June 16, 2021

Via Electronic Delivery
Ms. Lora W. Johnson, CMC, LMMC
Clerk of Council
City Hall - Room 1E09
1300 Perdido Street
New Orleans, LA 70112

Re: Entergy New Orleans, LLC Load Shed Protocols and All Events and Decisions Related to the February 2021 Winter Storm Uri Even
CNO Docket No. UD-21-01

Dear Mrs. Johnson:

Please find enclosed for your further handling Entergy New Orleans, LLC’s Response to Prudence Investigation, which is being submitted for filing in the above-referenced docket. As a result of the remote operations of the Council’s office related to COVID-19, ENO submits this filing electronically and will submit the requisite original and number of hard copies once the Council resumes normal operations, or as you direct. ENO requests that you file this submission in accordance with Council regulations as modified for the present circumstances.

Please note that certain exhibits contain Highly Sensitive Protected Materials and are being provided this date to appropriate reviewing representatives generally in accordance with the terms of the Council’s Official Protective Order set forth in Resolution R-07-432 via electronic means.

Thank you for your assistance with this matter.

Sincerely,

Brian L. Guillot

BLG/rdm
Enclosures

cc: Official Service List (UD-21-01 via electronic mail)
BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: ENTERGY NEW ORLEANS, LLC
LOAD SHED PROTOCOLS AND ALL
EVENTS AND DECISIONS RELATED
TO THE FEBRUARY 2021 WINTER
STORM URI EVENT

DOCKET NO. UD-21-01

ENTERGY NEW ORLEANS, LLC’S RESPONSE TO PRUDENCE INVESTIGATION

Respectfully submitted:

Timothy S. Cragin, Bar No. 22313
Brian L. Guillot, Bar No. 31759
639 Loyola Avenue, Mail Unit L-ENT-26E
New Orleans, Louisiana 70113
Telephone: (504) 576-2603
Facsimile: (504) 576-5579

-and-

W. Raley Alford, III, Bar No. 27354
Christian S. Chaney, Bar No. 37068
Stanley, Reuter, Ross, Thornton & Alford, L.L.C.
909 Poydras Street, Suite 2500
New Orleans, Louisiana 70112
Telephone: (504) 523-1580
Facsimile: (504) 524-0069

ATTORNEYS FOR ENTERGY NEW ORLEANS, LLC
EXECUTIVE SUMMARY

On balance, the Company’s global response to the winter storm was reasonable and prudent, especially given the rarity of such an event, as the Entergy Operating Companies (“EOCs”)\(^1\) had not experienced a system-wide load shed in approximately 20 years. Indeed, the Edison Electric Institute recently awarded Entergy an Emergency Response Award for its global response to the February 2021 Winter Storm.

While any interruption to electric service is regrettable, New Orleans compared favorably to the lengthier outage durations experienced in other regions. In New Orleans, approximately 25,000 of ENO’s 206,000 customers (12%) were interrupted for a maximum duration of 1 hour and 40 minutes, compared to a significant number of customers interrupted for days in other areas. In Texas, for example, 4.5 million people lost electricity for a prolonged period of time ranging from several hours to many days.

These minimum impacts in New Orleans were not the result of mere coincidence, but rather the result of planning and proactive measures taken in advance of the storm, as well as quick action taken in rapidly changing circumstances during a multi-day event. The EOCs implemented a strategy to maximize available generation — a strategy that proved vital. The Companies took a number of proactive steps to make more generation available in MISO South, delaying multiple planned outages, returning units from planned outages, and removing units from mothballed/deactivated status in order to maximize available generation. Together, these actions added an additional 2,825 MW of available generation to the grid and helped to stabilize the grid during the load shed event. Without these proactive measures, the Local Balancing Authority

\(^1\) The five EOCs consist of Entergy New Orleans (“ENO”), Entergy Louisiana, LLC (“ELL”), Entergy Arkansas, LLC, Entergy Mississippi, LLC, and Entergy Texas, Inc. The EOCs, together with Entergy Services, LLC, are sometimes herein collectively referred to as the Companies and/or Entergy.
(“LBA”) would have directed more load to be curtailed in New Orleans (116 MW) for a likely longer duration. Undoubtedly, the local generation that the Council wisely approved to be constructed also played a key role, and all ENO-owned generating units were operational during the load shed event.

The Company also experienced some challenges with its winter storm response. Specifically, these challenges related to (1) an undiscovered data entry error in the load shed program (approximately 60 MW), (2) certain load measurement issues (19 MW), (3) a cell reference error in the spreadsheet used to calculate load shed (3 MW), and (4) sequencing issues that led to the Sewerage and Water Board (“SWB”) losing service to certain facilities, though their operations were not impacted. In response, the Company has implemented a series of improvements to ensure that these issues have been corrected; and it is actively exploring additional recommendations made by the Council’s Advisors.

Regarding communications, although general communications began several days ahead of the load shed event, the Company sent texts and voice messages to customers at least one day before the actual load shed event that specifically warned them to conserve energy and that insufficient conservation could lead to temporary service interruptions. This messaging was covered ahead of the load shed event by the New Orleans news media, such as WDSU, NOLA.com, and FOX 8. The Company’s messaging, coupled thereafter with a steady drumbeat of coverage from the local media outlets in New Orleans, gave customers sufficient time to understand the need to conserve and to make plans in the event of a service interruption. In addition, while an ENO employee communicated with several New Orleans media outlets immediately following the load shed event by telephone, improvements have been made to the communications process that will allow for more streamlined written news releases in the future.
ENO urges the Council to consider the global response to the winter event, and not to focus solely on the individual aspects of the response where challenges admittedly existed. When the bigger picture is considered, the positive aspects of the response weigh heavily against a finding of imprudence or the imposition of any fine. While ENO recognizes that a number of its customers were interrupted due to the technical issues described more fully below, the actions taken by the EOCs prevented prolonged, widespread outages and protected the bulk electric system from catastrophic failure.

The Company supports the Council’s efforts to conduct a thorough review of the facts and commits to ensuring that all challenges identified are corrected going forward, but the law does not support a finding of imprudence or a fine against ENO under these circumstances. Accordingly, pursuant to Resolution R-21-151, the Company hereby submits this Response to the Prudence Investigation.
Table of Contents

I. The Winter Storm ............................................................................................................2
   a. Background ......................................................................................................... 2
   b. Entergy’s Proactive Measures Avoided Additional Curtailments ......................... 8
   c. Technical Challenges During the Load Shed Event impacted ENO Customers, but, on balance, were not Imprudent ...................................................................12
      i. Incorrect breakers on ELL Program and Prioritization Issues ..................13
      ii. Load Measurement Issues .......................................................................16
   d. Entergy’s Communications During the Winter Storm were Not Imprudent.......18
      i. Entergy’s Communications Warned of Potential Load Shed ...................18
      ii. ENO made Reasonable Efforts to notify the Public after the Load Shed Event ......................................................................................................20
      iii. The Company activated its Incident Command during the Winter Storm and a Centralized Communications Process was Necessary ............21
      iv. The Law Does Not Support a Finding of Imprudence for ENO’s communications .....................................................................................22

II. A Council Finding of Imprudence and/or the Imposition of Penalties under these Circumstances would be Unlawful, Arbitrary and Capricious, and Violate the United States and Louisiana Constitutions ................................................................................. 23
   a. ENO’s decisions and actions are presumed prudent and cannot be evaluated based on hindsight. ..........................................................................................23
   b. It would be improper and unlawful to impose a “financial penalty” based on the Load Shed Event ........................................................................................................24

III. Conclusion .................................................................................................................... 28
BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: ENTERGY NEW ORLEANS, LLC ( )
LOAD SHED PROTOCOLS AND ALL ( )
EVENTS AND DECISIONS RELATED ( )
TO THE FEBRUARY 2021 WINTER ( )
STORM URI EVENT ( )

DOCKET NO. UD-21-01

ENTERGY NEW ORLEANS, LLC’S RESPONSE TO PRUDENCE INVESTIGATION

NOW BEFORE THE COUNCIL OF THE CITY OF NEW ORLEANS (the “Council”), through the undersigned counsel, comes Entergy New Orleans, LLC (“ENO” or the “Company”), which respectfully submits its response to the prudence proceeding initiated in Resolution R-21-151.

ENO acknowledges at the outset both the seriousness of this matter and the Council’s efforts to conduct a thorough review of the facts. As part of that review, the principal concern to bear in mind is that the protection of the bulk electric system\(^2\) is paramount during a load shed event. This is especially true in New Orleans where the City is almost entirely dependent on the transmission grid for operational reliability.\(^3\) Furthermore, such protection is a coordinated, multi-jurisdictional effort; and in this regard, the load shed event was only successful because the EOCs and other utilities in MISO South worked collectively to prevent catastrophic damage and prolonged outages in the region, including in New Orleans.\(^4\) On balance, the Company’s\(^5\) global

\(^2\) The bulk electric system is the backbone of the electric-delivery system. It is the high-voltage transmission lines that move power from generation sources (power plants) to substations. Power is then taken from the substation to the smaller distribution lines serving local neighborhoods. Energy flowing across the bulk electric system must remain in constant balance to maintain reliability and avoid large-scale blackouts. See MISO Operating Conditions FAQs, attached as Exhibit 1.

\(^3\) See Affidavit of Mike Goin at ¶ 5, attached as Exhibit 2.

\(^4\) See Affidavit of Mike Goin at ¶ 10, attached as Exhibit 2.

