordination with MISO Transmission Owners, and is responsible for reliably managing the commitment and dispatch of generating units for a region that extends from parts of Canada to the Gulf of Mexico. While the EOCs, including ENO, are responsible for maintaining and operating their generating resources, the ultimate dispatch of those resources is directed by MISO.

[16] The Entergy Operating Companies are, Entergy Arkansas, LLC, ("EAL"), Entergy Louisiana, LLC ("ELL"), Entergy Mississippi, LLC ("EML"), Entergy New Orleans, LLC ("ENO"), and Entergy Texas, Inc. ("ETI")

Figure 1 shows a map of the MISO market footprint noting regions and the location of the Regional Directional Transfer ("RDT").

Figure 1



Abnormally cold temperatures were experienced across the central United States from February 12, 2021 through February 19, 2021. By February 16, more than thirty-five (35) percent of the generation in MISO South was in outage or derated. The increase in demand from the cold weather coupled with unit outages and derates across the central U.S. resulted in atypical flows of energy within MISO, the Southwest Power Pool ("SPP"), and the Pennsylvania New Jersey Maryland Interconnection ("PJM") regional transmission organizations ("RTO"). While there were multiple load curtailment events in MISO on February 16, the load curtailment that affected

New Orleans was triggered by an energy flow limit having been exceeded on the Regional Directional Transfer between MISO North/Central and MISO South regions.

On February 16, 2021 at 6:43 PM (CST), MISO declared a Max Gen Event Step 5 and directed a 700 MW load shed in the MISO South Region. ENO's allocated amount of load shed was 26 MW. Unfortunately, for reasons discussed more fully below, the actual amount of load shed by ENO was 105 MW – 4 times the amount necessary. The load shed event began at approximately 7:15 p.m. on the evening of February 16 and lasted for approximately one hour and forty minutes, affecting nearly 25,000 ENO Customers.

A. Procedures and Protocols in Preparation for Capacity Emergencies

In preparation for dealing with capacity emergencies NERC, MISO, and Entergy have developed procedures, manuals, and processes that guide interactions and communications between NERC, MISO, Local Balancing Authorities ("LBAs"),[17] and Market Participants, including Load Serving Entities ("LSEs") such as ENO. In addition, these procedures and manuals are used to implement the load shed process. Each of the documents are subject to periodic review and updating. The Technical Advisors have reviewed the following procedures, manuals, and processes.

1. NERC Emergency Operating Procedures EOP-011-1. Effective April 1, 2017. Ensures that each Balancing Authority has developed Operating Plans to mitigate emergencies, in conjunction with the MISO Reliability Coordinator and with standards for compliance.

2. MISO Market Capacity Emergency, SO-P-EOP-00-002 Rev: 9. Effective April 24, 2020. Reviewed annually, this is included under the MISO

[17] The Local Balancing Authority ("LBA") is an entity that is responsible for compliance to NERC for the subset of NERC Balancing Authority Reliability Standards. LBA activities include: maintaining interconnection telemetry, metering, and associated accounting; establishing equipment ratings and monitoring their local system in real-time; implementing emergency procedures including load shedding.

Reliability Operating Procedures for MISO Market Capacity Emergencies and Abnormal Conditions. These protocols provide a set of emergency operating plans to address capacity and energy emergencies within MISO, including Stakeholder Market Participants, such as ENO. These protocols also address Stakeholder actions during a MISO Max Gen Emergency and include immediate actions to mitigate any undue risk to the Interconnection, including load shedding; includes Load Modifying Resource ("LMR") instructions via a MISO communications system (MCS).

3. Entergy Operations Management Manual, OMM-Pl-014. Effective date of July 2, 2020. This is the Event Reporting Operating Plan mandated by NERC Standard EOP-004. This Manual governs Procedures for Business Units, such as ENO, which include the specific responses to system-wide weather events as part of Entergy's Utility Operations Emergency Operations Plan, which is included in Entergy's System Planning and Operations ("SPO") Policies and Procedures.

4. Entergy Load Risk Management Load Shed Process, Rev. 02. Dated February 27, 2008. This ensures that Entergy's load shed program is consistent with the Regional Reliability Organization program and provides guidelines for determining the loads subject to curtailment, including the process for feeder selection for a load shed plan.

5. Entergy SPO Policies and Procedures - Capacity Emergency Load Shed Process, and Event Reporting, Rev. 12. Dated December 1, 2020, the operating plan that addresses Requirement R2 of NERC EOP-011-1, which mandates an Emergency Operating Plan.

6. LBA Operating Guide Firm Load Shed Process, Rev. 7. Dated September 3, 2019. This guide provides the orderly and equitable process steps the Entergy LBAs (including the EES LBA and ENO) execute when MISO instructs an emergency firm load shed.

7. ENO Load Shed Plan. Dated April 27, 2020. Reviewed annually, this plan lists details of the specific feeders that were curtailed in the February 16, 2021 Firm Load Shed. From a review of Entergy communications, it appears that there were no changes from the 2019 ENO Load Shed Plan.

The Advisors also requested and reviewed operational communications and communication logs for the period leading up to and including the Event, but did not identify any deviations from the procedures, with the exception of the actual Event execution, which is discussed below.

The Advisors note that Entergy's manuals and procedures are detailed in their instructions but may be cumbersome to implement as they involve a myriad of groups and organizations within Entergy. While some level of complexity is necessary given the size of the Entergy organization, the process with respect to some aspects appeared to provide for multiple communication paths from different Entergy groups to certain stakeholders. While it is not known if these multiple paths created any confusion, the docket recommended below, and any actions taken therefrom, should address this concern.

B. Events Leading up to the Firm Load Shed Event

Anticipating extreme cold temperatures, Entergy began pre-storm preparations approximately a week before the Event. While the details regarding Entergy's pre-storm activities have been classified by ENO as HSPM, the Advisors can report that Entergy took actions that included canceling planned outages on several other EOC-owned units and returning to service a unit that was on reserve shutdown. During this time Entergy also participated in daily calls between MISO and the Entergy LBAs and arranged for environmental waivers in advance of the storm.

MISO uses defined emergency operations messaging whereby MISO communicates to its members the status of its emergency operating procedures to provide for situational awareness and guide MISO and member actions.[18]

MISO's Emergency Operating Procedures proceed from Advisories, to Alerts, to Warnings, and to Events. The critical steps are as follows:

- Max Gen Alert – Alert for Situational Awareness: potential capacity shortage
- Max Gen Warning – Prepare for Possible Event
- Max Gen Event (Step 1) – Actions Taken to Preserve Operating Reserves
- Max Gen Event (Step 2,3,4) – Actions Taken to Preserve Firm Load
- Max Gen Event (Step 5) – Shed (curtail) Load

Messaging leading up to the Event began on February 13 when MISO declared a Maximum Generation Capacity Advisory to begin on February 15, at 8:00 a.m. Throughout the day on February 15, emergency operations messaging for MISO South progressed from Alerts to Warnings, getting as high as Max Gen Event Step 2.

On February 15, there was a Local Transmission Emergency in the Western Pocket of MISO South in Texas during the morning peak where MISO curtailed 800 MW of load. On the morning of February 16, there was another Local Transmission Emergency in the Western Pocket in Texas where MISO curtailed 300 MW of load and a Transmission System Emergency in the Acadiana Area in southwest Louisiana where MISO curtailed 1000 MW of load. Also, during the morning of February 16, MISO extended Conservative Operations and declared a Max Gen Event Step 2a.

Under Max Gen Event Step 2a, MISO informs the affected LBAs to implement Load Modifying Measures and Load Modifying Resources, such as interruptible load resources. It appears that the Entergy EES Local Balancing Authority and the EOCs, including ENO, did

[18] See Attachment 1 which summarizes MISO's emergency Operating Procedures and terminology.

implement Load Modifying Resources at various times over the three-day period, February 15, through February 17. However, in reviewing the HSPM logs of operations, some notifications are missing, and incongruencies were observed with respect to the timing of the operation of the Load Modifying Resources, the dispatch level of generating units, and the timing of the Event. This is an area that requires additional information from MISO.[19]

C. Firm Load Shed Event

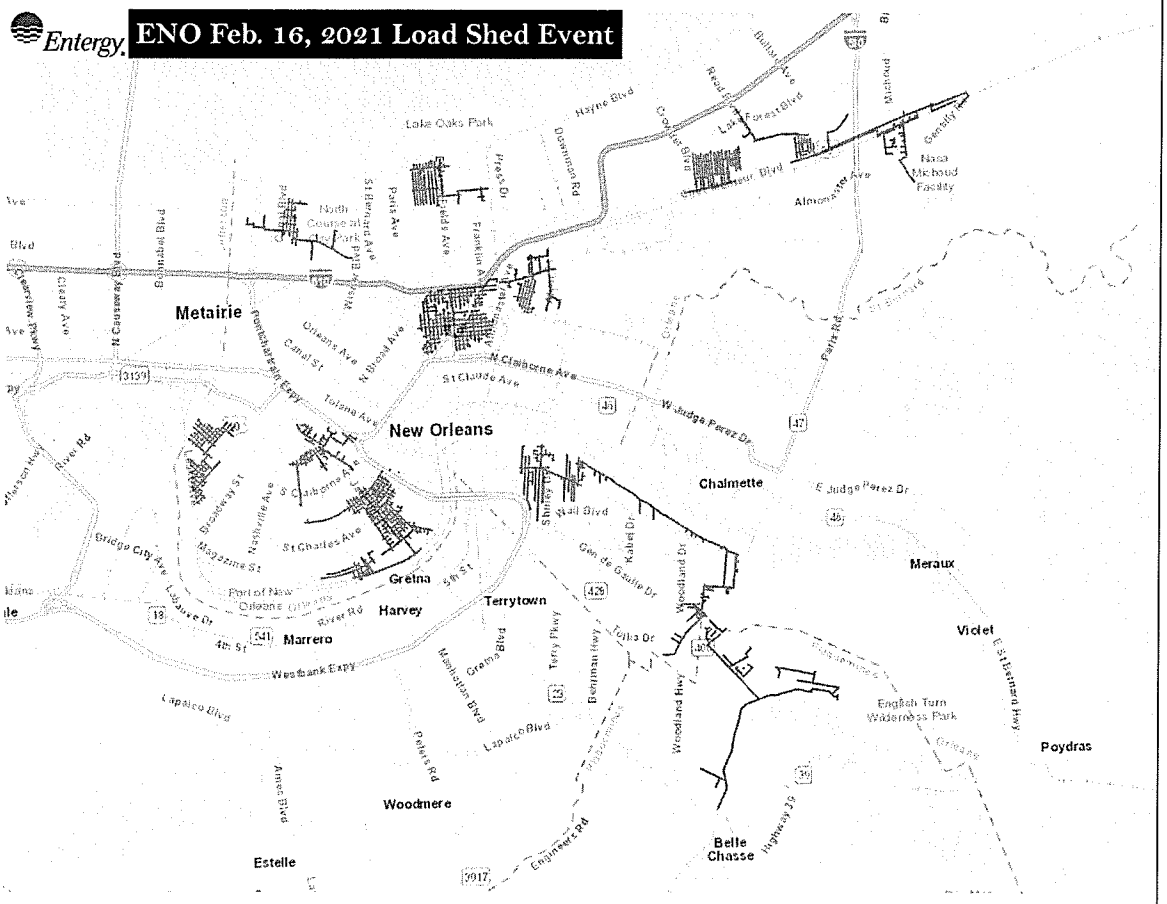
On February 16, 2021 at 6:43 p.m., MISO declared a Max Gen Event Step 5 and directed a 700 MW load shed in the MISO South Region. The load shed was to be allocated to all MISO South LBAs on a *pro rata* basis with each LBA allocating the load shed to the Load Serving Entities (LSE) within its LBA. Of the 700 MW, the Entergy LBA was allocated 538 MW, of which the EOCs were allocated 448 MW of load shed; ENO's allocated amount was 26 MW. A chronology of the February 16, 2021 Event is summarized on Attachment 3, which begins with the MISO directive to the LBA to shed load. This chronology was derived from responses to the Advisors' discovery requests and cross-referenced to copies of notifications and logs.