\(^5\) It should be noted that while sometimes referred to as the “Company’s Response,” ENO was a part of a necessarily larger response team consisting of multiple functional groups and employees from multiple Entergy Companies.
response to the winter storm was reasonable and prudent, with outages in New Orleans lasting a maximum of 1 hour 40 minutes compared to **days** in other areas. Indeed, the Edison Electric Institute recently awarded Entergy an Emergency Response Award for its global response to the February 2021 Winter Storm. The Company supports the Council’s efforts to conduct a thorough review of the facts and commits to ensuring that all challenges identified are prospectively addressed, but the facts and the law do not support a finding of imprudence or a fine against ENO under these circumstances. Accordingly, pursuant to Resolution R-21-151, the Company hereby submits this Response to the Prudence Investigation:

I. The Winter Storm

   a. Background

   On February 13, 2021, a frontal storm developed off the coast of the Pacific Northwest and moved ashore, before moving southeastward. This storm eventually became a record-setting winter storm named Uri that swept across the United States, causing widespread and prolonged power outages and extensive property damage throughout the Country. In Texas, for example, 4.5 million people lost electricity for periods of time ranging from several hours to many days.

---

6 See Affidavit of John Hawkins at ¶ 30, attached as Exhibit 3.
The task of coordinating reliability in the EOCs’ service territories during this winter event fell to the Midcontinent Independent System Operator (“MISO”).\(^8\) MISO is an independent, not-for-profit organization that acts as a Regional Transmission Organization (“RTO”) for 15 U.S. states.\(^9\) ENO is located within the MISO South region, which consists of Arkansas, Mississippi, Louisiana, and Texas.\(^10\) Maintaining reliability is challenging during a major storm such as Winter Storm Uri because the weather system and the electric grid itself are very dynamic and in a constant

\(^8\) See Affidavit of Mike Goin at ¶ 7, attached as Exhibit 2.
\(^9\) See id. at ¶ 8.
\(^10\) See id.
state of flux during such an event.\textsuperscript{11} The availability of generation and transmission elements, just like in a hurricane, do not remain constant and require continuous monitoring and adjustments by MISO and load serving entities such as Entergy.\textsuperscript{12}

The MISO Operating Procedures contain a list of alerts that guide their system operators’ actions in a variety of conditions and are designed to allow MISO to adjust quickly as system conditions change:\textsuperscript{13}

\textbf{Table 1}

<table>
<thead>
<tr>
<th>Message</th>
<th>Communication Intent</th>
<th>Potential Member/MISO Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservative Operations Declaration</td>
<td>Alert for Situational Awareness: Reliability issue possible for defined area.</td>
<td>• Potentially suspend transmission maintenance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Review outage plans for deferral, cancellation</td>
</tr>
<tr>
<td>Hot Weather, Cold Weather or Severe Weather Alert</td>
<td>Alert for Situational Awareness: MISO could be approaching tight supply conditions.</td>
<td>• Review outage plans for deferral, cancellation</td>
</tr>
<tr>
<td>Capacity Advisory</td>
<td>Advisory for Situational Awareness: Potential for limited operating capacity margins (&lt;5%) in the next 2-3 days.</td>
<td>• Update facility and generation outages, including de-rates</td>
</tr>
<tr>
<td>Transmission Advisory</td>
<td>Alert for Situational Awareness: Operational conditions may require emergency declarations; no specific actions required.</td>
<td>• Update generation offers</td>
</tr>
<tr>
<td>Min Gen Alert</td>
<td>Alert for Situational Awareness: MISO is forecasting a potential supply surplus.</td>
<td>• Update Load Forecast Values</td>
</tr>
<tr>
<td>Max Gen Alert</td>
<td>Alert for Situational Awareness: MISO is forecasting a potential capacity shortage.</td>
<td>• Update LMR Availability and Self Scheduled MW values</td>
</tr>
<tr>
<td>Max Gen Warning</td>
<td>Warning to Prepare for Possible Event</td>
<td>• Update EDR offers</td>
</tr>
<tr>
<td>Max Gen Event (Step 1)</td>
<td>Actions Taken to Preserve Operating Reserves: NERC Emergency Alert 1</td>
<td>• Conditions may require a Local Transmission Emergency or a Transmission System Emergency declaration.</td>
</tr>
<tr>
<td>Max Gen Event (Steps 2, 3, 4)</td>
<td>Actions Taken to Preserve Firm Load: NERC Emergency Alert 2 (Step 3 declaration)</td>
<td>• Prepare for de-commitment (taking generation off line), reduction in purchases or other actions</td>
</tr>
<tr>
<td>Max Gen Event (Step 5)</td>
<td>Event Occurring: NERC Energy Emergency Alert 3</td>
<td>• Declare Conservative System Operations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Prepare for possible Max Gen Event</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Curtail non-firm exports</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Schedule all available external resources into the MISO Market</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Implement Emergency Pricing Offer Tier 1. This is an ex-post pricing change, and does not affect system commitment or dispatch.</td>
</tr>
</tbody>
</table>

\textsuperscript{11} See id. at ¶ 11.

\textsuperscript{12} See affidavit of Mike Goin at ¶ 11, Exhibit 2; and Affidavit of John Hawkins at ¶ 6, Exhibit 3.

\textsuperscript{13} See MISO Operating Procedures, attached as Exhibit 4.
Ultimately, when there is not enough generation to serve system load, or if the system is overly constrained, MISO is required by the North American Electric Reliability Corporation ("NERC") to take action to protect the grid, or bulk electric system.\textsuperscript{14} During a "Max Gen Event (Step 5)," MISO follows its emergency procedures and directs load curtailment as the option of last resort. Curtailment means the intentional interruption of service to utility customers, sometimes referred to as "load shed."\textsuperscript{15} Load shed has the effect of reducing the demand/stress placed on the grid, which, if not reduced, could result in significant damage to the electric grid, potentially causing widespread, extended outages.\textsuperscript{16} Because catastrophic damage to the grid may be imminent under this scenario, Entergy implements the required load shed as quickly as possible after being directed by MISO.\textsuperscript{17}

The need to shed load generally arises under two system conditions. First, it can be in response to a local transmission emergency, meaning that operating conditions in a specific location on the grid require curtailment of load to prevent significant damage.\textsuperscript{18} Second, a load shed event can be in response to a system-level transmission emergency, which means that curtailment across the entire MISO system is necessary to prevent instability, uncontrolled separation, or cascading outages.\textsuperscript{19} Winter Storm Uri triggered numerous alerts and directives that escalated up the MISO Operating Guide and included multiple calls for public conservation,\textsuperscript{20} the

\begin{flushright}
\textsuperscript{14} See Affidavit of Mike Goin at ¶ 12, attached as Exhibit 2.
\textsuperscript{15} See Affidavit of Mike Goin at ¶ 13, attached as Exhibit 2.
\textsuperscript{16} See id. at ¶ 14.
\textsuperscript{17} See id.
\textsuperscript{18} See id. at ¶ 16.
\textsuperscript{19} See id. at ¶ 17.
\textsuperscript{20} MISO may direct member utilities to issue public electricity conservation appeals. MISO operators communicate this direction directly to local utilities, who then communicate to their customers. Simple conservation measures can allow customers to help keep the lights on and avoid blackouts. Conservation appeals are part of MISO’s emergency operating procedures that help protect the grid. The procedures also maintain the reliability of the bulk electric system. Specific reasons for a public appeal are usually due to a combination of things, including extreme heat or cold, unplanned generation outages, and/or unplanned transmission line outages. See MISO Operating Conditions FAQs, attached as Exhibit 1.
\end{flushright}
interruption of Load Modifying Resources ("LMRs"), and the implementation of both types of load shedding described above. In MISO South, there were four load shed events over a two-day period, three of which occurred on February 16, 2021, and only one of which resulted in unplanned outages in ENO’s service area:

**Figure 2**

When MISO orders a systemwide curtailment, it directs each Local Balancing Authority ("LBA") to shed a certain amount of MW of load. The LBA then calculates the amount of load to be shed in specific load pockets. Once it receives a direction to curtail load, the Entergy LBA then send instructions to Entergy’s Transmission Control Center ("TCC"), which then relays those instructions to the relevant Distribution Operation Centers ("DOC") in various areas. 

---

21 Load Modifying Resources are Demand Resources and Behind the Meter Generation not typically modeled or measured as part of MISO's operations, but used during capacity shortages to help meet the energy balance.

22 See Affidavit of Mike Goin at ¶ 21, attached as Exhibit 2.

23 See Affidavit of Mike Goin at ¶ 22-23, attached as Exhibit 2.

24 See id. at ¶ 18.

25 See id. at ¶ 19.

26 See id. at ¶ 20.
then initiates the relevant load-shed program, which interrupts feeders in a quick, automated manner.\textsuperscript{27} In Louisiana, there are 6 load shed programs that correspond to various areas on the transmission system: ENO Amite South, ELL DSG, ELL ASI, EGSL WOTAB, EGSL Baton Rouge, and ELL West Monroe.\textsuperscript{28} The Louisiana DOC is located in Baton Rouge and has responsibility for all areas of the state, including New Orleans.\textsuperscript{29} As Figure 2 shows, there were multiple load shed events during this emergency period, two of which required constant action by the Louisiana DOC.\textsuperscript{30}

ENO was impacted by only one of the load shed events listed in Figure 2, which occurred on February 16, 2021, at approximately 7:15 pm.\textsuperscript{31} That event was a system-wide load shed event (Max Generation Event, Step 5 on the MISO Operating Guide), which called for 700 MW of curtailment throughout the MISO South region.\textsuperscript{32} The directive from the LBA was for 26MW of load to be shed in New Orleans.\textsuperscript{33} Although the DOC entered the 26 MW load shed into the system using the ENO Amite South Load Shed Program in compliance with the LBA directive, it was later determined that a total of approximately 105 MW was interrupted in New Orleans.\textsuperscript{34}

There were three challenges associated with the load shed event that led to more load being shed in New Orleans than was required:\textsuperscript{35}

(1) A data entry error caused ENO feeders (instead of ELL feeders) to be shed when the ELL DSG Load Shed Program was executed at the DOC (approximately 60 MW);\textsuperscript{36}

\textsuperscript{27} See Affidavit of John Hawkins at ¶ 7, attached as Exhibit 3.
\textsuperscript{28} See Affidavit of John Hawkins at ¶ 9, attached as Exhibit 3.
\textsuperscript{29} See id.
\textsuperscript{30} See id. at ¶ 10.
\textsuperscript{31} See id.
\textsuperscript{32} See Affidavit of Mike Goin at ¶ 23, attached as Exhibit 2.
\textsuperscript{33} See id. at ¶ 24.
\textsuperscript{34} See Affidavit of John Hawkins at ¶ 12, attached as Exhibit 3.
\textsuperscript{35} See id. at ¶ 13.
\textsuperscript{36} See id.
(2) Certain load measurement issues resulted in approximately 19 MW being shed because load that already had been shed was not recorded as such by the system;\(^{37}\)

(3) A cell reference error in the spreadsheet used to calculate the amount of load to be shed for each load shed program resulted in ENO being directed by the LBA to shed 26 MW rather than the 23 MW that it should have been directed to shed (3 MW).\(^{38}\)

While the entire load shed event had a maximum duration of 1 hour and 40 minutes, many customers were restored prior to that time.\(^{39}\) In all, approximately 25,000 ENO Customers were impacted by the event.\(^{40}\)

b. Entergy’s Proactive Measures Avoided Additional Curtailments

Winter Storm Uri impacted New Orleans far less than other regions.\(^{41}\) New Orleans experienced no reported deaths and only 12% of its residents experienced service interruptions for approximately 1 hour and 40 minutes, or less.\(^{42}\) While any interruption to electric service is regrettable, New Orleans compared favorably to the lengthier outage durations experienced in other regions.\(^{43}\)

These relatively minimal impacts were not the result of mere coincidence, but rather the result of planning and proactive measures taken by Entergy in advance of the storm, as well as quick action taken in rapidly changing circumstances during a multi-day event the likes of which had not been experienced in at least 20 years.\(^{44}\) Even before the formation of the weather system,

\(^{37}\) See id. . 
\(^{38}\) See Affidavit of Mike Goin at ¶ 25, attached as Exhibit 2. 
\(^{39}\) See Affidavit of John Hawkins at ¶ 16, attached as Exhibit 3. 
\(^{40}\) See id.
\(^{41}\) See Affidavit of Mike Goin at ¶ 26, attached as Exhibit 2. 
\(^{42}\) See Affidavit of John Hawkins at ¶ 16, attached as Exhibit 3. 
\(^{44}\) See Affidavit of Mike Goin at ¶ 26, attached as Exhibit 2.
the Companies were beginning their pre-storm planning, which reduced the potential impact on ENO’s customers.45

To begin, the Companies started a constant communication loop with MISO beginning on February 12, 2021.46 In these meetings, key leaders reviewed MISO prospective load forecasts, load forecast accuracies of the previous 24 hours, forecasted sufficiency, generation availability, and gas supply issues, and discussed strategies to maximize reliability.47 These meetings helped to improve communication and information sharing between Entergy and MISO, which was vital to navigating the dynamic and challenging operating environment created by Winter Storm Uri.48 Entergy also began a series of pre-storm activities focused on a strategy to maximize available generation.49 This strategy proved vital.50

The Companies took a number of proactive steps to make more generation available in MISO South.51 The EOCs delayed multiple planned outages related to several generators, namely River Bend, Lake Charles Power Station, Gerald Andrus, Baxter Wilson 1, and White Bluff 1.52 The Companies also returned units from planned outages where feasible and removed units from mothballed/deactivated status in order to maximize available generation.53 The Companies also optimized generators with longer start-up times in order to ensure they would be available if needed for reliability.54 Also, they sought environmental waivers ahead of time in order to ensure

45 See Affidavit of Mike Goin at ¶ 27, attached as Exhibit 2.
46 See Affidavit of Mike Goin at ¶ 28, attached as Exhibit 2.
47 See Affidavit of Mike Goin at ¶ 29, attached as Exhibit 2.
48 See Affidavit of Mike Goin at ¶ 30, attached as Exhibit 2.
49 See Affidavit of Mike Goin at ¶ 31, attached as Exhibit 2.
50 See id.
51 See id. at ¶ 32.
52 See id.
53 See id.
54 See id.
that generation could continue to provide reliability despite being temporarily out of environmental compliance.\textsuperscript{55}

Together, these actions added an additional 2,825 MW of available generation to the grid and helped to stabilize it during the load shed event.\textsuperscript{56} Had the Companies not been prepared for the winter storm, and had they not taken these pre-storm precautions described above, ENO would have experienced additional load shedding for potentially longer durations.\textsuperscript{57} In this instance, every MW of additional generation amounted to less load being shed in New Orleans.\textsuperscript{58} Without this generation, additional system-wide events could have been experienced resulting in more frequent outages; and with respect to the system-wide load shed event on February 16, the LBA would have requested 116 MW to be curtailed in New Orleans, likely for a longer duration.\textsuperscript{59} The Council’s Advisors recognized that these actions reduced the duration and impact of the load shed event, stating the following in their post-event investigation report:

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.\textsuperscript{60}

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.\textsuperscript{61}

\textsuperscript{55} See id. at ¶ 33.
\textsuperscript{56} See id. at ¶ 34.
\textsuperscript{57} See id. at ¶ 35.
\textsuperscript{58} See id.
\textsuperscript{59} See id. at ¶ 36.
\textsuperscript{60} See Council Utility Advisors’ Initial Report at 11.
\textsuperscript{61} See id. at 23.
The Company agrees with the Advisors that these actions were vitally important, as without them, more load would have been curtailed in New Orleans for likely longer durations. It should also be noted that these activities came at a significant cost, most of which was borne by other Operating Companies.\(^{62}\) For example, the cost of delaying a refueling outage at River Bend alone was $5 million.\(^{63}\) ELL also took action to ensure gas supply to its legacy units in Amite South (which includes New Orleans) because of significant concerns regarding gas shortages in that area. Those efforts paid dividends in the form of an order from the Department of Natural Resources that made more natural gas available to produce electricity under constrained supply conditions.\(^{64}\) This benefited the load pocket where New Orleans is located by ensuring a steady gas supply to generators that ENO depended on for reliability.\(^{65}\)

All of these measures taken by the EOCs collectively demonstrate that protecting the bulk electric system through a system-level load shed requires a coordinated response. While ENO recognizes that a number of its customers were impacted by the technical issues discussed below, it is important to note that other operating companies, including ELL, performed a number of activities that directly benefited customers in New Orleans.

In this docket, ENO urges the Council to consider the global response to the Winter Event, and not focus solely on the individual aspects of the response where challenges admittedly existed. When the bigger picture is considered, the positive aspects of the response weigh heavily against a finding of imprudence or the imposition of any fine. While ENO recognizes that a number of its customers were interrupted due to the technical issues described more fully below, the actions

\(^{62}\) See Affidavit of Mike Goin at ¶ 37, attached as Exhibit 2.
\(^{63}\) See id.
\(^{64}\) See Emergency PL Orders, attached as Exhibit 5.
\(^{65}\) See Affidavit of Mike Goin at ¶ 38, attached as Exhibit 2.
taken by the EOCs prevented prolonged widespread outages and protected the bulk electric system from catastrophic failure.

c. Technical Challenges During the Load Shed Event impacted ENO Customers, but, on balance, were not Imprudent

In the Company’s March 10, 2021 letter to the Council, ENO explained that a load shed event of this nature is rare, with the last system-wide load shed event happening over 20 years ago. As such, the Company has stated that the process revealed some significant learning opportunities, and explained that there are three issues that resulted in incremental load being shed in New Orleans:

1. **Incorrect Breakers Shed (60 MW):** There was an error in the automated system that executes the load shed that caused the interruption of ENO feeders in the Downstream of Gypsy (“DSG”) load pocket instead of Entergy Louisiana, LLC (“ELL”) feeders in DSG. Simply put, it was necessary for load to be shed to protect the integrity of the system, but 60 MW of that load should have been shed on ELL’s feeders in DSG, not ENO’s. Specifically, the system had an automated load-shed program incorporated into it called “ELL: Downstream of Gypsy,” which incorrectly contained all ENO breakers, resulting in ENO customers being shed instead of the ELL customers.

2. **Breaker Load Measurement (19 MW):** Breaker load measurement issues on the system also caused unforeseen incremental load shed in New Orleans. These measurement issues are unrelated to the incorrect inclusion of ENO breakers in ELL’s DSG load shed program. Due to improperly functioning breaker load measurement in some breakers, the load shed program did not accurately record that load was actually shed when certain breakers were opened, and thus, the program opened (i.e., shed) more breakers than were needed to meet the required load shed amount. For example, if a breaker were inaccurately reading zero load, but there actually was load present, the load shed program would shed that breaker but not measure load reduction and then move to the next feeder in the sequence in search of the required load reduction.