The Entergy LBA Operations, following Emergency Operating Procedures, targeted a firm load shed of 26 MW from ENO's customers; however, the actual firm load service interruption was 105 MW, impacting approximately 25,000 customers for up to one hour and 40 minutes. If the load shed had stopped at the actual target of 26 MW, fewer than 7,500 customers would have likely been affected. In total there were 15 distribution feeder circuits that were interrupted in New Orleans during the Event.

[19] A chronology of events up to the MISO notification of Max Gen Event Step 5 (Firm Load Shed) is included as Attachment 2.

The service interruptions were distributed throughout the city. Figure 2 presents a map of the feeders that were interrupted.

Figure 2



The Technical Advisors have confirmed that there were two immediate causes for the excessive shedding of 79 MW beyond the 26 MW load shed directive for ENO's service area:

1) 60 MW of ENO load was erroneously included in an ELL load shed program, resulting in 13,400 ENO customers (rather than ELL customers) losing service; and

2) an improperly functioning measurement of load in one of ENO's substations provided an inaccurate reading of actual load shed, resulting in an additional 19 MW of excess load shed and an additional 4,200 ENO customers losing service.

The specific errors discovered with the ENO load shed, and the faulty measurement equipment summarized above, resulted in 17,600 customers' service being interrupted erroneously of the total of approximately 25,000 customers affected.

Several Entergy entities were involved during the Event, each generally responded in accordance with the emergency procedures, including the timing of the responses. However, the Advisors have not yet been able to determine why the Supervisor of Distribution Dispatch at the Louisiana Distribution Operations Center South (LA DOC South), among other Entergy staff at LA DOC South, did not recognize, or act to remedy, the excessive ENO load shed over the one hour and forty minute event. Also, there appears to be a critical disconnect between the Advanced Metering System ("AMI") and the Outage Management System ("OMS") capability of effectively identifying the outage of customers and feeder locations, verified by distribution operators,[20] when the distribution operators were aware of the targeted amount of ENO load to be shed. A review of unadjusted load shed data of each affected ENO substation feeder also indicated that the restore and load shed operation of two circuit breakers was inconsistent with the load shed operation of the other affected feeders.

The load shed execution is accomplished through an automatic program in which the targeted amount of load for subregions defined within each of the EOCs is entered into the

[20] In an April 1 letter to the Council ENO Vice President, Regulatory Affairs, Becky Knox stated: "Advanced meters also support more effective outage management during storm restoration work and can provide nearly instant awareness of power outages customers may be experiencing. AMI can help us visualize, analyze and efficiently manage repairs, reducing outage times while quickly and accurately allowing our distribution operators to verify service restoration."

automated program. The automated program steps through the list of pre-programmed feeders, opening the breakers to those feeders and using real time load measurements on each feeder to determine when the target amount of load shed has been achieved and no additional breakers need to be opened.

At the March 16, UCTTC meeting, Mr. Elieces Viamontes, Entergy's Vice President of Distribution Operations, explained:

> It is designed to automatically and quickly shed and restore load using the real time SCADA[21] system. Each year a review and prioritization is developed and the feeder circuits are verified as candidates for a potential load shed are preprogrammed into the automated system.
>
> During an actual event the operator's role is strictly to enter the megawatts and trigger the automated process where the system takes over until the target megawatts is reached.[22]

The significant points in the quoted description of the load shed program are (1) the load shed once initiated is automatic and quick, and (2) feeder circuits for load shed are reviewed, prioritized, and verified.

The automatic and quick nature of the load shed emphasizes the importance of ensuring, in advance of a load shed event, that the program operates correctly. An annual review is required as part of the "Entergy SPO Policies and Procedures - Capacity Emergency Load Shed Process, and Event Reporting." Further, as part of the Entergy Load Risk Management Process, ENO and the other EOCs are annually responsible for "...reviewing and updating the interruptible/curtailable retail service customer list and loads" as well as reviewing and concurring with the updating of "[t]he assigned circuit priority classification for all circuits selected for load shed and critical customer assignment".

[21] Supervisory control and data acquisition (SCADA)
[22] UCTTC Meeting Transcript at 43-44, Lines 17-1.

At the UCTTC meeting, Entergy confirmed that the latest annual review of the load shed plan occurred in April 2020 and described the annual review as a cross-functional process that includes individuals from distribution, transmission, Entergy's information technology group, and customer service.

Although Entergy also addressed training, simulation, and testing with regards to the load shed program it was apparent that the simulations that were performed were not an actual test of the load shed program in an external computer environment but more of a simulation of the actions needed to be taken by operators to implement a load shed and communications with MISO.

If the annual review process had been more robust and actual simulations of the program had been performed in an external computer test environment, the errors that resulted in the 60 MW of excess load shed due to the ENO feeders being improperly identified as ELL feeders would have been avoided. ENO has failed to explain how Entergy's cross-functional review process, with a significant participation from multiple entities, failed to catch the errors. The Advisors understand that a load shed event of this type has not been executed by Entergy in more than 20 years but cannot say at this time how long the error has persisted and slipped through the annual review process.

In addition to the problems with the load metering equipment and the ENO feeders being improperly identified as ELL feeders during the Event, one of the ENO feeders serving the SWB water intake facility was interrupted by the load shed program. The feeder at issue serves the Hamilton electrical vault at the rear of the SWB Carrollton Water Treatment Facility. That feeder is not dedicated solely to serve the SWB; rather, it also serves approximately 2,400 residential customers in the area.

ENO service to that load was interrupted at 7:16 p.m. At approximately 7:44 p.m., copies of notifications indicate that ENO was made aware of a service loss to SWB, but also that relevant Entergy organizational entities had not yet been informed. At 8:31 p.m., service was restored to the SWB feeder. However, this feeder should have been prioritized as including a critical customer and should not have been interrupted during the Event. ENO has indicated the feeder at issue has since been removed from the ENO Load Shed Plan, but the question remains as to how a critical customer feeder was not protected resulting in the potential loss of a critical utility.

Mr. Ellis' March 10, 2021 letter to Members of the New Orleans City Council Re: Follow-Up on February 16, 2021 New Orleans Winter Storm Load Shed, the President and CEO ("Ellis Letter"), addresses the selection of feeders to be shed:

> Entergy's Distribution organization undertakes a process whereby it establishes priority categories for the interruption of service during load shed events. The Company undertakes a process whereby feeders are placed in categories ranked from 3 to 0, with 3 consisting of mostly residential load that is added to the load shed plan to be interrupted first, and 0 being critical customer load that is only included in load shed events if absolutely necessary. The socio-economic make-up of neighborhoods is not a consideration when ranking these feeders for the prioritization list. Residential load in general is included in priority 3, and thus designed to be interrupted first in order to protect the general health and welfare by preserving power, to the extent possible, to facilities like hospitals, police stations, and businesses that provide supplies.[23]

Further, Mr. Ellis noted that "...although the load shed program is populated using the priority categories described above, ENO has been unable to identify the original criteria used to establish the sequencing in which breakers are interrupted."[24]

Councilmember Giarrusso focused on preparation that might have avoided at least the SWB interruption:

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[23] Ellis Letter at 4.
[24] *Id.*

MR. GIARRUSSO:

> Okay. And then you, Mr. Hawkins, you've explained a couple of times about how there's different priority levels. Depending on whether you're a priority one, priority zero, whether you're a hospital or first responder. Here's my question.
>
> Before February the 16th, when was the last time Sewerage and Water Board and Entergy discussed their powers and breakers they would need for power or water purposes?

MR. HAWKINS:

> As it relates to that list or just in general?

MR. GIARRUSSO:

> As it relates to the list.

MR. HAWKINS:

> As it relates to the list, I don't know that there was a discussion. I would have to verify that, to see if there was an actual discussion with Sewerage and Water Board regarding that list.[25]

A review of HSPM discovery responses suggests that the load shed program may not have recognized the feeder priority categories assigned to the feeders. Additionally, a review of the HSPM "Entergy SPO Policies and Procedures - Capacity Emergency Load Shed Process, and Event Reporting," suggests that Priority Class 1 and Priority Class 0 should not even be included on the load shed list in the load shed program. While the corrective actions taken by Entergy with respect to their load shed program, which are discussed later in this report, are a step in the right direction, there are likely other actions that need to be taken with respect to priority category treatment within the ENO load shed program.

While Mr. Ellis has indicated that the socio-economic make-up of neighborhoods is not a consideration when ranking the feeders on the load shed list, he notes that ENO has been unable

[25] Joint meeting at 72-73, Lines 23-19.

to identify the original criteria used to establish the sequencing in which breakers are interrupted. A review of discovery responses suggests that the sequencing is intended to be based first on priority, starting with feeders having the lowest priority classification, and second by a random number generated to establish the sequence within that priority category. Further, based on discussions with ENO and Entergy, the Advisors understand that once a feeder is interrupted it moves to the bottom of the load shed list and will not be interrupted again until all other feeders on the load shed list have been interrupted.

Entergy has indicated that ENO's load shed plan includes 42 distribution circuit feeders; however, this is only about 18 percent of the total distribution feeders in New Orleans. At this stage of the investigation, the Advisors do not know how the 42 feeders were selected. The Advisors recommend additional review in this area of feeder selection, prioritization, and sequencing to ensure that all ENO customers are treated equitably. Specifically, the Advisors recommend a comprehensive review of all ENO distribution feeders, identifying all feeders with critical customers, prioritizing all remaining feeders, and from that, establishing a new load shed plan which includes as many feeders as reasonably possible with a randomly assigned load shed sequence.

D. Corrective actions claimed by Entergy following the Firm Load Shed Event:

ENO has asserted that the "pre-programmed" ENO Load Shed program and the Entergy Louisiana ("ELL") Downstream of Gypsy ("DSG") Load Shed program have been re-programmed to eliminate the incorrect circuit breaker assignments. According to ENO an Entergy information technology team worked with Distribution Operations and Planning to create updated load shed programs for both ENO and ELL. No indication was given regarding participation of ENO staff with the revisions to the ENO Load Shed Program or the ENO Load Shed Plan.

The Advisors received two follow-up responses related to the revised ENO Load Shed Plan,[26] but there appeared to be inconsistent data regarding ENO distribution feeders. Specifically, the March 30, 2021 data identified two ENO-Amite South feeders as being included in the Event; however, those two feeders were not included in the list of interrupted feeders provided in previous ENO discovery responses.[27] There was also no evident correlation between the feeder loads in the March 30, 2021 revised ENO Load Shed Plan and the feeder loads listed as megawatts curtailed during the Event.

ENO has indicated that the improper functioning load measurement equipment was corrected following a comprehensive evaluation of load measurement and communications equipment for all ENO feeders, completed shortly after the March 10, 2021 David Ellis letter to the Council. ENO has provided no indication when such a comprehensive evaluation was last performed, or if load measurement problems that occurred during the Event could have been identified previously by distribution operations during drills or scheduled preventive maintenance, which information should be addressed in the recommended docket.

ENO also asserts that cross-functional reviews among EOCs specific load shed plans are being added to the annual update process to verify that the various load shed plans are correctly reflected in the load shed applications that are programmed into the SCADA system. In addition, ENO asserts that the ENO feeder (SouthPort BO527) that includes a SWB load that was shed, and another feeder with priority classification 2 (Napoleon 1911) were removed from the revised ENO Load Shed Program feeder rotation. However, ENO did not yet provide a critical customer list,[28] as well as a deliverable and timetable regarding completion of an update of priority classifications

[26] The two responses related to the revised ENO Load Shed plan were received on 03/19/2021 and 03/30/2021.
[27] ENO discovery responses to Follow-Up Topic 7.
[28] A critical customer list was required as part of the Scope of the Investigation in Resolution R-21-87.

for all ENO feeders, particularly confirming the priority classification for the feeders in the revised ENO load shed plan.

E. Generating Unit Availability and Weatherization

In discovery questions Advisors 1-20 and Advisors 1-21 the Advisors asked for "all documents in ENO's possession, custody or control related to the operational status of all generating units serving ENO load throughout the Load Shed Event" and, "detailed documentation of the ability of each of the generating units serving ENO load to operate in extreme weather conditions and any weatherization measures utilized at each unit". The responses to each of those data requests were classified by ENO as HSPM. Accordingly, our discussion regarding generating unit availability and weatherization in this report is limited.

The response to Advisors 1-20 provided information on the operational availability of ENO's New Orleans Power Station ("NOPS") and Grand Gulf on February 16. Further, the response provided similar information on ELL's generation located in Amite South and Downstream of Gypsy as these generating facilities are near New Orleans and likely to be the generating units providing power to ENO's load.

The information included the status of the units that were identified in Council President Moreno's February 22, 2021 letter to Mr. Ellis, requesting ENO's load shed protocols, a timeline of events regarding the February 16 load shed event, and notifying ENO that the Advisors have been directed to work with ENO to investigate the weatherization level of local generation facilities including, but not limited to: NOPS, Ninemile, Little Gypsy, and Waterford.

The response to Advisors 1-21, in general, provided winter weather preparation procedures, design specifications, and wind ratings for NOPS, Ninemile, Little Gypsy, Waterford,

Grand Gulf, Union, River Bend Station, and the J. Wayne Leonard Facility. While this information is helpful, it does not fully detail the extent of the weatherization measures installed at the facilities, such as heat tracing on instrument lines and insulation on critical lines and instruments.

The Advisors are aware that cold weather was a factor in the availability of generating units in MISO South during this artic weather event. Further, the causes of the outages and derates were a result of some of the same causes identified by NERC in its Polar Vortex Review report on the January 2014 polar vortex event. While it appears from the discovery responses that the generating facilities in Amite South and Downstream of Gypsy performed better (lower percentage of outages and deratings) than MISO South in total, there still appear to be outages that might have been avoided with increased weatherization measures.

Accordingly, more work is necessary to ensure that cold weather effects on Entergy generating units can be mitigated while considering the cost burden of those additional weatherization measures or procedures. The Advisors do not have sufficient information at this time to make a determination with respect to the current weatherization of the Entergy generating facilities in Amite South and Downstream of Gypsy. However, beyond additional discovery, the Advisors recommend additional meetings with ENO and Entergy personnel and generating facility site visits to determine the current level of cold weather weatherization and potential recommendations on additional weatherization measures and procedures.

The Advisors believe that Entergy acted appropriately by taking proactive measures in advance of the Event, including delaying planned outages on several of the EOCs generating facilities as well as returning to service a unit that was on reserve shutdown. These actions likely mitigated the need for a larger load shed in MISO South. The Advisors also note that both of

ENO's owned units, NOPS and Union Power Station 1, were available for dispatch by MISO during the time of the load shed event as was Grand Gulf.

IV. Communications Issues

A major source of the critical communications failure that occurred during the Event is ENO's reliance on ESL and other Entergy companies for communication and public relation services. These services are among a list of shared services covered by an agreement between ENO and ESL that has existed for decades. As a result, ENO has no independent control over its communications, even those specifically directed to ENO customers, including in an emergency. In fact, ENO has, by contract, abdicated to ESL its responsibility to its customers to provide timely, informative, and understandable communications during an emergency.

Operationally, ESL and other Entergy companies are governed by communications protocols, procedures, and manuals that create a complex, bureaucratic, and bloated process that virtually assured that the emergency communications up to and during the event would fail utterly with respect to ENO customers, who represent the smallest part of the Entergy system. This is clearly reflected in the communications that were issued before, during, and after the event.

Entergy communications procedures are governed by hundreds of pages of manuals including at least two manuals that are specifically tailored for emergency communications related to power shortfalls as occurred during the Event.[29] Nonetheless, no ENO customer-specific message presented during this investigation was sent prior to or during the event that provided any sufficient, accurate, and understandable information related to the Event.

[29] Although they are considered HSPM by ENO they are referred to as 1) Entergy Power Shortfall Communications Plan, and 2) ETR Emergency Outage Response Communications Plan.

This result is complicated by the fact that ESL-controlled communications can be issued by a variety of means that do not always follow a consistent pattern. For example, some information is released by a news release directly to the media. Other information is released by ENO "alerts" or "newsroom updates," which are posted on the ENO website. Some information is sent by direct message to customers via text, email, or voicemail; some on social media. Although the details of the various communications manuals are currently designated as HSPM, the conclusion that they were ill-suited to the task of communicating to New Orleans customers during the Event is no secret.[30]

In the days leading up to the Event, all public communications referred to by ENO in connection with this investigation were consistently very general, mostly related to potential weather-related bill increases, and encouraging customers to "prepare for cold weather" and to conserve energy. They all lacked any clear sense of urgency.

On February 11, for example, voice and text messages were sent to customers who had signed up for such alerts with no mention of potential power disruptions, instead referring to "tips on how to save money and prepare for winter weather," and "we also offer a number of payment options to fit your needs."[31] In text and voice messages on February 14, there was again no mention of potential outages instead encouraging customers to "do your part to help by managing your usage to reduce bills and taking a few easy steps to conserve energy."[32]

On February 15, the first mention is made in text and voice messages that "if reductions [in electric usage] are not sufficient, it may be necessary to begin temporary interruptions of

[30] The sampling of communications referred to in this report were all provided in discovery by ENO or found on the ENO website. Although initially designated as HSPM, ENO counsel lifted that designation as to public communications referred to herein.
[31] See ENO Excel spreadsheet attached hereto as Attachment 4 and provided as part of ENO's Response to Advisors' First Set of Data Requests 1-15.
[32] *Id.*

electric service in your area," which statement appears near the end of long voice and text message scripts.[33]

During the same period, the system-wide prejudice of the communications system is reflected in a February 14, Entergy Louisiana winter storm alert posted on the Entergy website at 3:00 p.m. and referred to by ENO as a communication relevant to this investigation.[34]

However, that alert reads in part as follows:

> Entergy crews are on standby across the state as the utility prepares for snow, ice and freezing temperatures statewide beginning tonight and into the week.
>
> The National Weather Service is predicting several inches of snow possible in north Louisiana and ice accumulation up to one-fourth an inch possible in north and central Louisiana, and up to half an inch possible in portions of south Louisiana, including Baton Rouge.
>
> If this type of winter precipitation occurs, it could pose significant challenges for our electric system, especially in cities, such as Baton Rouge that have a large tree canopy. Snow and ice can add weight to tree limbs and cause them to fall into electric equipment, downing power lines and utility poles. It can also add weight to power lines, causing them to sag and break cross arms or damage other electric equipment.[35]

There is no mention of New Orleans in this alert or of rolling outages. Another alert on February 14 refers to MISO with the following explanation:

> The current load forecasts are approaching an all-time winter peak, even greater than those experienced during the polar vortex of January 2019.
>
> These conditions are spread across the country, including the area served by the Mid-Continent Independent System coordinator that manages transmission and generation needs for the Entergy operating companies and other utilities. MISO projects whether it will have sufficient power generation to address increased demand and resource uncertainties the cold weather can bring.
>
> MISO will direct its members to take additional actions if generation or transmission sufficiency changes.

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[33] See ENO Excel spreadsheet attached hereto as Attachment 4 and provided as part of ENO's Response to Advisors' First Set of Data Requests 1-15. Although this attachment was originally designated HSPM, that designation was removed by ENO counsel because it is public information.
[34] ENO's response to Advisors' First Set of Data Requests 1-15.
[35] *Id.*

> Extreme cold can cause operational issues for our power generation facilities by adversely affecting systems and instrumentation that could result in a generator suddenly going offline and not producing power.[36]

Again, there is no information specific to New Orleans, nor is there any warning about impending outages.

This pattern continued into February 15. The only direct customer messages that day that mentioned potential interruptions of electric service in the event of insufficient reductions in usage was either a voicemail or text message with the following script:

> This is a call from Entergy.... we are strongly requesting our customers to limit electricity uses immediately, since the present extreme cold weather is increasing demand for electricity. Conservation can be done by turning off or not using non-essential lights and electric appliances, especially electric water heaters, clothes driers, and dishwashers and to turn heating thermostats to lower settings. If reductions are not sufficient, it may be necessary to begin temporary interruptions of electric service in your area. We apologize sincerely for this inconvenience and are working to restore our system to normal grid operations as soon as possible. For additional information, visit www.comentergynewsroom.com.[37]

News releases that day reflect the same general call for conservation. However, at noon on February 15, more specific information benefitting other Entergy service areas did find its way into a winter storm alert that read:

> Winter weather continues to significantly impact portions of Entergy service area in Louisiana, with approximately 60,000 customers without power as of noon. The greater Baton Rouge and Tangipahoa parish areas have been hardest hit.
>
> A storm team of 1900 including line workers, tree trimmers and support personnel is assessing damage and restoring power where it is safe to do so. Preliminary damage assessments indicate ice accumulations have knocked down power lines, tree limbs and entire trees into electric equipment. Road closures due to icy conditions and other accessibility challenges will hamper our ability to reach some areas and slow restoration in those communities.[38]

Again, no New Orleans-specific information in this otherwise general admonition to conserve.

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[36] ENO's response to Advisors' First Set of Data Requests 1-15.
[37] See ENO Excel spreadsheet attached hereto as Attachment 4 and provided as part of ENO's Response to Advisors' First Set of Data Requests 1-15.
[38] ENO's response to Advisors' First Set of Data Requests 1-15.

At 8:30 a.m. on February 15, in an "Entergy System Winter Storm Update" in an otherwise standard form winter weather alert, Texas specific information was included:

....

> Entergy Texas has started periodic power outages for its customers across southeast Texas. The company is taking this action as directed by our reliability coordinator, the Mid-Continent Independent System Operator (MISO), as a last resort and in order to prevent a more extensive prolonged power outage that could severely affect the reliability of the power grid.
>
> - This is an unusual situation driven by extreme weather conditions. A loss of generation combined with the peak load has caused a strain on the system. As a result, we are short of power needed to meet our customer's demands across southeast Texas.
> - Depending on conditions, individual customers may experience multiple outages during the day.
> - Crews have taken proactive steps to prepare and protect our assets from the extreme cold as well as placed additional power generation into service. Due to bitterly cold temperatures and the winter storm, the demand for electricity has reached an all-time high.
> - MISO is taking action or directing actions to be taken to restore the system to normal operations as quickly as possible and will direct Entergy Texas to stop the periodic outages as soon as the power shortfall no longer threatens the integrity of the rest of the electrical power system.[39]

On February 16, the local direct messaging was essentially the same as February 15 and lacked the urgency that was justified by the MISO Max Gen Event Step 2 in effect, the curtailment of ENO's largest interruptible customer, and the fact that a load shed was all but certain by mid-morning. Yet, again, the messaging contained no specific information related to impending outages in the New Orleans area except for a general statement that "If reductions are not sufficient, it may be necessary to begin temporary interruptions of electric service in your area," which only appears well into the voice and text messages scripts. By midday on February 16, ENO was well aware of the **probability** of load shedding affecting ENO customers. Yet, the news

[39] ENO's response to Advisors' First Set of Data Requests 1-15.

releases and alerts on February 16, were far more helpful to customers of **other** Entergy companies.