---

66 See March 10, 2021 Letter, attached as Exhibit 6.
67 See Affidavit of John Hawkins at ¶ 13(1), attached as Exhibit 3.
68 See Affidavit of John Hawkins at ¶ 13(2), attached as Exhibit 3.
3. **Cell Reference Error (3 MW):** A recently-discovered cell reference error in the spreadsheet used to calculate the amount of load to be shed for each load shed program resulted in ENO being directed by the LBA to shed 26 MW rather than the 23 MW that it should have been directed to shed (3 MW).\(^69\)

These three issues resulted in ENO shedding an additional 82 MW beyond the 23 MW that the LBA should have directed ENO to shed, resulting in a total of 105 MW being interrupted.\(^70\)

Moreover, feeder prioritization issues regarding the load shed list also resulted in Southport feeder B0527 (which serves the Sewerage & Water Board’s (“S&WB’s”) water intake facilities) being interrupted.\(^71\) All of these issues have been addressed post-event and are discussed more fully below.

### i. Incorrect breakers on ELL Program and Prioritization Issues

The Company has been transparent during the Council’s investigation into these issues and has admitted that there were challenges with the load shed event — both in the preparation and execution. Because load shed events are rare, the Company is not aware of any uniform approach or best practices among utilities. In response to Winter Storm Uri, the Company has updated its processes and has implemented immediate measures to address the issues that arose during the load shed event.\(^72\) Other long-term measures are currently being evaluated to potentially supplement the process.

For example, while the Company regularly practiced the communications aspects of load shed events and utilized on-the-job table top training sessions to prepare new operators, load shed test simulations were not historically performed.\(^73\) The Company is exploring test simulations for

---

\(^{69}\) See Affidavit of Mike Goin at ¶ 25, attached as Exhibit 2.

\(^{70}\) See Affidavit of John Hawkins at ¶ 14, attached as Exhibit 3.

\(^{71}\) See id. at ¶ 15.

\(^{72}\) See id. at ¶ 17.

\(^{73}\) See id. at ¶ 18.
future applications, but believes that they may not provide the most effective option to mitigate the specific issues encountered in the recent winter event. Specifically, test simulations would have been unlikely to uncover the data entry issue that arose during the winter event because they are designed to compare the list of feeders entered into a load shed program against the tripping of those same feeders. 74 Absent specific knowledge that the data entry error existed, it is not a given that the simulation would have revealed that the wrong feeders were entered into the ELL:DSG Load Shed Program in the first place. 75 Test simulations could have value for other reasons beyond identifying the specific issues with the recent load shed event, but the Company believes that the most effective way to ensure that breakers are correctly selected and entered into the correct load shed program is to implement an improved annual review/approval process. 76

The Company has already adjusted and improved its annual review process and has performed an expedited review of all ENO feeders under the new procedures. 77 The review involved members of ENO Customer Service, ENO Distribution Operations, Distribution Planning, the Louisiana DOC, Transmission, and Information Technology groups. 78 The process produced a revised load shed plan, which is very similar to the plan recommended by the Council’s Advisors. 79 That is, a comprehensive review of all ENO distribution feeders was performed and all feeders with critical customers were identified. 80 The plan now excludes all feeders that contain critical load, and there are randomly-generated numbers assigned to the load shed sequence. 81 ENO is confident that the issues experienced during Winter Storm Uri will not reoccur. In

74 See id.
75 See id.
76 See id.
77 See id. at ¶ 19.
78 See id.
79 Advisor Initial Report at 20.
80 See Affidavit of John Hawkins at ¶ 20, attached as Exhibit 3.
81 See Updated Load Shed List, attached as HSPM Exhibit 7. Note that the feeders interrupted during the winter event that are still on the Load Shed list were placed at the back of the list.
addition, the Company is currently evaluating the feasibility of the Advisor’s recommendation to add all available Priority 3 feeders to the load shed plan and believes at this time that it has merit. This process produced a revised and improved load shed plan, which is attached, and a manual validation was performed to ensure the breakers listed on the plan were programed into the correct load shed program.\textsuperscript{82}

These improvements were designed to eliminate any gaps in the annual review process. Specifically, following a comprehensive, retrospective review of the events, the Company has concluded that there was not enough communication among the various groups within Entergy whose input was needed to create and implement the load shed list, and there was no validation and/or peer check once the load shed lists were programmed into the various load shed programs.\textsuperscript{83} These gaps have been addressed.\textsuperscript{84} Also, while the SWB had back-up generation for the feeder that lost service and was not operationally affected, the Company has since met with the SWB and has eliminated all feeders that SWB considers critical from the load shed list.\textsuperscript{85} Additionally, as stated above, the Company ensured that no critical feeders currently populate the load shed list and incorporated the improved communications with SWB regarding their critical loads into the Company’s improved annual review process.\textsuperscript{86}

Also, the Company believes that the annual review process is the appropriate venue to review the Company’s load shed plans and ensure their accuracy, not at the DOC level in real-time. As stated above, the operators at the DOC have an extremely short window within which to execute the load shed programs, or the TCC will be required to start interrupting entire substations,

\begin{flushleft}
\textsuperscript{82} See Manual Verification, attached as HSPM Exhibit 8.
\textsuperscript{83} See Affidavit of John Hawkins at ¶ 21, attached as Exhibit 3.
\textsuperscript{84} See id.
\textsuperscript{85} See id. at ¶ 22.
\textsuperscript{86} See Updated Load Shed List, attached as HSPM Exhibit 7.
\end{flushleft}
causing more widespread and indiscriminate outages.\textsuperscript{87} The automated process must be initiated quickly, therefore, by DOC supervisors, and operators rely on the load shed program logic to deliver the directive values that were entered into each program.\textsuperscript{88} There is no dashboard that would allow the operators in the heat of an emergency event to manually validate the feeders shed by six different load shed programs and compare against the targeted jurisdictional load in real-time.\textsuperscript{89} Moreover, in the recent winter event, once the load shed program was executed, the focus in the Louisiana DOC quickly shifted to creating plans to restore the SWB, and shortly thereafter, to executing the directives to restore all customers.\textsuperscript{90}

\textbf{ii. Load Measurement Issues}

The Company has also made repairs to equipment that caused the load measurement issues at two substations. The Avenue C substation had a communications port issue that prevented data from being communicated, and the Market Street substation had an intermittent password mismatch between various equipment. Under normal operations, this equipment would trigger a SCADA alarm in the event of a malfunction.\textsuperscript{91} Once an alarm is triggered, Entergy dispatches a crew to diagnose the issue and decide whether the issue will impact operational reliability. The Company also performs regular maintenance on its substations, and the equipment related to load shedding is inspected along with like equipment in the substation on regular intervals.\textsuperscript{92}

While there is not an independent inspection program related to equipment involved in load shedding, the Company believes that its SCADA alarm system coupled with its regular substation inspection program is sufficient to identify issues with load measurement communications

\textsuperscript{87} See Affidavit of John Hawkins at ¶ 23, attached as Exhibit 3.
\textsuperscript{88} See id.
\textsuperscript{89} See id.
\textsuperscript{90} See id.
\textsuperscript{91} See id. at ¶ 25.
\textsuperscript{92} The maintenance task that would identify this issue is a DC Operation test that is set for 8-year intervals, or a relay calibration task that is set for 12-year intervals.
equipment. In fact, the communications port issue at Avenue C was identified through a SCADA alarm in 2018, but because that port was not critical to reliability from an operations perspective, it was not given priority over other repairs.\textsuperscript{93} A one-time total evaluation of all substation equipment with a load shedding function in New Orleans was recently performed, but going forward, the Company believes that a priority list for all equipment associated with load shedding is necessary so that crews can make expedited repairs even if such equipment is not operationally significant.\textsuperscript{94} Regarding the password mismatch at Market Street, the Company does not believe that preventative maintenance would have discovered the issue because there was no equipment failure. The problem was further complicated because it was intermittent, functioning correctly with some equipment and malfunctioning with others.\textsuperscript{95}

In summary, the Company has identified and addressed several areas of needed improvement regarding its preparation and execution of the winter storm response. The Council should keep in mind, however, that there is a level of imprecision/margin of error associated with the execution of a rapid curtailment of customers in emergency situations such as these. The Company has learned from this event and has made the necessary improvements to its processes to prevent a reoccurrence. On balance, the Company’s response to the winter storm was reasonable given all of the proactive measures taken to avoid additional load shed; and there were no regulations or best practices put in place by the Council or the broader utility industry that could be relevant to the Service Regulations cited by the Advisors. The Company urges the Council to consider the totality of the circumstances, as well as the remedial measures instituted by ENO, in determining whether ENO acted prudently in responding to Winter Storm Uri.

\textsuperscript{93} See Affidavit of John Hawkins at ¶ 27, attached as Exhibit 3.
\textsuperscript{94} See id. at ¶ 29.
\textsuperscript{95} See id. at ¶ 28.
d. Entergy’s Communications During the Winter Storm were Not Imprudent

Customer communications is a vital component of any storm response. The February 2021 Winter Storm was ENO’s first time communicating with Customers regarding a system-wide load shed event in 20 years. The Company’s communications were reasonable under the circumstances.

i. Entergy’s Communications Warned of Potential Load Shed

During the Winter Event, the Company issued multiple communications to customers via text, email, phone calls, web posts, and social media starting on February 10, 2021. While these communications began by conveying general information regarding the winter storm and potential effects on customers’ bills, the communications escalated to requests for customers to conserve energy and warnings that system conditions were creating a risk of temporary or periodic service interruptions.