In the fourth paragraph of one news release on February 16, the following was stated:

> As of 1:00 p.m., approximately 62,000 customers in Louisiana were without power, with portions of southwest Louisiana, greater Baton Rouge and Northshore areas being hardest hit. Approximately 200 customers were without power in Orleans Parish. **In southwest Louisiana, Entergy Louisiana initiated power outages for some customers as directed by the company's reliability coordinator, Mid-Continent Independent System Operator. This was done as a last resort to prevent more extensive, prolonged power outages that could severely affect the reliability of the power grid. The directive from MISO has since been lifted and crews have begun the process of restoring power to customers in southwest Louisiana.**[40]

The news release, which is not time stamped, provided no useful information for the customers of ENO.

In a February 16, 10:30 a.m. "Winter Storm Update," the following information was provided:

> The winter weather continues to cause power outages for our customers across our service territory. Our restoration workforce continues restoring power where it is safe to do so. Temperatures overnight below zero in some locations have created extremely high demand for electricity in the service territory.
>
> Our grid operator, MISO, notified our operating companies in Texas and southwest Louisiana to start additional power outages for their customers.
>
> Extremely cold weather continues to effect operations across our territory. Low-temperature records below zero and in the teens dating back to 1903 have been met and exceeded in several locations, especially southeast Texas and southwest Louisiana.
>
> **Entergy Texas is conducting power outages for its customers across its Texas service territory. This includes an area north of Houston, and Jefferson, Orange, Hardin and Liberty Counties. Additionally, Entergy Louisiana has started power outages for customers in southwest Louisiana.** (Emphasis in original).[41]

[40] ENO's response to Advisors' First Set of Data Requests 1-15 (emphasis added).
[41] ENO's response to Advisors' First Set of Data Requests 1-15.

The balance of the alert is standard cold weather boilerplate with no useful information for the customers of ENO.

In a separate news release on February 16, more specific information was provided, at least for customers in southwestern Louisiana:

> Entergy Louisiana has started power outages for its customers across the southwestern portion of its service territory. The company is taking this action as directed by our reliability coordinator, the Mid-Continent Independent System Operator, as a last resort in order to prevent a more extensive, prolonged power outage that could severely affect the reliability of the power grid.[42]

Also, on February 16, the City of Beaumont, Texas was favored with a specific press release entitled "Entergy Forced to Initiate Power Outages to Customers in Beaumont Area."[43] The release reads in part "Entergy Texas has started additional power outages for its customers across the eastern portion of its Texas service territory, which includes Jefferson, Orange, Hardin and Liberty Counties.... Depending on conditions, individual customers may experience multiple outages during the day. Entergy will work to limit the duration of each outage, but due to significant demand on the system and generation outages, options may be limited."

It is important to note that this was one of many specific load shed alerts for **other** parts of Louisiana, Texas, Mississippi and Arkansas, but, in discovery responses, ENO presented no specific release or message issued for New Orleans, until **after** the event.

Indeed, some messages were contradictory. In a 5:00 p.m. update on February 16, a long multi-paragraphed document says:

> **Entergy's reliability coordinator, MISO, cancelled its order for power outages in Texas and Louisiana.** Shortly afterward, operators began restoring customers back to service who were affected by these outages. However, winter weather and the forecast could cause additional outages over the next few days.... Crews are currently working to restore customers effected by the load shed. This part of our restoration process could take many hours to complete. Additionally, some

[42] ENO's response to Advisors' First Set of Data Requests 1-15.
[43] www.entergynewsroom.com.

> equipment may have been damaged due to the cold weather and the amount of load being consumed.

Oddly, in the same release, several paragraphs later, contradictory statements are made:

> **We have begun targeted customer outages** to prevent the possibility of more extensive and wider spread outages. These outages may last several hours and it is not necessary to report your outage during this time.... Because of the extreme cold temperatures, resuming to full operation is a slower than usual process. We are working to minimize outage times as much as possible. We apologize for the inconvenience this outage has caused and appreciate your understanding.[44]

No New Orleans specific messaging referring to or explaining imminent outages before or during the Event has been presented by ENO during this investigation.

The first New Orleans specific communication does not occur until the event was already underway when Ms. Becky Knox, ENO Vice-President for Regulatory Affairs, sent an email to councilmembers at 7:35 p.m. stating that "At 6:52 p.m. MISO issued a Maximum Generation Emergency Event Step 5 effective from 02/16/2021 19:40 EST until 2/17/2021 01:00 EST.[45] MISO has called for a mandatory load shedding event for Louisiana including 26 megawatts from New Orleans.[46] "Our DOC will begin effecting load shedding immediately in order to satisfy the MISO request. The event is currently expected to last until midnight...."[47]

It was only the fact that Councilmember Moreno posted this information on her social media that anyone in New Orleans had any idea about the event until it was well underway. Notably, the information included in Ms. Knox's email was very limited and inhibited any efforts by councilmembers to provide useful information to the public.

In an email to Ms. Knox at 8:43 p.m., and referenced at the Joint Meeting, Councilmember Moreno urged ENO to provide information to the public:

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[44] "Storm Center...Entergy System Winter Storm Update – 2/166/21 @ 5 p.m." from Entergy website (emphasis added).
[45] Email from Becky Knox to Councilmembers, Council Staff and Advisors dated February 16, 2021.
[46] *Id.*
[47] *Id.*

> Becky, communications with the public is key during situations like this. It's been almost two hours since the directive and there's been no media.
>
> News stations are quoting Cleco's news release and my social media as to what's happening with blackouts.
>
> Please provide the public with information. Thank you. Helena Moreno.[48]

The councilmember received no response until after 10 p.m. that evening, after the Event had long ended. Similarly, ENO did not make any public information available until the Event had nearly ended.

> At 8:41 p.m. on February 16, a news release issued saying, in part:
>
> Entergy has initiated additional power outages for its customers across its four-state service area. The company is taking this action as directed by our reliability coordinator, the Mid-Continent Independent System Operator, as a last resort in order to prevent more extensive, prolonged power outages that could severely affect the reliability of the power grid. **The directive includes all of MISO's south region, spanning from Arkansas to Texas to the Gulf South.**
>
> Due to extremely cold temperatures over the last several days, the demand for electricity has reached an all-time high. Additionally, these weather conditions have forced off generation resources across the system. The implementation of this load shed across the Entergy region will help ensure an adequate reserve margin, which helps ensure Entergy is better positioned to manage through additional extreme weather this week.... Entergy will work to limit the duration of each outage, but due to significant demand on the system and generation outages, options may be limited.
>
> MISO is directing actions to be taken to restore the system to normal operations as quickly as possible and will direct Entergy to stop these outages as soon as the power shortfall no longer threatens the integrity of the rest of the electrical power system.[49]

Even if this had come in advance of the Event, the release relies upon broad geographic descriptions rather than simply explaining whether New Orleans is affected and to what extent.

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[48] Joint Meeting Transcript at 11-12, Lines 18-9.
[49] ENO's response to Advisors' First Set of Data Requests 1-15 (emphasis added).

An ENO customer would have to know what constitutes the "MISO south region" to know whether New Orleans customers were included.

Finally, in another press release issued after the event Entergy said "Mandatory rolling outages that began at 7 p.m. have ended for now, and we have returned the system to normal operations. All customers affected by this directive were restored by 9 p.m."[50]

Consequently, the New Orleans public never received any prior or real-time information that would have prepared them for the event, **including** the fact that load sheds are designed to last no more than two hours in any one location. In response to a question from Councilmember Banks about the duration of load sheds, ENO representatives said:

> Mr. Ellis:
>
> Well my understanding is that each event, each load shedding event can last between 30 minutes and two hours, then we roll to the next load. Is that procedurally correct John?
>
> Mr. Hawkins:
>
> Yeah, that's correct. Yes sir.
>
> Mr. Banks:
>
> So a maximum of two hours for anybody?
>
> Mr. Hawkins:
>
> Maximum two hours they will roll to the next set.[51]

Residents and businesses could have benefitted greatly from just that much information.

There is no indication that ENO had even a modicum of influence on the communications process. Based upon the Advisors' initial investigation, it seems clear that the entire process is driven by ESL and other Entergy companies with ENO as nothing more than an afterthought. In fact, during the discovery conference call on communications matters with the ENO lawyers and

[50] ENO's response to Advisors' First Set of Data Requests 1-15.
[51] Joint Meeting Transcript at 59-60, Lines 19-5.

the Entergy communications team, the ENO communications manager was not even on the call until added at the Advisors' request.

Therefore, even though ENO has its own communications manager, the investigation disclosed that she cannot "localize" messaging without going through a cumbersome approval process controlled by ESL or some other Entergy affiliated entity. Unfortunately, based upon discovery responses and conference calls, it does not appear that the ENO communications manager attempted to localize the messaging before or during the Event.

ENO management, including its communications manager, knew for days that the actual implementation of a load shed event was a significant possibility, yet, despite having "canned" releases for everything from higher bills to generator safety there was no evidence presented that any kind of a prepared message was written in advance, which could have been dispatched immediately upon confirmation of the load shed directive, with information specific to ENO customers. The Advisors believe that it was irresponsible that ENO-specific messaging, including direct customer messaging, was not "in the chamber" for immediate release upon the activation of the load shed event. A brief but informative message could have been prepared that gave a simple explanation of a load shed event, why it was being implemented, the expected time frame for the forced outages, and the fact that they are intended to roll from neighborhood to neighborhood as the event progresses until its conclusion.

Even the general messaging about the Event that did get disseminated without any ENO customer specific information was garbled, unclear, confusing, and usually buried among numerous paragraphs of boilerplate. If there was any mention of load shedding, it was often not until deep into the message and often it was little more than a mention.

The Advisors also believe that based upon this initial investigation that the communication system relied upon by ENO is inherently overly complicated and impenetrable for the average customer. It appears that certain information is released as "alerts," which appear on the website and can be accessed by hyperlinks in other communications. Some communications are "media releases," which, although they may be posted on the website, appear to be intended for the news media to decipher and report. Finally, there are direct messages to customers that can be in the form of texts, voice messages, or emails. Often these messages also contain hyperlinks to other information on the Entergy website. (Although these messages usually only go to customers who sign up, ENO has an "emergency override" capability to send them to all customers but based on information provided by ENO counsel, this was not done before or during the Event.)

The Advisors believe that this process places an unacceptable burden on ENO customers to seek out and decipher information rather than having basic, understandable, and important information disseminated directly to customers and the media.

As Councilmember Moreno pointed out at the March 16, UCTTC meeting, in response to an ENO presentation of the many nonspecific messages that were sent before, during, and after the Event:

> And I appreciate your presentation and I've said this already before. It's really about, not the quantity but really it's about the quality of the communication. And, you know, at the end of the day, on the evening, Mardi Gras night, communication was a failure.
>
> And, you know, the fact that by the time the news release went out I think there was like, four minutes left in like the load shedding event. So that's unacceptable so I highly recommend that, you know, you change up whatever protocols you currently have for news releases. If you're having to have ten people have to check a news release during emergency situations, reduce that down to one.[52]

[52] UCTTC Meeting Transcript, March 16, 2021 at 92-93, Lines 14-4.

It is also important to note that in his March 10, 2021 letter to councilmembers, Mr. David Ellis, discussed technical issues related to the load event failure, but did not mention the communications debacle, apparently indicating that the communications issue is not viewed as significant by ENO.

The "Service Regulations Applicable to Electric and Gas Service by Entergy New Orleans, LLC" ("Service Regs") are the Council approved regulations applicable to ENO operations. The Service Regs note that they "are a part of the Company's Contract with each Customer and a part of the Company's Rate Schedules. To the extent these Service Regs are not inconsistent with a particular rate schedule approved by the Council, they are as much a part of such rate schedule as if repeated therein."[53] The Service Regs incorporate the "Customer Bill of Rights" as enumerated in Chapter 158 of the New Orleans Code, Article VIII, Sections 158-1041 through 158-1059.[54]

The Service Regs also define "prudent utility practice" as:

> The practices, methods and acts, which in the exercise of reasonable judgment in the light of the facts (including, but not limited to, practices, methods and acts engaged in or approved by a significant portion of the utility industry) known at the time the decision was made, would have been expected to accomplish the desired result at the lowest reasonable costs consistent with reliability, safety and expedition.[55]

Further, the Service Regs mandate that "the Company shall use Prudent Utility Practice to provide safe, adequate and continuous Service but shall not be responsible for loss or damage caused by the loss or failure or other defects of Service when such failure is not reasonably avoidable or due to unforeseen difficulties or causes beyond its control."[56]

[53] Service Regs at Number 1.
[54] See Service Regs at K.
[55] Service Regs at W.
[56] Service Regs at 11.

The Service Regs also make clear that notification of outages to customers is a primary responsibility of ENO. As stated in the Service Regs:

> Should an outage occur that is of significant duration and impacts a substantial number (greater than 2500) of Customers, the Company shall provide to the local news media information relevant to the outage. For planned outages for scheduled maintenance, the Company shall take reasonable steps as may be practicable under then-prevailing circumstances to notify affected customers.[57]

Finally, the Service Regs also address "System Service Reliability":

> Electric and gas Service shall be adequate and continuous except for the Company's exercise of Prudent Utility Practices in the performance of routine work for maintenance, replacement, repair or expansion of its facilities; disconnection of a Customers Service due to non-payment or other Customer violations of these Service Regulations; or as a consequence of loss or damage caused by failure or other defects of Service when such failure is not reasonably avoidable or due to the unforeseen difficulties and/or causes beyond the Company's control or other acts of God.[58]

Based upon the information gathered in this initial investigation, the Advisors believe that ENO has not adhered to several applicable standards regarding reliability of service, notification to customers, and responsibility for avoidable consequences resulting from **foreseeable difficulties within the company's control**.

ENO failed utterly to have adequate and reliable communication systems in place to assure that timely, understandable, and useful information was effectively disseminated to ENO customers before, during, and after the load shed event. The Advisors' initial conclusion is that these failures resulted from ENO's abdication of its communication responsibilities to ESL and other Entergy companies. While the Advisors acknowledged that there can be cost efficiencies realized from shared services among the EOC, they cannot be achieved in derogation of the rights of its customers by participating in a process with no discernable local input or control, especially

[57] Services Regs at 18.
[58] Service Regs at 53.

during emergency circumstances where the scope, potential impact, timing, and precautions are not fungible among all operating companies.

ENO's duty to provide effective communications is what the law calls a nondelegable duty, a duty that cannot be handed off to someone else. Therefore, although ENO may choose to employ a third-party to implement the duty, it still must stand accountable when things go awry.

ENO has defended its actions both in its technical and communications failures as resulting from an emergency. The "emergency" refrain was repeated by every ENO speaker at both committee meetings and in Mr. Ellis' March 10, letter. However, the Advisors do not accept that the technical and communications failures resulted from an emergency in the true sense of that word, which is defined as "a sudden, urgent, usually unexpected occurrence or occasion requiring immediate action."[59]

The technical failure acknowledged by ENO was the result of an error in computer data and programming that likely occurred years ago, not during an emergency, but routinely. It was repeated annually during routine system reviews for accuracy. As Mr. Viamontes said at the UCTTC meeting explaining the error: "It was very specific that the – **there was no validation** to ensure that the final [breaker] list, that the cross-functional group had finalized, made its way into the automated system. That last and final step, that validation, did not occur."[60] These errors did not result from an emergency and could have been avoided by ENO.

The same is true of the communications failure. ENO is subject to communications manuals and protocols that run literally hundreds of pages, including many specific to load shedding. ENO management was aware in advance of the Event that load shedding was a **possibility**, yet no concise, informative, understandable message had been prepared for New

[59] Dictionary.com
[60] UCTTC Meeting Transcript, March 16, 2021 at 63-64, Lines 23-2 (emphasis added).

Orleans customers in advance of the Event. This was not due to an emergency, but neglect in planning, despite the reams of procedures.

The extent to which ENO was forewarned was explained by Mr. Daryl Brown, Executive Director of External Affairs for the South Region of MISO:

> Okay, this here shows the actual load shedding that we go through. But before this ever happens it's important to know, throughout the year, there's [sic] training that takes place. There's practice meetings, executive meetings so that we can collaborate with members between MISO and us.
>
> **Several days leading up to this particular event, we established daily synchronization calls between operators, regulatory as well as corporate communications.**[61]

There was no emergency during the preparation phase when appropriate communications could have been prepared and loaded for dispatch. More accurately, the Event was turned into an emergency due to ENO's failures that occurred well before the Event.

ENO's collective failures before and during the Event come with very serious consequences for customers. Nearly 18,000 more New Orleans residents and businesses than were required to meet the MISO directive were left confused in the dark and cold. Councilmember Moreno called it "downright shameful" that New Orleans suffered such a disproportionate and unnecessary share of the outages.[62]

V. Conclusions and Recommendations

ENO's actions related to many aspects of the Event raise serious questions about the prudence of those actions, and about the processes and procedures employed by ENO. Although this initial investigation has uncovered many of ENO's failings, there are still unresolved issues

[61] Joint Meeting Transcript at 25-26, Lines 16-1 (emphasis added).
[62] *Id.* at 75.

related to both the technical and communications aspects of the Event. Moreover, remedial actions asserted by ENO have not yet been verified by the Advisors.

Accordingly, the Advisors recommend that a docket be opened and that a full public proceeding be established, including all stakeholders, to create an evidentiary record to determine if ENO's obvious, and in some cases admitted, failures on both the technical and communications sides are the result of imprudent conduct or otherwise fell below appropriate standards of conduct under the circumstances, and to determine if appropriate remedial actions have in fact been implemented. Further, the Advisors recommend that if a determination is made that ENO acted in an imprudent or otherwise substandard manner in any regard with respect to any aspect of the Event, or that ENO has failed to take proper remedial actions, appropriate sanctions and reforms should be more specifically developed and recommended to the Council.

ATTACHMENT 1

Advisor's Preliminary Report Investigation
of Storm URI Firm Load Shed Event Pursuant to

Resolution R-21-87

MISO Operating Procedures

MISO Operating Procedures

MISO's carefully designed operating procedures ensure reliability and predictable outcomes during emergency or abnormal operating situations.

Protecting Reliability

To maintain the reliability of the electric system, MISO operates under a set of carefully designed operating procedures that define system conditions and guide system operator actions in a variety of conditions.

These procedures empower MISO to quickly adjust to system conditions as they unfold. For example, extreme weather patterns or unexpected increases or decreases in available electric generation can affect the balance of supply and demand on the transmission system.

Did you know?

- MISO has never issued a call for rolling brownouts or blackouts, despite some of the hottest summers on record in 2006 and 2012, and record cold during the polar vortex of 2014.
- To maintain reliability, Conservative and Emergency operating conditions require a successive series of remedial actions.
- MISO must implement emergency procedures to use demand management (load modifying) resources. There are more than 9,000 MW of these resources.

Operating Conditions

- **Normal Operations**: MISO's Normal Operating Procedures (NOPs) guide our operation of the bulk electric system and are used during normal grid operations or, in some instances, to prevent an emergency. NOPs mitigate risk, facilitate the reliable and efficient operation of the electric system, and ensure compliance with federal and state regulatory requirements, reliability standards, and MISO's Tariff and contractual agreements.
- **Abnormal Operations**: MISO utilizes Abnormal Operating Procedures (AOPs) for events that deviate from normal but do not put the electric system at risk. Examples include malfunctioning software systems or other infrastructure problems affecting MISO or its members. The procedures help mitigate further risk and may include, but are not limited to, the back-up process used when a particular system fails.
- **Conservative Operations**: If conditions warrant, MISO will carefully transition from normal operating conditions to Conservative Operations to prepare local operating personnel for a potential event, and to prevent a situation or event from deteriorating. During conservative operations, non-critical maintenance of equipment is suspended or in some cases, returned to service. Operating personnel throughout the affected area are also in a higher state of alert. Conservative operation declarations may be initiated due to system conditions including severe weather, hot/cold weather, or geo-magnetic disturbance warning.
- **Emergency Operations**: Emergency Operating Procedures (EOPs) guide system operator actions when an event occurs on the electric system that has the potential to, or actually does, negatively impact system reliability. Emergency Operating Procedures are communicated in escalating order as advisories, alerts, warnings, and events. Advisories are provided for situational awareness of potential limited operating capacity. Alerts define the affected area and call to temporarily suspend generation unit maintenance in the defined area. During warnings, MISO may require external capacity resources to be available, or may curtail non-firm energy sales. MISO issues Max Gen Events due to a shortage of capacity resources. **During Emergency Events, MISO utilizes Emergency Pricing, which affects ex-post pricing, not system commitment or dispatch. Emergency Pricing will only be implemented during Max Gen Warnings, and Events, which may be caused by forced outages, higher than projected load, or other circumstances.**

Reference Documents

Find MISO's Reliability Operating Procedures on the MISO website:

https://www.misoenergy.org/markets-and-operations/reliability-operating-procedures/

General Guide to MISO's Emergency Operations Messaging

MISO's Emergency Operations messages define the area(s) involved, duration, and projections of system conditions. The table below is a summary, and does not replace or redefine MISO's Emergency Operations messages.

Message	Communication Intent	Potential Member/MISO Actions
Conservative Operations Declaration	**Alert for Situational Awareness:** Reliability issue possible for defined area.	• Potentially suspend transmission maintenance • Review outage plans for deferral, cancellation
Hot Weather, Cold Weather or Severe Weather Alert	**Alert for Situational Awareness:** MISO could be approaching tight supply conditions.	• Review outage plans for deferral, cancellation
Capacity Advisory	**Advisory for Situational Awareness:** Potential for limited operating capacity margins (<5%) in the next 2-3 days.	• Update facility and generation outages, including de-rates • Update generation offers • Update Load Forecast Values • Update LMR Availability and Self Scheduled MW values • Update EDR offers
Min Gen Alert	**Alert for Situational Awareness:** MISO is forecasting a potential supply surplus.	• Prepare for de-commitment (taking generation off line), reduction in purchases or other actions
Max Gen Alert	**Alert for Situational Awareness:** MISO is forecasting a potential capacity shortage.	• Declare Conservative System Operations • Prepare for possible Max Gen Event
Max Gen Warning	**Warning to Prepare for Possible Event**	• Curtail non-firm exports • Schedule all available external resources into the MISO Market • Implement Emergency Pricing Offer Tier 1. This is an ex-post pricing change, and does not affect system commitment or dispatch.
Max Gen Event (Step 1)	**Actions Taken to Preserve Operating Reserves:** NERC Emergency Alert 1	• All available resources in use • Generators instructed to start off-line resources. • Use of reserves not yet implemented. • Emergency Pricing Offer Tier 1 is still effective.
Max Gen Event (Steps 2, 3, 4)	**Actions Taken to Preserve Firm Load:** NERC Emergency Alert 2 (Step 3 declaration)	• Implement demand management programs • Utilize Contingency Reserves • Purchase Emergency Energy • Issue Public Appeals • Prepare for possible firm load shed • Implement Emergency Pricing Offer Tier 2. This is an ex-post pricing change, and does not affect system commitment or dispatch.
Max Gen Event (Step 5)	**Event Occurring:** NERC Energy Emergency Alert 3	• Shed firm load • Rolling brownouts or blackouts for defined area • Emergency Offer Tier 2 is still effective.