For example, on the evening of February 15, at 5:37 pm, more than 24 hours before the load shed event, ENO messaged customers via text message and voice scripts (phone calls) regarding the need to conserve energy and warned that it may be necessary to begin temporary outages:

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

Importantly, members of the public and the media had a heightened sensitivity to the possibility of customer interruptions given the events transpiring in Texas, and several New Orleans media

---

96 See Affidavit of Lee Sabatini, at ¶ 6, attached as Exhibit 9.
97 See id., at ¶ 7.
98 (emphasis added) See id., at ¶¶ 8 and 9; see also Company’s Response to ADV 1-15, attached as Exhibit 10.
99 See Affidavit of Lee Sabatini, at ¶ 9.
outlets echoed the Company’s call for conservation and its warning of the possibility of outages in their coverage, including NOLA.com, WGNO, WDSU, and FOX 8, WWL Radio, etc. Some examples of this coverage were the following:

- **NOLA.com, February 15, posting - 3 p.m.:** What is the risk that customers in Louisiana will face similar outages over the next day or so as temperatures dip? The short answer: it’s a possibility, and residents should be prepared. Additionally, as power companies have been explaining this week, utilities operating in the south have set up their grids more to deal with extreme heat and thus are vulnerable to issues caused by rare bouts of extreme cold.

- **WGNO, February 15:** Entergy customers asked to conserve electricity to prevent further outages

- **WDSU, February 15 - (Mayor’s press conference) noon:** …we’re all going to hear from a representative from Entergy New Orleans. That’s the next big concern for the city of New Orleans… power outages. Could we and will we lose power here too?

- **Fox 8, February 16, 8 a.m. newscast:** …conserve electricity because the extra use could put a strain on the system. Entergy says its current load forecast is approaching an all time peak

- **February 16, WDSU, noon newscast:** If the power system is not able to keep up with the demand, then rolling blackouts may occur -- rolling blackouts may occur. Randi: Entergy is asking customers to turn down their thermostat, use ceiling fans to circulate air, and cook foods at the lowest possible setting.

Accordingly, the Company’s public messages and the media’s coverage of those messages provided information to the public about potential for temporary outages well before the load shed event occurred on February 16, 2021 at 7:15 pm. The Company’s messaging, coupled thereafter with a steady drumbeat of coverage from the local media outlets in New Orleans, gave customers more than 24 hours to understand the need to conserve usage and to make plans in the event of service interruption.

---

100 See Affidavit of Lee Sabatini at 11, attached as Exhibit 9; see also the Company’s Response to ADV 1-15, attached as Exhibit 10.

101 See Affidavit of Lee Sabatini, at 12 and 13.
ii. ENO made Reasonable Efforts to notify the Public after the Load Shed Event

The electric grid is very dynamic, so the loss of a resource in an area far outside of ENO’s service territory can have drastic and sudden effects on system conditions. This was the case on February 16, 2021. There were multiple MISO alerts that morning and evening, and at approximately 5:44 pm, MISO called a Max Gen Event Step 2. At 6:43 pm, MISO directed the EOCs to curtail customers; and by 7:14 pm, curtailments began in New Orleans.102

Immediately after the event, ENO communicated with 4 local media outlets in New Orleans and confirmed for them that ENO had been instructed by MISO to curtail its customers.103 The following media outlets called ENO at the following times: WDSU at 7:30pm, Fox 8 at 7:35pm, NOLA.com at 7:49 pm, WWL at 8:30 pm. 104 Accordingly, 15 minutes after the load shed was executed, the Company confirmed for the media that ENO was instructed to curtail customers. The information provided during these calls offered basic information that the media could have used to inform the public, even if the information did not come in the form of a written news release.

Later that night, at 8:44 p.m., the Company issued a detailed news release stating that there were mandatory rolling outages directed by MISO105 and updated customers on social media after load shed was complete.

As the Council can imagine, there are a number of moving parts when responding to an event such as Winter Storm Uri. Being fast but wrong when communicating has significant consequences in terms of public confusion and undermining public trust in the messaging. In this

102 See Affidavit of Lee Sabatini, at ¶¶ 14 and 15; See also ENO’s response to ADV 1-19, attached as Exhibit 11.
103 See id. at ¶ 16.
104 See id. at ¶ 17.
105 See id. at ¶ 19; see also https://www.entergynewsroom.com/storm-center/news/entergy-forced-initiate-power-outages-customers-across-its-service-area/
situation, there were two separate MISO alerts within an hour of each other that involved different facts to communicate. The Company confirmed the events for local media shortly after the load shed event was directed, and more importantly, it communicated the possibility of temporary outages well in advance of actual load shed occurring.

ENO has, however, reviewed communications during Winter Storm Uri with a critical eye and implemented a new procedure regarding news releases following a MISO directive to shed load. A streamlined news release will be communicated to the media containing basic information such as (1) confirming that MISO has issued a directive to curtail load, and (2) identifying the specific jurisdiction where the load shed has occurred. The Company believes that this improved process will allow it to provide basic information through a written news release in an expedited manner.

iii. The Company activated its Incident Command during the Winter Storm and a Centralized Communications Process was Necessary

During the February 2021 Winter Storm, the Company activated the same Incident Command that has been used during countless tropical weather events and other emergency situations. In an emergency, centralized communications are critically important. Having designated points of contact within the Incident Command Structure is essential to ensuring accurate and consistent messaging. The reverse situation would be untenable. For example, if each of Entergy’s five operating companies communicated with various company members in the field and crafted their own individual messages, there is a high likelihood that customers would end up receiving inconsistent and inaccurate messages, undermining their confidence. It would be

106 See Affidavit of Lee Sabatini at ¶ 20, attached as Exhibit 9.
107 See id. at ¶ 21.
particularly problematic and confusing for customers in the New Orleans media market if ENO and ELL were not aligned in their messaging about severe weather events.

Instead, an emergency situation warrants a single, consistent, and accurate message so that customers are not ultimately misguided or left confused. Moreover, ENO personnel do have the ability to make minor changes to customize the message to their jurisdiction, and the fact that the words “New Orleans” do not appear in a news release cannot form the basis of an imprudence finding or a fine. That is especially the case here, where the Company issued numerous communications well before the event to the New Orleans media, who covered the potential for curtailment and the load shed event in the New Orleans media market.

iv. The Law Does Not Support a Finding of Imprudence for ENO’s communications

The United States Supreme Court articulated the basic premise of this limit on regulatory authority over utilities nearly a century ago, stating: “It must never be forgotten that, while the state may regulate with a view to enforcing reasonable rates and charges, it is not the owner of the property of public utility companies, and is not clothed with the general power of management incident to ownership.”108 It is undisputed in this case that the Company warned customers about the possibility of temporary service interruptions almost 24 hours before the load shed event was directed. The Service Regulation cited by the Advisors required ENO to alert the local news media with information relevant to the outage. While this Service Regulation cannot be used to fine the Company, as discussed below, the Company has nonetheless complied. The Company is certainly open to implementing reforms and constructive recommendations of the Council, but the hindsight

108 Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission of Missouri, 262 U.S. 276, 289 (1923. The Supreme Court’s focus on ownership of property is telling. For municipally-owned and operated utilities, regulators exercise a greater degree of control over managerial decisions. They also bear a greater degree of responsibility for the effects of such decisions.
review of its communication efforts during the winter storm cannot form the basis of an imprudence finding or a fine under law.

II. A Council Finding of Imprudence and/or the Imposition of Penalties under these Circumstances would be Unlawful, Arbitrary and Capricious, and Violate the United States and Louisiana Constitutions

a. ENO’s decisions and actions are presumed prudent and cannot be evaluated based on hindsight.

Council Resolution No. R-21-151 directs the Council’s Advisors to “conduct a prudence investigation to determine whether decisions which impacted ENO’s response as well as ENO’s actions leading up to and during the load shed event related to Winter Storm Uri on February 16, 2021 were prudent or otherwise fell below appropriate standards of conduct under the circumstances…” As the Council, its Advisors, and ENO continue to work together in this “prudence investigation” to understand the events leading up to and during the load shed event and to identify those areas that may be improved, it is important to remain mindful of the legal standards applicable to a prudence investigation.

The Supreme Court of Louisiana has made it clear that a utility’s decisions (and related costs) “are presumed to be prudent and allowable.” It follows that the utility has no initial burden to show prudence. The presumption of prudence is overcome only when “serious doubt [is raised] about the prudence of a particular investment.” Any finding of “serious doubt” or a subsequent finding of imprudence must be based on sufficient factual evidence.

109 Resolution No. R-21-151.
110 GSU (1991), 578 So. 2d at 85.
111 See South Cent. Bell Tel. Co., 594 So. 2d at 366 (noting that “the utility is entitled to the presumption that the investments were prudent, unless the contrary is shown”).
112 GSU (1991), 578 So. 2d at 85.
113 See, Gordon v. Council of City of New Orleans, 2008-0929 (La. 4/3/09); 9 So. 3d 63, 72 (noting that, while Council may have broad authority in the regulatory context, such decisions can be overturned when they are “arbitrary and capricious, a clear abuse of authority, or not reasonably based upon the factual evidence presented”); see also, GSU (1991), 578 So. 2d at 94 (emphasis added) (noting that “Commission's consultants presented sufficient credible evidence to raise a serious doubt about the prudence of the company's investment”).
Furthermore, the Supreme Court of Louisiana has made clear that hindsight and the mere fact of unfavorable results do not justify a finding of imprudence:

> **[T]he focus in a prudence inquiry is not whether a decision produced a favorable or unfavorable result, but rather, whether the process leading to the decision was a logical one, and whether the utility company reasonably relied on information and planning techniques known or knowable at the time.** Although a prudence review is necessarily retrospective in that it involves an examination of past circumstances, past information available, and past decisions, these factors may not be evaluated in light of subsequent knowledge.