System Status Levels

MISO also issues color-coded System Status Levels (SSL) based on the severity of the impact to the bulk electric system. For more information, see MISO's Abnormal Operating System Status Levels Procedure, SO-P-AOP-00-203.

Operating Conditions			
SSL 0 **Low - Green**	**SSL Level 1** **Elevated - Yellow**	**SSL Level 2** **High - Orange**	**SSL Level 3** **Severe - Red**
Description: System status is normal. No adverse impacts.	**Description:** Short, minor impact to system, can be quickly remedied. **Examples**: Temporary infrastructure issue.	**Description**: Longer term, major impact to system, cause unknown. **Examples**: Loss of monitoring data or member infrastructure	**Description**: Major impact on MISO's ability to reliably operate system or market. **Examples**: Hardware failure, bomb threat, sabotage, control center evacuation

ATTACHMENT 2

Advisor's Preliminary Report Investigation
of Storm URI Firm Load Shed Event
Pursuant to Resolution R-21-87

Storm URI Event Period Chronology of Events Prior To the Load Shed

Attachment 2

to Advisor's Preliminary Report Investigation of Storm URI Firm Load Shed Event Pursuant to Resolution R-21-87

Storm URI Event Period Chronology of Events Prior To the Load Shed

(Refer to Attachment 1 for a description of MISO Notifications)

February 13, 2021 (from non-HSPM email W. Feguson, MISO)

11:25 - MISO declares a Maximum Generation Capacity Advisory for the MISO South Region, including Entergy and all Members, to start Monday **02/15/2021 08:00** CST until further notice. Insure LMR data is accurate and ready to implement. Prepare to implement the MISO Market Capacity Emergency Procedure and follow procedures for emergency conditions.

February 15, 2021

05:44 – MISO upgrades to a Maximum Generation Emergency Alert

12:51 – MISO upgrades to a Maximum Generation Emergency Warning

14:59 – MISO declares a Maximum Generation Emergency Event Step 2, from 17:00 to 21:00

19:54 – MISO extends the Maximum Generation Emergency Event Step 2 to 22:59

22:50 – MISO issues a Maximum Generation Emergency Warning (backing down from Event Step 2)

February 16, 2021 (from Response to Advisors 1-19 (non-HSPM)

05:09 – MISO declares a Maximum Generation Emergency Event Step 2a from 2/16/21 08:00 EST to 14:00 EST

08:22 – MISO extended Conservative Ops that was effective on 2/14/21 to 2/17/21 23:59

12:34 – MISO extended Max Generation Emergency Event step 2a effective 2/16/21 08:00 EST to 2/16/21 22:00 EST

12:51 – LBA curtails LMM in TX

13:32 – LBA extends system-wide Entergy Load Risk Alert Level 2 ("ELRAL 2") until 2/16/21 21:00 due to MISO extending Max Gen Emergency Event step 2a

17:44 – MISO declares Max Gen emergency event step 2c at 18:35 EST until 2/17/21 01:00 EST for MISO-South due to forced generation outages and higher than expected load forecast

18:43 – MISO gave directive to LBA to shed load. Official 30-minute clock starts.

ATTACHMENT 3

Advisor's Preliminary Report Investigation
of Storm URI Firm Load Shed Event Pursuant to

Resolution R-21-87

Storm URI Event Period Chronology of Events During the Load Shed Event

Attachment 3

to Advisor's Preliminary Report Investigation of Storm URI Firm Load Shed Event Pursuant to Resolution R-21-87

Storm URI Event Period Chronology of Events During the Load Shed Event

(Refer to Attachment 1 for a description of MISO Notifications)

February 16, 2021 (from Response to Advisors 1-19 (non-HSPM)

18:43 – MISO gave a directive to the Local Balancing Authority (LBA) to shed load. Official 30-minute clock starts.

18:48 – Lead Operator in Entergy's Transmission Control Center North ("TCC-N") in Little Rock, Arkansas verifies the load shed directive with the MISO Reliability Coordinator.

18:49 – TCC sends a notice picked up from MISO's MISO Communication System (MCS) as MISO declares a Max Gen Emergency Event Step 5 from 2/16/21 at 18:40 CST until 2/17/21 00:00 CST due to forced generation outage and higher than expected load forecast.

18:50 – LBA sends a notice that MISO has directed the LBA to issue public appeals.

18:52 – LBA issues TCC load shed instruction and allocations by email and LBA issues system-wide Entergy Load Risk Alert Level 2 (ELRAL 2) effective 2/16/21 18:35 CPT to 2/17/21 01:00 CPT. The Entergy LBA load shed instruction was for a total of 448 MW: 57 MW Entergy Mississippi; 89 MW Entergy Arkansas; 80 MW Entergy Texas; and 222 MW from the Louisiana Distributions Operations Center (LA DOC), specifically 26 MW load shed from ENO, and 196 MW from ELL. One of the five ELL Load Shed Programs is "Down Stream of Gypsy", with a Load Shed Plan of 55 MW; however, that Load Shed Program erroneously included all ENO circuit breakers for feeders serving ENO customers.

18:56 - 19:07 - Entergy North & South TCCs notify all Distribution Operations Centers of the load shed directive.

19:07 – Entergy Transmission Control Center South ("TCC- S") to LA DOC for South LA Load.

19:12 – Transmission Control Center South issues a directive for the Louisiana Distribution Operations Center to drop the following loads: ELL: "Downstream of Gypsy" (55 MW), ENO: "Amite South" (26 MW)

19:14 – ELL "Downstream of Gypsy" Load Shed Program was initiated. The following steps execute the load shed:

Select LoadShed under the EMP Application menu

Select ELL "Downstream of Gypsy" Load Shed Program

Select Start Shed Episode

Enter the MW Shed amount in the "Automatic" text box, hit "Enter"

Select "Start Shed"

Select "Execute"

Breakers are opened automatically in the order documented in the Load Shed Program.

19:15 - ENO "Amite South" Load Shed Program was initiated, with the same steps used as outlined above to execute the ENO load shed.

19:16 – ENO "Amite South" Load Shed Complete

19:17 – ELL "Downstream of Gypsy Load" Shed Complete

19:29 – Entergy TCC reported to Entergy LBA - load shed execution complete as of 19:25

19:37 – LBA issued a system-wide Entergy Load Risk Alert Level 3 (ELRAL 3) effective 2/16/21 19:50 until 20:20

19:45 – LBA updates ELRAL 3 effective 18:50 to 23:59 on 2/16/21

19:57 – LBA issues an instruction to restore up to 193 MW.

19:58 - 20:00 – TCC notifies DOCs that up to 193 MW can be restored as allocated by the LBA.

20:00 - TCC-South notifies LA Distribution Operations Center (DOC) to restore 71 MW in South LA

Released 5 of 55 MW using ELL: "Down Stream of Gypsy" Load Shed Program (actually ENO load)

Released 11 of 26 MW using ENO: "Amite South" Load Shed Program

20:31 – ENO's Southport distribution feeder (B0527), which includes a SWBNO load, circuit breaker restored

20:33 – ENO's Napoleon distribution feeder (1911), which includes a priority 2 classification, restored

20:44 – LBA notified TCC-N/TCC-S that all remaining load should be released

20:49 – TCC-S notified the LA DOC that all remaining load should be released

20:51 – 20:55 All remaining ENO: "Amite South" and ELL: "Downstream of Gypsy" circuit breakers restored

21:01 – LBA downgrades system ELRAL 3 to ELRAL 2, due to MISO returning to Max Gen Event Step 2a

21:32 – MISO reduces to Max Gen Event Step 2a

22:59 – MISO reduces to Max Gen Event Step 1a

22:59 – LBA downgrades system ELRAL 2 to ELRAL 1

ATTACHMENT 4

Advisor's Preliminary Report Investigation
of Storm URI Firm Load Shed Event Pursuant to

Resolution R-21-87

ENO Response to ADV001-N015-002
ENOL MESSAGE SUMMARY_HSPM

Message Date	Jurisdiction	Audience	Voice Script	Text Script	Voice Deployment Timing	Text Deployment Timing
2/11/2021	ENOL	ENOL: High Bill	This call is from Entergy at 8xx-xxx-xxxx. The forecast for the next several days calls for extreme cold weather that may drive increased energy usage. For tips on how to save money and prepare for winter weather, visit https://entergy.com/myadvisor. We also offer a number of payment options to fit your needs. Learn more at www.myentergy.com/s/makepayment. Thank you for being a valued Entergy customer. To repeat this message, press #.	Entergy: The forecast for the next several days calls for extreme cold weather that may drive increased energy usage. For tips on how to save money and prepare for winter weather, visit https://entergy.com/myadvisor . We also offer a number of payment options to fit your needs. Learn more at https://www.myentergy.com/s/makepayment . Thank you for being a valued Entergy customer.	2/11/2021 02:46 PM	2/11/2021 02:46 PM
2/14/2021	ENOL	ENOL: Conservation	This call is from Entergy at 8xx-xxx-xxxx. Extreme cold is expected over the next few days resulting in high electricity demand. We have taken steps to prepare and protect our assets from the extreme cold as part of our winter weather preparations. Please do your part to help by managing your usage to reduce bills and taking a few easy steps to conserve energy. Visit http://entergy.com/extremecold/ to learn more. To repeat this message, press #.	Entergy: Extreme cold is expected over the next few days resulting in high electricity demand. We have taken steps to prepare and protect our assets from the extreme cold as part of our winter weather preparations. Please do your part to help by managing your usage to reduce bills and taking a few easy steps to conserve energy. Visit http://entergy.com/extremecold/ to learn more.	2/14/2021 08:00 PM	2/14/2021 08:00 PM
2/15/2021	ENOL	ENOL: MISO	This call is from Entergy at 8xx-xxx-xxxx. We are strongly requesting our customers to limit electricity usage immediately, since the present extreme cold weather is increasing demand for electricity. Conservation can be done by turning off or not using non-essential lights and electric appliances, especially electric water heaters, clothes dryers, and dishwashers and to turn heating thermostats to lower settings. If reductions are not sufficient, it may be necessary to begin temporary interruptions of electric service in your area. We apologize sincerely for this inconvenience and are working to restore our system to normal grid operations as soon as possible. For additional information, visit www.entergynewsroom.com. To repeat this message, press #.	Entergy: We request limited electricity usage due to present extreme cold weather immediately, including turning off electric water heaters and lowering heating thermostats settings. Insufficient reductions may require temporary interruptions of electric service. We apologize for this inconvenience and are working to restore our system to normal grid operations as soon as possible. More info www.entergynewsroom.com	2/15/2021 05:37 PM	2/15/2021 05:37 PM
2/16/2021	ENOL	PARTIAL - ENOL: MISO Public Appeal	This call is from Entergy at 8xx-xxx-xxxx. We are strongly requesting our customers to limit electricity usage immediately, since the present extreme cold weather is increasing demand for electricity. Conservation can be done by turning off or not using non-essential lights and electric appliances, especially electric water heaters, clothes dryers, and dishwashers and to turn heating thermostats to lower settings. If reductions are not sufficient, it may be necessary to begin temporary interruptions of electric service in your area. We apologize sincerely for this inconvenience and are working to restore our system to normal grid operations as soon as possible. For additional information, visit www.entergynewsroom.com. To repeat this message, press #.	Entergy: We request limited electricity usage due to present extreme cold weather immediately, including turning off electric water heaters and lowering heating thermostats settings. Insufficient reductions may require temporary interruptions of electric service. We apologize for this inconvenience and are working to restore our system to normal grid operations as soon as possible. More info www.entergynewsroom.com	2/16/2021 08:56 PM	2/16/2021 08:56 PM
2/17/2021	ENOL	ENOL: Post Event MISO	This call is from Entergy at 8xx-xxx-xxxx. Yesterday, record demand for power resulted in a call from our grid coordinator for periodic power outages to maintain the safety and stability of the regional electric grid. We are strongly requesting our customers continue to limit electricity usage, since the extreme cold weather is increasing demand for electricity. Conservation can be done by turning off or not using non-essential lights and electric appliances, especially electric water heaters, clothes dryers, and dishwashers and to turn heating thermostats to lower settings. If reductions are not sufficient, it may be necessary to resume temporary interruptions of electric service in your area. We sincerely apologize for this inconvenience and thank you for being a valued Entergy New Orleans customer. To repeat this message, press #.	Entergy: Yesterday, record demand for power resulted in a call from our grid coordinator for periodic power outages to maintain the safety and stability of the regional electric grid. Please limit electricity usage, including turning off electric water heaters and lowering heating thermostat settings. Insufficient reductions may require additional temporary interruptions of electric service. Thank you.	2/17/2021 02:50 PM	2/17/2021 02:38 PM
2/18/2021	ENOL	ENOL: Conservation Appeal V2	This call is from Entergy at 8xx-xxx-xxxx. The extreme cold weather conditions across our region continue to create a high demand for electricity. We still need your help to limit electricity usage. If reductions are not sufficient, it may be necessary to resume temporary interruptions of electric service in our area. Conservation can be done by turning off or not using non-essential lights and electric appliances, especially electric water heaters, clothes dryers, and dishwashers and to turn heating thermostats to lower settings. We understand that these conditions are difficult and sincerely apologize for the inconvenience. Thank you for your help and for being a valued Entergy customer. To repeat this message, press #.	Entergy: Extreme cold weather across our region continues to create high demand for power. We still need your help to conserve energy by lowering thermostats, turning off or not using non-essential lights and large electric appliances, especially electric water heaters. If reductions are not sufficient, it may be necessary to resume temporary service disruption. We sincerely thank you for your help.	2/18/2021 04:58 PM	2/18/2021 04:56 PM