*GSU (1991)*, 578 So. 2d at 85 (internal citation omitted) (emphasis added).\(^{114}\) As these principles indicate, a utility regulator must determine whether the actual decisions and actions were prudent, and it cannot justify a finding of imprudence simply by comparing the results obtained to hypothesized, optimal conditions.\(^{115}\)

ENO respectfully submits that Council Resolution No. R-21-151 and the Council’s Advisors’ Report do not raise a serious doubt about ENO’s overall decisions or actions in preparation for or during the load shed event. ENO’s decisions and actions are presumed prudent. The discrete hindsight-based issues that the Council’s Advisors have raised are important to identifying and implementing remedial measures to prevent a reoccurrence, but do not support a finding of imprudence.

b. **It would be improper and unlawful to impose a “financial penalty” based on the Load Shed Event.**

The imposition of a “financial penalty” on ENO for its decisions and actions leading up to and during the load shed event would be improper and contrary to the law under the current

---

\(^{114}\) See also *South Cent. Bell Tel. Co.*, 594 So. 2d at 366 (emphasis added) (“Under that principle, South Central Bell is entitled to be compensated for all prudent investments at their actual cost when made (their ‘historical’ cost) irrespective of whether individual investments are deemed necessary or beneficial in hindsight.”).

\(^{115}\) See Id. at 366 (remanding LPSC’s rate order because the commission’s order was arbitrary and unjustified where the commission chose to reject the use of a utility’s actual capital structure for use in rate-making in favor of a hypothetical capital structure when there was no finding by the commission that the actual capital structure of the utility was imprudent).
circumstances. As an initial matter, federal law limits the Council’s power to impose penalties on ENO for implementing MISO directives that were issued under emergency circumstances to protect the functioning and reliability of the interstate electric transmission system.\footnote{\textbf{116} 16 U.S.C. § 824o(b)(1) (granting jurisdiction to the Federal Energy Regulatory Commission (“FERC”) over “any regional entities, and all users, owners and operators of the bulk-power system, including but not limited to the entities described in section 824(f) of this title, for purposes of approving reliability standards established under this section and enforcing compliance with this section. All users, owners and operators of the bulk-power system shall comply with reliability standards that take effect under this section.”); see also, \textit{Oneok, Inc. v. Learjet, Inc.}, 575 U.S. 373, 376-77 (2015) (internal quotation and citation omitted) (“[C]onflict pre-emption exists…where the state law stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress.”); \textit{English v. Gen. Elec. Co.}, 496 U.S. 72, 79 (1990) (“[S]tate law is [field] pre-empted where it regulates conduct in a field that Congress intended the Federal Government to occupy exclusively.”).} Furthermore, even if the Council only seeks to address aspects of the load shed event that are not preempted by federal law, substantive due process requires both certainty in the definition of what conduct could result in a penalty and “that the penalty portion of a statute be definite.”\footnote{\textbf{117} See \textit{State v. Piazza}, 596 So. 2d 817, 820 (La. 1992).} Accordingly, under Louisiana law and in accordance with the guarantees of due process, a utility regulator does not have unrestrained discretion to penalize or impair property rights in the absence of articulated policies, standards, or guidelines.\footnote{\textbf{118} See \textit{Bowie v. Louisiana Public Service Commission}, 627 So. 2d 164 (La. 1993).} And any provision or statute potentially providing authority to a utility regulator to penalize or impair property rights must be strictly construed.\footnote{\textbf{119} See \textit{Id.}, at 169 (“[B]ecause the Commission’s action infringes to some extent upon the stock owners’ rights to contract and to dispose of their private property, the rule must be strictly construed and only applications plainly warranted by its language may be made.”); \textit{State ex rel. Louisiana Pub. Serv. Comm’n v. Lancaster}, 97 So. 347, 348 (La. 1923) (emphasis added) (“The provision is penal in its nature and must be strictly construed. It cannot be extended beyond the scope of the authority therein expressly conferred.”).} \textit{Bowie v. Louisiana Public Service Commission} is instructive on this point.\footnote{\textbf{120} \textit{Bowie}, 627 So. 2d at 165-67.} \textit{Bowie} involved the sale of 100% of the capital stock of two LPSC-jurisdictional water and sewerage service corporations.\footnote{\textbf{121} \textit{Id.}} The LPSC disallowed the sale, but the Louisiana Supreme Court reversed on appeal. The Court found that while the LPSC possessed regulatory power to adopt and enforce reasonable rules and procedures to govern the regulation of public utilities’ corporate stock
transfers and prohibit these kinds of sales, those rules must “afford a sufficient basis for the Commission’s action in prohibiting the transfer.”\textsuperscript{122} Otherwise, the Commission would be acting with “virtually unfettered discretion” to affect private property interests.\textsuperscript{123} Applying \textit{Bowie}, even when a regulatory body is acting in an area within its regulatory powers, before it can take actions that affect private property, due process requires it “to articulate policies and to establish standards or guidelines to implement those policies, either through rulemaking or by precedent, to direct the agency’s discretion.”\textsuperscript{124}

Just as the LPSC possessed regulatory power to adopt and enforce reasonable rules and procedures to govern the regulation of public utilities’ corporate stock transfers as discussed in \textit{Bowie}, the Council possesses regulatory power to adopt and enforce reasonable rules and procedures with regard to load shed events to the extent that such regulation is not preempted.\textsuperscript{125} But, as in \textit{Bowie}, the Council may not act with “virtually unfettered discretion” to deprive a regulated utility of a private property right without advance regulatory guidance. Instead, it must “articulate policies” and “establish standards or guidelines to implement those policies.”\textsuperscript{126} The Council has not done so.

Confirming the absence of specific, established standards, Council Resolution No. R-21-151 does not cite any provision of the Charter, the City Code, or a regulatory order of the Council that addresses emergency load shed events. Instead, the resolution cites the Service Regulations Applicable to Electric and Gas Service by Entergy New Orleans, LLC ("Service Regulations"),

\begin{footnotesize}
\begin{enumerate}
\item\textsuperscript{122} \textit{Id.} at 169.
\item\textsuperscript{123} \textit{Id.} at 169-70.
\item\textsuperscript{124} \textit{Id.}
\item\textsuperscript{125} Given the federal interests of the FERC, NERC, and MISO with respect to the functioning and reliability of the bulk electric system, the need for the Council to articulate and provide advance notice of any rules/penalties is particularly important.
\item\textsuperscript{126} \textit{Bowie}, 627 So. 2d at 169-170.
\end{enumerate}
\end{footnotesize}
and specifically the definition of “Prudent Utility Practice.” 127 But that definition itself and other provisions of the Service Regulations recognize that ENO does not and cannot guarantee uninterrupted service; at times, interruptions may be required. The Service Regulations, moreover, do not provide a basis for (or much less make any reference to) the imposition of a fine or penalty. In other words, the Service Regulations, which function as “part of the Company’s Contract with each Customer,” 128 do not provide any specific requirements or standards for ENO with respect to load shed events, and the more general terms and conditions contained in the regulations are no substitute for the Council’s responsibility to formulate, publish, and make available to ENO clear standards with respect to system emergencies and potential enforcement of such standards before a penalty can be imposed. And, while the Service Regulations and the City Code provide a mechanism for resolving individual disputes between ENO and its customers through the Customer Complaint and Dispute Resolution Process, 129 those provisions do not make ENO subject to a fine or penalty from the Council. Accordingly, until the Council provides ENO with definite and clear standards with respect to a load shed event, including guidance to direct the Council’s enforcement of such standards, imposing a financial penalty would be improper under Louisiana law. 130

Moreover, the imposition of a fine based on previously unarticulated standards for ENO with respect to load shed events would be constitutionally prohibited. The federal and Louisiana constitutions both expressly prohibit the enactment of ex post facto laws. 131 A prohibited ex post

---

127 The Council Utility Advisor’s Initial Report similarly did not reference any regulation or rule promulgated by the Council specifically dealing with ENO’s obligations in response to a load shed event. See Resolution No. R-21-87.
128 See, Serv. Regs. at 1.
129 See Serv. Regs. at 51 (“Customer Complaints”); City Code Sec. 158-1046, et seq.
130 See Bowie, 627 So. 2d at 169-70.
facto law is any statute “which punishes as a crime an act previously committed, which was innocent when done; [or] which makes more burdensome the punishment for a crime, after its commission.”132 While the prohibition on ex post facto laws typically applies only to criminal statues, a civil-styled law or resolution falls within the ambit of the prohibition on ex post facto laws “[i]f the intention of the legislature was to impose punishment...”133

Council Resolution No. R-21-151’s call to consider “whether financial and/or other penalties should be imposed” to penalize ENO’s decisions and actions leading up to and during the Load Shed Event is, therefore, constitutionally improper. The Council cannot impose a penalty for conduct that was not subject to penalty at the time of the action without violating the ex post facto clauses of the federal and Louisiana constitutions.

III. Conclusion

In conclusion, ENO acknowledges both the seriousness of this matter and the efforts undertaken by the City Council to conduct a thorough review of the facts. While the Company acknowledges that there were some challenges and learning opportunities associated with the recent load shed event, the actions undertaken by ENO and the other EOCs prevented prolonged and widespread outages throughout the region, including the City of New Orleans, as well as the catastrophic failure of the bulk electric system. Simply put, the facts do not support the finding of imprudence or a fine, which would be improper and contrary to established caselaw. Accordingly, no penalties and/or sanctions should be imposed.