sage Date	Jurisdiction	Time	Alert Message Posted	Message fo
.3-Feb	ENOL	9:00 AM	Entergy New Orleans According to the National Weather Service, a winter weather advisory is in effect for portions of the very northern region of Louisiana this evening and into Thursday, February 18th. Freezing rain and ice accumulations are possible. Entergy New Orleans is closely monitoring weather forecasts as this type of precipitation can create hazardous driving conditions and problems for our electric system. Our crews and contractors are on alert and are ready to respond if needed. Along with standard storm preparations, Entergy employees are navigating the COVID-19 pandemic by taking additional steps. Crews will continue to practice social distancing, and we ask that customers do the same. For our safety and yours, please stay away from work zones. STORM RESTORATION PROCESS Following a storm, we deploy scouts to assess damage. Our scouts work as quickly and safely as possible in sometimes very dangerous conditions. As damages are assessed, we will communicate with you the conditions found along with an estimated restoration time and our progress toward restoring your power. We ask for your patience, and please know restoring your power safely and quickly is our top priority. As we assess the damage, we will begin restoring service where it is deemed safe to do so. Your preparation is essential too: oAbove all stay safe. A personal plan for you and your family is the best way to stay safe and be storm ready. oVisit the Entergy Storm Center website for planning tools that can help guide you through the decisions you need to make. oWhether you shelter in place or evacuate you should make preparations to protect your home. ☑Decide to stay or go well before the storm strikes. ☑Basic emergency supplies and a first aid kit are key items to keep on hand during severe weather. ☑Visit the Entergy Storm Center website in advance for details on how to prepare for hurricanes and other types of storms. We continuously keep our communities informed throughout a storm using the following channels: ☑Download our free app for your smartphone at entergy.com/app. ☑Sign up for text alerts. From your cellphone text REG to 36778. ☑Visit the Entergy Storm Center website and our View Outages page. ☑Follow us on Twitter.com/entergynola or Facebook.com/entergynola. ☑Call us at 800-9OUTAGE (800-968-8243). ☑Follow updates in your local news media like radio television and newspapers.	Weather Pr
.4-Feb	ENOL	9:00 AM	Entergy New Orleans According to the National Weather Service, a winter weather advisory is in effect for portions of the very northern region of Louisiana this evening and into Thursday, February 18th. Freezing rain and ice accumulations are possible. Entergy New Orleans is closely monitoring weather forecasts as this type of precipitation can create hazardous driving conditions and problems for our electric system. Our crews and contractors are on alert and are ready to respond if needed. Along with standard storm preparations, Entergy employees are navigating the COVID-19 pandemic by taking additional steps. Crews will continue to practice social distancing, and we ask that customers do the same. For our safety and yours, please stay away from work zones. STORM RESTORATION PROCESS Following a storm, we deploy scouts to assess damage. Our scouts work as quickly and safely as possible in sometimes very dangerous conditions. As damages are assessed, we will communicate with you the conditions found along with an estimated restoration time and our progress toward restoring your power. We ask for your patience, and please know restoring your power safely and quickly is our top priority. As we assess the damage, we will begin restoring service where it is deemed safe to do so. Your preparation is essential too: oAbove all stay safe. A personal plan for you and your family is the best way to stay safe and be storm ready. oVisit the Entergy Storm Center website for planning tools that can help guide you through the decisions you need to make. oWhether you shelter in place or evacuate you should make preparations to protect your home. ☑Decide to stay or go well before the storm strikes. ☑Basic emergency supplies and a first aid kit are key items to keep on hand during severe weather. ☑Visit the Entergy Storm Center website in advance for details on how to prepare for hurricanes and other types of storms. We continuously keep our communities informed throughout a storm using the following channels: ☑Download our free app for your smartphone at entergy.com/app. ☑Sign up for text alerts. From your cellphone text REG to 36778. ☑Visit the Entergy Storm Center website and our View Outages page. ☑Follow us on Twitter.com/entergynola or Facebook.com/entergynola. ☑Call us at 800-9OUTAGE (800-968-8243). ☑Follow updates in your local news media like radio television and newspapers.	Weather Pr

.4-Feb	ENOL	12:00 PM	Entergy New Orleans According to the National Weather Service, extreme cold temperatures are expected to impact New Orleans through Wednesday, Feb. 17. There remains a potential for freezing rain and ice accumulations in some areas. Entergy New Orleans is closely monitoring weather forecasts as this type of weather system can create hazardous driving conditions and problems for our electric system. Our crews and contractors are ready to respond if needed. Along with standard storm preparations, Entergy employees are navigating the COVID-19 pandemic by taking additional steps. Crews will continue to practice social distancing, and we ask that customers do the same. For our safety and yours, please stay away from work zones. Key Messages: •Extreme cold temperatures are expected Monday night through Tuesday evening. Freezing rain and ice accumulations are possible. •Traveling can be impacted with icy roadways, especially bridges and overpasses. •Ice accumulating on trees and power lines can result in power outages. •Entergy resources are prepared to deploy if outages occur. Safety is our number one priority. If you lose power: •Stay away from downed power lines and assume they are energized. Report them to 1-800-9OUTAGE. •Report your power outage online to Entergy New Orleans or call 1-800-9OUTAGE. There is no need to speak with a customer service representative to report an outage if completed online. •If you have a portable generator, use it safely. DO NOT run it in an enclosed space. If connecting to the whole house, do so only if the connection has been installed by a licensed electrician to prevent back feed on to the distribution system. •If you do lose power, do not open your refrigerator or freezer door. Food will stay cold much longer this way. If outside temperature is below freezing, consider placing food in an ice chest outside. •Please stay clear of linemen as they work to safely restore power •Customers without power can help in the restoration process by turning off major appliances but leaving on a lamp or other light to indicate when power is restored. Then, gradually turn other appliances to spread out the increase in power usage over a longer time. Customer preparations should include: •Charge up mobile devices and back-up batteries. •Download the Entergy app to sign up for text updates. •Review guidance at entergystormcenter.com. •If you have medical equipment that requires electricity to properly function, take necessary steps to secure an alternative source of electricity in the event of a power disruption. •Have an emergency kit including flashlights, medicine, first aid, blankets, water, and food. Conserve Electricity: Remember that extreme cold can drive increased electricity consumption. Follow these easy steps to reduce consumption and lower your usage: •Heating can account for as much as 55% of your monthly electric bill. Setting the thermostat to 68 degrees in the winter is an easy way to reduce how much energy you use. Every degree above 68 on the thermostat can increase your bill by about 3%. •Conserve hot water. Wrap your electric water heater with a water heater blanket that can be found at local home improvement stores and set the thermostat to 120 degrees or medium. •Keep all doors and windows closed. Constant traffic will let out the warm air, forcing your heater to work harder to keep the room at the set temperature. •Ensure fans are turning the right way. Fans should be run at a low speed clockwise during the winter. This helps keep the cold air from blowing down on you. •Keep the air circulating. Don't block heat registers or air returns with curtains or furniture. •Leverage the sun. During the day, open your curtains and blinds to let in the warm sunlight. Close them at night to reduce heat loss.	Weather Pr
.5-Feb	ENOL	10:00 AM	Entergy New Orleans According to the National Weather Service, extreme cold temperatures are expected to impact New Orleans through Wednesday, Feb. 17. There remains a potential for freezing rain and ice accumulations in some areas. Entergy New Orleans is closely monitoring weather forecasts as this type of weather system can create hazardous driving conditions and problems for our electric system. Our crews and contractors are ready to respond if needed. Along with standard storm preparations, Entergy employees are navigating the COVID-19 pandemic by taking additional steps. Crews will continue to practice social distancing, and we ask that customers do the same. For our safety and yours, please stay away from work zones. Key Messages: •Extreme cold temperatures are expected Monday night through Tuesday evening. Freezing rain and ice accumulations are possible. •Traveling can be impacted with icy roadways, especially bridges and overpasses. •Ice accumulating on trees and power lines can result in power outages. •Entergy resources are prepared to deploy if outages occur. Safety is our number one priority. If you lose power: •Stay away from downed power lines and assume they are energized. Report them to 1-800-9OUTAGE. •Report your power outage online to Entergy New Orleans or call 1-800-9OUTAGE. There is no need to speak with a customer service representative to report an outage if completed online. •If you have a portable generator, use it safely. DO NOT run it in an enclosed space. If connecting to the whole house, do so only if the connection has been installed by a licensed electrician to prevent back feed on to the distribution system. •If you do lose power, do not open your refrigerator or freezer door. Food will stay cold much longer this way. If outside temperature is below freezing, consider placing food in an ice chest outside. •Please stay clear of linemen as they work to safely restore power •Customers without power can help in the restoration process by turning off major appliances but leaving on a lamp or other light to indicate when power is restored. Then, gradually turn other appliances to spread out the increase in power usage over a longer time. Customer preparations should include: •Charge up mobile devices and back-up batteries. •Download the Entergy app to sign up for text updates. •Review guidance at entergystormcenter.com. •If you have medical equipment that requires electricity to properly function, take necessary steps to secure an alternative source of electricity in the event of a power disruption. •Have an emergency kit including flashlights, medicine, first aid, blankets, water, and food. Conserve Electricity: Remember that extreme cold can drive increased electricity consumption. Follow these easy steps to reduce consumption and lower your usage: •Heating can account for as much as 55% of your monthly electric bill. Setting the thermostat to 68 degrees in the winter is an easy way to reduce how much energy you use. Every degree above 68 on the thermostat can increase your bill by about 3%. •Conserve hot water. Wrap your electric water heater with a water heater blanket that can be found at local home improvement stores and set the thermostat to 120 degrees or medium. •Keep all doors and windows closed. Constant traffic will let out the warm air, forcing your heater to work harder to keep the room at the set temperature. •Ensure fans are turning the right way. Fans should be run at a low speed clockwise during the winter. This helps keep the cold air from blowing down on you. •Keep the air circulating. Don't block heat registers or air returns with curtains or furniture. •Leverage the sun. During the day, open your curtains and blinds to let in the warm sunlight. Close them at night to reduce heat loss.	Weather Prep/Cons