132 Collins v. Youngblood, 497 U.S. 37, 42 (1990); accord State ex rel. Olivieri v. State, 2000-0172 (La. 2/21/01); 779 So. 2d 735
133 State v. Trosclair, 2011-2302 (La. 5/8/12); 89 So. 3d 340, 348 (quoting Smith v. Doe, 538 U.S. 84, 92 (2003)).
Respectfully submitted:

BY: _______________________________
Timothy S. Cragin, Bar No. 22313
Brian L. Guillot, Bar No. 31759
639 Loyola Avenue, Mail Unit L-ENT-26E
New Orleans, Louisiana 70113
Telephone: (504) 576-2603
Facsimile: (504) 576-5579

-and-

W. Raley Alford, III, Bar No. 27354
Christian S. Chaney, Bar No. 37068
Stanley, Reuter, Ross, Thornton & Alford, L.L.C.
909 Poydras Street, Suite 2500
New Orleans, Louisiana 70112
Telephone: (504) 523-1580
Facsimile: (504) 524-0069

ATTORNEYS FOR ENTERGY
NEW ORLEANS, LLC
CERTIFICATE OF SERVICE
DOCKET NO. UD-21-01

I hereby certify that I have served the required number of copies of the foregoing report upon all other known parties of this proceeding, by the following: electronic mail, facsimile, overnight mail, hand delivery, and/or United States Postal Service, postage prepaid.

Lora W. Johnson, CMC, LMMC  
Clerk of Council  
Council of the City of New Orleans  
City Hall, Room 1E09  
1300 Perdido Street  
New Orleans, LA  70112

Erin Spears, Chief of Staff  
Bobbie Mason  
Christopher Roberts  
Council Utilities Regulatory Office  
City of New Orleans  
City Hall, Room 6E07  
1300 Perdido Street  
New Orleans, LA  70112

Andrew Tuozzolo  
CM Moreno Chief of Staff  
1300 Perdido Street, Rm 2W40  
New Orleans, LA  70112

Paul Harang  
Interim Chief of Staff  
New Orleans City Council  
City Hall, Room 1E06  
1300 Perdido Street  
New Orleans, LA  70112

Suni LeBeouf  
City Attorney Office  
City Hall, Room 5th Floor  
1300 Perdido Street  
New Orleans, LA  70112

Norman White  
Department of Finance  
City Hall – Room 3E06  
1300 Perdido Street  
New Orleans, LA  70112

Jonathan M. Rhodes  
Director of Utilities, Mayor’s Office  
City Hall-Room 2E04  
1300 Perdido Street  
New Orleans, LA 70012

Hon. Maria Auzenne  
1615 Poydras Street, Suite 900  
New Orleans, Louisiana 70112

Clinton A. Vince, Esq.  
Presley R. Reed, Jr., Esq.  
Emma F. Hand, Esq.  
Adriana Velez-Leon  
Dee McGill  
Dentons US LLP  
1900 K Street NW  
Washington, DC  20006

Basile J. Uddo  
J.A. “Jay” Beatmann, Jr.  
c/o Dentons US LLP  
650 Poydras Street, Suite 2850  
New Orleans, LA  70130
New Orleans, Louisiana, this 16th day of June 2021.

________________________________________
Brian L. Guillot
1. **What is MISO?**
The Midcontinent Independent System Operator is a not-for-profit Regional Transmission Organization. MISO ensures reliable and least-cost delivery of electricity to 15 U.S. states and Manitoba, Canada. We manage 200,000 megawatts of power-generating resources for our members. We also manage 65,000 miles of high-voltage transmission lines. The transmission lines deliver power to utility companies who then deliver that power to their customers.

2. **What steps does MISO use to manage system demand in tight situations?**
MISO operates under a set of carefully designed operating procedures that guide system operations during well-defined system conditions. These procedures allow us to adjust quickly 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. Our Emergency Operating Procedures guide operator actions when an event impacts reliability.

MISO operating conditions used to manage system demand include:
- **Cold/Hot Weather Alert** - provides situational awareness for MISO members as the Regional Transmission Operator works to ensure all necessary resources are available to meet energy demands.
- **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.
- **Emergency Operating Procedures** – escalate 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 Maximum Generation Events due to a shortage of capacity resources. Maximum Generation emergency procedures allow MISO greater flexibility to ensure system reliability. Among other steps, MISO coordinates available generation and transmission lines. We may make power purchases from neighboring systems. We also may activate demand-response or load-modifying resources (financial arrangements with organizations that can conserve energy), depending on level of emergency. In the most extreme situation, MISO would be able to coordinate controlled blackouts to maintain reliability of the bulk electric system – a limit negative impacts to the larger electric system that serves our region.

3. **What actions may MISO take to ensure reliability?**
MISO follows established procedures during emergency operations. It works with member utilities and neighboring grid operators to maintain reliability.

4. **What is the bulk electric system – and how is it different from local power lines?**
The bulk electric system is the backbone of the electric-delivery system. It is the high-voltage transmission lines that move power from generation sources (power plants) to substations.
Power is then taken from the substation to the smaller distribution lines serving local neighborhoods. Energy flowing across the bulk electric system must remain in constant balance to maintain reliability and avoid large-scale blackouts.

5. **How does MISO predict how much electricity will be needed by its members’ customers?**

MISO uses sophisticated computer models to forecast and schedule power resources daily, and in real-time as conditions change. Forecasting load helps MISO meet the energy needs of the system. MISO’s load forecast horizon spans the next seven days and includes temperature, cloud cover, humidity, precipitation, other weather conditions and historic usage data, among other factors, to determine needed electricity supplies. Sudden or unpredicted changes in the weather pattern can impact the load forecast. A single degree difference on a hot summer afternoon can increase energy consumption by approximately 1,800 megawatts or more, or roughly the amount of power needed to serve a half-million people.

6. **Does the need for emergency operations mean we need to build more power plants?**

No. Under typical conditions, our region has ample electric supply. MISO uses many different energy resources across a large footprint to serve its load. Specific conditions, generally during extreme heat or cold, may cause emergency operating conditions that include requests for public conservation. MISO plans for these situations and if necessary, takes steps to protect the bulk electric system.

7. **Does Emergency Operations include a public appeal to conserve electricity?**

In some extreme situations, MISO may direct member utilities to issue public electricity conservation appeals. MISO operators communicate this direction directly to local utilities, who then communicate to their customers. Simple conservation measures can allow customers to help keep the lights on and avoid blackouts. Conservation appeals are part of MISO’s emergency operating procedures that help protect the grid. The procedures also maintain the reliability of the bulk electric system. Specific reasons for a public appeal are usually due to a combination of things, including extreme heat or cold, unplanned generation outages, and/or unplanned transmission line outages.

8. **In a public appeal, why should I conserve power when I pay an electric bill to be comfortable?**

In an extreme situation, everyone can do a little to help keep the lights on. We encourage customers to follow their electric company’s tips on conserving electricity. A few simple actions can help reduce demand on energy resources during public appeal situations. These include delaying a clothes-washing/drying cycle, or moving the thermostat up or down a few degrees. Conserving power can also help lower your power bills by decreasing your usage.

9. **Who makes the decision to issue a public appeal?**

MISO makes that decision. We manage the reliability of the grid across our footprint and follow emergency procedures established by federal regulations.

10. **How often have public appeals been used by MISO?**
MISO directed public appeals in January and September of 2018. These were only in the south region of our territory. In both cases, two conditions changed from what operators planned for, causing the need for conservation. They were:

- Extreme temperatures created more demand for electricity by customers.
- Unexpected generation outages reduced available power supply.

MISO provided the needed power by following its prescribed emergency operating procedures, which included a public appeal for conservation.

###
BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: ENTERGY NEW ORLEANS, LLC )
LOAD SHED PROTOCOLS AND ALL )
EVENTS AND DECISIONS RELATED )
TO THE FEBRUARY 2021 WINTER )
STORM URI EVENT )

DOCKET NO. UD-21-01

AFFIDAVIT OF MICHAEL J. GOIN

STATE OF TEXAS
COUNTY OF MONTGOMERY

NOW BEFORE ME, the undersigned authority, personally came and appeared,

MICHAEL J. GOIN, who after being duly sworn by me, did depose and say:

1. I am an adult of the full age of majority and competent to testify before the Council of the City of New Orleans (the “Council”) on behalf of Entergy New Orleans, LLC (“ENO” or the “Company”). The statements made herein are based on my personal knowledge, experience, and recollection.

2. I am employed by Entergy Services, LLC (“ESL”), as Director, Local Balancing Authority for System Planning and Operations (“SPO”). I earned a Bachelor of Electrical Engineering degree and a Master of Science in Management (“MSM”) degree from the Georgia Institute of Technology. I have been employed by ESL since 1996. During my career, I have held numerous positions of increasing responsibility in financial planning and analysis, forecasting, accounting, strategic planning, and power marketing. I assumed my current position in August 2020.

---

1 ESL is a service company to the Entergy Operating Companies ("EOCs" or the "Companies"), which are Entergy Arkansas, LLC; Entergy Louisiana, LLC ("ELL"); Entergy Mississippi, LLC; ENO; and Entergy Texas, Inc.
3. As Director, Local Balancing Authority for SPO, I am responsible for providing direction and leadership related to Entergy’s Local Balancing Authority (“LBA”) function. This function consists of three primary areas: Real Time Operations, Policy and Training, and Meter Data Management Agent/Meter Data Quality (“MDMA/MDQ”). During Winter Storm Uri in February 2021, I provided oversight for the Real Time Operations team that implemented the system load shed directive.

4. ENO’s load is located entirely within the transmission-constrained Downstream of Gypsy (“DSG”) load pocket (which itself is located entirely within the Amite South load pocket). Furthermore, the Company’s service area is at the eastern geographic boundary of DSG and surrounded by water on three sides, which means that ENO relies heavily on high voltage transmission lines to import power from west to east.

5. The protection of the bulk electric system is paramount during a load shed event. This is especially true in New Orleans, which, again, is extremely dependent on the transmission grid for operational reliability.