.6-Feb	ENOL	9:30 PM	Entergy New Orleans Extremely cold temperatures have impacted the New Orleans area and are expected to last for much of the week. Earlier this evening, the Midcontinent Independent System Operator (MISO), instructed Entergy New Orleans to begin periodic power outages for customers across the metro area. This unusual request is a last resort in order to prevent a more extensive, prolonged power outage that could severely affect the reliability of the power grid. The mandatory rolling outages that began at 7 p.m. have ended, for now, and we have returned the system to normal operations. Thank you very much for your patience and your voluntary conservation of power as we work through this difficult situation. We continue to face challenges related to the extreme cold temperatures, so please continue to closely monitor electricity usage to help reduce the likelihood of future load shedding events. We're not out of the woods yet, so please continue to conserve energy. Due to bitterly cold temperatures and the winter storm, the demand for electricity has reached an all-time high. You can do your part to help us manage through this by taking a few easy steps to conserve energy. Customer can conserve energy by •Setting the thermostat to 68 degrees. •Wrapping your electric water heater with a water heater blanket that can be found at local home improvement stores and set the thermostat to 120 degrees or medium. •Keep all doors and windows closed. •Ensuring fans are turning the right way. •Don't block heat registers or air returns with curtains or furniture. •During the day, open your curtains and blinds to let in the warm sunlight. Close them at night to reduce heat loss. Safety is our number one priority. If you lose power: •Stay away from downed power lines and assume they are energized. Report them to 1-800-9OUTAGE. •Report your power outage online to Entergy New Orleans or call 1-800-9OUTAGE. There is no need to speak with a customer service representative to report an outage if completed online. •If you have a portable generator, use it safely. DO NOT run it in an enclosed space. If connecting to the whole house, do so only if the connection has been installed by a licensed electrician to prevent back feed on to the distribution system. •Do not open your refrigerator or freezer door. Food will stay cold much longer this way. If outside temperature is below freezing, consider placing food in an ice chest outside. •Please stay clear of linemen as they work to safely restore power •Customers without power can help in the restoration process by turning off major appliances but leaving on a lamp or other light to indicate when power is restored. Then, gradually turn other appliances to spread out the increase in power usage over a longer time. Visit entergy.com/cold to learn more To prepare for an outage:	Conservation
.7-Feb	ENOL	8:30 AM	Extreme cold temperatures will impact New Orleans for the next few days. These freezing temperatures can make electric systems vulnerable. We understand customer concerns, and we're working hard to prevent additional power disruptions. Mandatory rolling outages as directed by the MISO impacted our area last night and we thank you for your patience if you were impacted by this emergency event. The company took the action at the direction of our reliability coordinator, the Midcontinent Independent System Operator, as a last resort to prevent a more extensive, prolonged power outage that could severely affect the reliability of the power grid. All Entergy operating companies, as well as other members of MISO, participated in the outages. We continue to face challenges related to the extreme cold temperatures, so please continue to closely monitor electricity usage and conserve energy to help reduce the likelihood of future load shedding events. We're not out of the woods yet. Customers may notice a lag to View Outage Map updates. We appreciate your patience as it is updated to show the most current outage information. Thank you very much for your patience as we navigate through this winter storm and your voluntary conservation of power. Customer can conserve energy by •Setting the thermostat to 68 degrees. •Wrapping your electric water heater with a water heater blanket that can be found at local home improvement stores and set the thermostat to 120 degrees or medium. •Keep all doors and windows closed. •Ensuring fans are turning the right way. •Don't block heat registers or air returns with curtains or furniture. •During the day, open your curtains and blinds to let in the warm sunlight. Close them at night to reduce heat loss. Safety is our number one priority. If you lose power: •Stay away from downed power lines and assume they are energized. Report them to 1-800-9OUTAGE. •Report your power outage online to Entergy New Orleans or call 1-800-9OUTAGE. There is no need to speak with a customer service representative to report an outage if completed online. •If you have a portable generator, use it safely. DO NOT run it in an enclosed space. If connecting to the whole house, do so only if the connection has been installed by a licensed electrician to prevent back feed on to the distribution system. •Do not open your refrigerator or freezer door. Food will stay cold much longer this way. If outside temperature is below freezing, consider placing food in an ice chest outside. •Please stay clear of linemen as they work to safely restore power •Customers without power can help in the restoration process by turning off major appliances but leaving on a lamp or other light to indicate when power is restored. Then, gradually turn other appliances to spread out the increase in power usage over a longer time. Visit entergy.com/cold to learn more To prepare for an outage: •Charge up mobile devices and back-up batteries.	Conservation

.7-Feb	ENOL	10:00PM	** Entergy New Orleans' customers are again asked to voluntarily reduce their electricity usage this evening. This unusual request is due to the demand for electricity potentially exceeding the available generation due to the extreme cold impacting our service territory. If the power supply cannot meet the demand, then periodic power outages would be needed to prevent an extensive power outage that could last an extended period. See tips below on how you can save energy during this time** Tips to Conserve Electricity: Remember that extreme cold can drive increased electricity consumption. Follow these easy steps to reduce consumption and lower your usage: ·Heating can account for as much as 55% of your monthly electric bill. Setting the thermostat to 68 degrees in the winter is an easy way to reduce how much energy you use. Every degree above 68 on the thermostat can increase your bill by about 3%. ·Conserve hot water. Wrap your electric water heater with a water heater blanket that can be found at local home improvement stores and set the thermostat to 120 degrees or medium. ·Keep all doors and windows closed. Constant traffic will let out the warm air, forcing your heater to work harder to keep the room at the set temperature. ·Ensure fans are turning the right way. Fans should be run at a low speed clockwise during the winter. This helps keep the cold air from blowing down on you. ·Keep the air circulating. Don't block heat registers or air returns with curtains or furniture. ·Leverage the sun. During the day, open your curtains and blinds to let in the warm sunlight. Close them at night to reduce heat loss. We continuously keep our communities informed throughout a storm using the following channels: Download our free app for your smartphone at entergy.com/app. Sign up for text alerts. From your cellphone text REG to 36778. Visit the Entergy Storm Center website and our View Outages page. Follow us on Twitter.com/entergynola or Facebook.com/entergynola. Call us at 800-9OUTAGE (800-968-8243). Follow updates in your local news media like radio television and newspapers.	Urgent Conservat
.8-Feb	ENOL	10:00 AM	Due to bitterly cold temperatures and the winter storm, the demand for electricity has reached an all-time high. We want to remind customers that it is important to continue to conserve energy to help avoid power outages. Customers may notice a lag to View Outage Map updates. We appreciate your patience as it is updated to show the most current outage information. Tips to Conserve Electricity: Remember that extreme cold can drive increased electricity consumption. Follow these easy steps to reduce consumption and lower your usage: ·Heating can account for as much as 55% of your monthly electric bill. Setting the thermostat to 68 degrees in the winter is an easy way to reduce how much energy you use. Every degree above 68 on the thermostat can increase your bill by about 3%. ·Conserve hot water. Wrap your electric water heater with a water heater blanket that can be found at local home improvement stores and set the thermostat to 120 degrees or medium. ·Keep all doors and windows closed. Constant traffic will let out the warm air, forcing your heater to work harder to keep the room at the set temperature. ·Ensure fans are turning the right way. Fans should be run at a low speed clockwise during the winter. This helps keep the cold air from blowing down on you. ·Keep the air circulating. Don't block heat registers or air returns with curtains or furniture. ·Leverage the sun. During the day, open your curtains and blinds to let in the warm sunlight. Close them at night to reduce heat loss. We continuously keep our communities informed throughout a storm using the following channels: Download our free app for your smartphone at entergy.com/app. Sign up for text alerts. From your cellphone text REG to 36778. Visit the Entergy Storm Center website and our View Outages page. Follow us on Twitter.com/entergynola or Facebook.com/entergynola. Call us at 800-9OUTAGE (800-968-8243). Follow updates in your local news media like radio television and newspapers.	Conservation

.8-Feb	ENOL	8:00 PM	Due to bitterly cold temperatures and the winter storm, the demand for electricity has reached an all-time high. We want to remind customers that it is important to continue to conserve energy to help avoid power outages. Customers may notice a lag to View Outage Map updates. We appreciate your patience as it is updated to show the most current outage information. Tips to Conserve Electricity: Remember that extreme cold can drive increased electricity consumption. Follow these easy steps to reduce consumption and lower your usage: ·Heating can account for as much as 55% of your monthly electric bill. Setting the thermostat to 68 degrees in the winter is an easy way to reduce how much energy you use. Every degree above 68 on the thermostat can increase your bill by about 3%. ·Conserve hot water. Wrap your electric water heater with a water heater blanket that can be found at local home improvement stores and set the thermostat to 120 degrees or medium. ·Keep all doors and windows closed. Constant traffic will let out the warm air, forcing your heater to work harder to keep the room at the set temperature. ·Ensure fans are turning the right way. Fans should be run at a low speed clockwise during the winter. This helps keep the cold air from blowing down on you. ·Keep the air circulating. Don't block heat registers or air returns with curtains or furniture. ·Leverage the sun. During the day, open your curtains and blinds to let in the warm sunlight. Close them at night to reduce heat loss. We continuously keep our communities informed throughout a storm using the following channels: Download our free app for your smartphone at entergy.com/app. Sign up for text alerts. From your cellphone text REG to 36778. Visit the Entergy Storm Center website and our View Outages page. Follow us on Twitter.com/entergynola or Facebook.com/entergynola. Call us at 800-9OUTAGE (800-968-8243). Follow updates in your local news media like radio television and newspapers.	Conservation
.9-Feb	ENOL	9:00 AM	Due to bitterly cold temperatures and the winter storm, the demand for electricity has reached an all-time high. We want to remind customers that it is important to continue to conserve energy to help avoid power outages. Customers may notice a lag to View Outage Map updates. We appreciate your patience as it is updated to show the most current outage information. Tips to Conserve Electricity: Remember that extreme cold can drive increased electricity consumption. Follow these easy steps to reduce consumption and lower your usage: ·Heating can account for as much as 55% of your monthly electric bill. Setting the thermostat to 68 degrees in the winter is an easy way to reduce how much energy you use. Every degree above 68 on the thermostat can increase your bill by about 3%. ·Conserve hot water. Wrap your electric water heater with a water heater blanket that can be found at local home improvement stores and set the thermostat to 120 degrees or medium. ·Keep all doors and windows closed. Constant traffic will let out the warm air, forcing your heater to work harder to keep the room at the set temperature. ·Ensure fans are turning the right way. Fans should be run at a low speed clockwise during the winter. This helps keep the cold air from blowing down on you. ·Keep the air circulating. Don't block heat registers or air returns with curtains or furniture. ·Leverage the sun. During the day, open your curtains and blinds to let in the warm sunlight. Close them at night to reduce heat loss. We continuously keep our communities informed throughout a storm using the following channels: Download our free app for your smartphone at entergy.com/app. Sign up for text alerts. From your cellphone text REG to 36778. Visit the Entergy Storm Center website and our View Outages page. Follow us on Twitter.com/entergynola or Facebook.com/entergynola. Call us at 800-9OUTAGE (800-968-8243). Follow updates in your local news media like radio television and newspapers.	Conservation

Date	Time	OPCO	Audience - Type	Audience - Location	Messaging
2/11/2021	1:15PM	ENO	Commercial Customers - Non Managed	All	High Bill
2/15/2021	5:30PM	ENO	All Customers (excl Industrial)	All	Energy Conservation
2/17/2021	3:45PM	ENO	Commercial Customers - Non Managed & Managed	All	Energy conversation/public appeal
2/18/2021	5:30PM	ENO	Commercial Customers - Non Managed & Managed	All	Energy Conservation