6. In the Energy Policy Act of 2005, the United States Congress authorized the Federal Energy Regulatory Commission (“FERC”) to approve mandatory, enforceable reliability standards for users, owners, and operators of the bulk power system. On July 20, 2006, and pursuant to Section 215 of the Federal Power Act, the FERC certified the North American Electric Reliability Corporation (“NERC”) as the Electric Reliability Organization in the United States. To achieve its mission of improving reliability and security of the bulk power system, NERC continually develops, updates, and enforces reliability standards; monitors the system; assesses future adequacy of the system; audits owners, operators, and users of the system for preparedness; and educates and trains industry personnel.
7. Coordinating reliability in the EOCs’ service territories during Winter Storm Uri in February 2021 was the responsibility of the Midcontinent Independent System Operator (“MISO”).

8. MISO is an independent, not-for-profit organization that acts as a Regional Transmission Organization (“RTO”) in 15 states in the United States. MISO exercises functional control over transmission assets of the EOCs, applies and implements NERC reliability standards, and oversees the reliability plans of all of its members, including ENO, to ensure that system reliability is maintained. ENO is located within the MISO South region, which is a region that consists of Arkansas, Mississippi, Louisiana, and Texas.

9. Since the EOCs joined MISO in 2013, MISO has performed as the Balancing Authority (“BA”), meaning that MISO maintains the balance between generation and load. The EOCs in New Orleans, Louisiana, and Texas now compose an Entergy LBA. LBAs work with MISO to maintain system balance and compliance with NERC reliability standards. Each LBA has defined electrical metered boundaries; an LBA’s area consists of defined transmission system ties that are metered in order to monitor the power flow in/out with adjacent LBAs and BAs. Generation and metered load are also defined and monitored. During normal operations, the Entergy LBAs’ Real Time Operations personnel monitor and validate generation, load, and interchange metering in real-time. And the Entergy LBAs support and implement directives from MISO during emergency operations. The Entergy LBAs are all are operated by the same personnel who work at SPO.

10. The protection of the bulk electric system is a coordinated, multi-jurisdictional effort; and in this regard, the load shed event in connection with Winter Storm Uri in February 2021 was only successful because the EOCs and other utilities in MISO South worked collectively to prevent catastrophic damage and prolonged outages in the region, including in New Orleans.
11. Maintaining reliability is no easy task during any major storm because both the weather system at issue and the electric grid itself are very dynamic and constantly changing. For example, the availability of generation and transmission elements, just like in a hurricane, does not remain constant, causing the need for constant monitoring and adjustments by MISO and load serving entities such as Entergy.

12. Ultimately, when there is not enough generation to serve system load, or if the system is overly constrained, MISO is required by NERC to take action to protect the grid, or bulk electric system.

13. During a “Max Gen Event (Step 5),” MISO follows its emergency procedures and directs load curtailment as a last resort. Curtailment means the intentional interruption of service to utility customers, sometimes referred to as “load shed.”

14. Load shed has the effect of reducing the demand/stress placed on the grid, which, if not reduced, could result in significant damage to the electric grid, potentially causing widespread, extended outages. Because catastrophic damage to the grid could be imminent under this scenario, Entergy implements the required load shed as quickly as possible after being directed by MISO.

15. The need to shed load generally arises under two system conditions.

16. First, it can be in response to a local transmission emergency, meaning that operating conditions in a specific location on the grid require curtailment of load to prevent significant damage.

17. Second, a load shed event can be a response to a system-level transmission emergency, which means that curtailment across the entire MISO system is necessary to prevent instability, uncontrolled separation, or cascading outages.
18. When MISO orders a systemwide curtailment, it directs each LBA to shed a certain amount of megawatts ("MW") of load.

19. The LBA then calculates the amount of load to be shed in specific load pockets.

20. With regard to the amount of load that the EOCs are required to shed, the Entergy LBAs then send instructions to Entergy’s Transmission Control Center ("TCC"), which then relays those instructions to the relevant Distribution Operation Centers ("DOC") in various areas.

21. Winter Storm Uri created a situation that involved numerous alerts and directives that escalated up the MISO Operating Guide and included multiple calls for public conservation, the interruption of Load Modifying Resources ("LMRs"), and the implementation of both types of load shedding described above.

22. In MISO South, there were four load shed events over a two-day period, three of which occurred on February 16, 2021.

23. ENO was impacted by only one load shed event, which occurred on February 16, 2021, at approximately 7:15 pm. The event in question was a system-wide load shed event (Max Generation Event, Step 5 on the MISO Operating Guide), which called for 700 MW of curtailment throughout the MISO South region.

24. The directive from the LBA was for 26MW of load to be shed in New Orleans.

25. A recently-discovered cell reference error in the spreadsheet used to calculate the amount of load to be shed for each load shed program resulted in ENO being directed by the LBA to shed 26 MW rather than the 23 MW that it should have been directed to shed.

26. Winter Storm Uri impacted New Orleans far less than other regions. These relatively minimum impacts were not the result of mere coincidence, but rather the result of planning and proactive measures taken in advance of the storm, as well as quick action taken in rapidly changing
circumstances during a multi-day event the likes of which had not been experienced in at least 20 years.

27. Even before the formation of the weather system, the Companies were beginning their pre-storm planning, which reduced the potential impact on ENO’s customers.

28. To begin, the Companies started a constant communication loop with MISO beginning on February 12, 2021.

29. In these meetings, key leadership reviewed MISO prospective load forecasts, load forecast accuracies of the previous 24 hours, forecasted sufficiency, generation availability, gas supply issues, and discussed strategies to maximize reliability.

30. These meetings helped to improve communication and information sharing between the Companies and MISO, which was vital to navigate the dynamic and challenging operating environment created by Winter Storm Uri.

31. The Companies also began a series of pre-storm activities focused on a strategy to maximize available generation. This strategy proved vital.

32. The Companies took a number of proactive steps to make more generation available in MISO South. The EOCs delayed multiple planned outages related to several generators, namely River Bend, Lake Charles Power Station, Gerald Andrus, Baxter Wilson 1, and White Bluff 1. The Companies returned units from planned outages where feasible and removed units from mothballed/deactivated status in order to maximize available generation. The Companies also optimized generators with longer start-up times in order to ensure they would be available if needed for reliability.
33. The Companies also sought environmental waivers ahead of time in order to ensure that
generation could continue to provide reliability despite being temporarily out of environmental
compliance.

34. Together, these actions added an additional 2,825 MW of available generation to the grid and
helped stabilize it during the load shed event.

35. Had the Companies not been prepared for the winter storm, and had they not taken the pre-
storm precautions described above, ENO would have experienced additional load shedding for
potentially longer durations. In this instance, every MW of additional generation amounted to
less load being shed in New Orleans.

36. Without this additional generation, additional system-wide events could have been
experienced, resulting in more frequent outages; and with respect to the system-wide load shed
event on February 16, the LBA would have requested 116 MW to be curtailed in New Orleans,
likely for a longer duration.

37. It should also be noted that these activities came at a significant cost, most of which is not
borne by ENO. For example, the cost of delaying a refueling outage at River Bend alone was
$5 million.

38. ELL took action to ensure gas supply to its legacy units in Amite South (which includes New
Orleans) because of significant concerns regarding gas shortages in that area. Those efforts
paid dividends in the form of an order from the Department of Natural Resources that made
more natural gas available to produce electricity under constrained supply conditions. This
benefited the load pocket where New Orleans is located by ensuring a steady gas supply to
generators that ENO depended on for reliability.
39. The above and foregoing is my sworn testimony in this Council proceeding. My statements are true and correct and based on my personal knowledge, except as to matters and things, if any, stated on information and belief, and, as to those matters and things, I verily believe them to be true and correct.

[SIGNATURE ON FOLLOWING PAGE]
Michael J. Goin

SWORN TO AND SUBSCRIBED BEFORE ME,
THIS 16th DAY OF JUNE, 2021.

NOTARY PUBLIC

My commission expires: 08/05/2023

BONNY DAWSON
Notary Public, State of Texas
Comm. Expires 08-05-2023
Notary ID 130321800

9
BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: ENTERGY NEW ORLEANS, LLC
LOAD SHED PROTOCOLS AND ALL EVENTS AND DECISIONS RELATED TO THE FEBRUARY 2021 WINTER STORM URI EVENT

DOCKET NO. UD-21-01

AFFIDAVIT OF JOHN W. HAWKINS, JR.

STATE OF LOUISIANA
PARISH OF EAST BATON ROUGE

NOW BEFORE ME, the undersigned authority, personally came and appeared, JOHN W. HAWKINS, JR., who after being duly sworn by me, did depose and say:

1. I am an adult of the full age of majority and competent to testify before the Council of the City of New Orleans (the “Council”) on behalf of Entergy New Orleans, LLC (“ENO” or the “Company”). The statements made herein are based on my personal knowledge, experience, and recollection.

2. I am employed by Entergy Services, LLC (“ESL”),¹ as Vice President, Distribution Operations – Louisiana. I earned a Bachelor of Science degree in Electrical Engineering Technology from Purdue University in 2001 and a Master’s degree in Business Administration from the Kelley School of Business at Indiana University in 2007. I am a registered Professional Engineer in both Texas and Ohio.

¹ ESL is a service company to the Entergy Operating Companies (“EOCs” or the “Companies”), which are Entergy Arkansas, LLC; Entergy Louisiana, LLC (“ELL”); Entergy Mississippi, LLC; ENO; and Entergy Texas, Inc.
3. Prior to joining ESL in May of 2020, I held the position of Senior Director of Distribution Operations in the North and West service territories for Florida Power & Light Company ("FPL") from 2018 to 2020, where I was responsible for planning, directing, and coordinating all Distribution construction, maintenance, trouble restoration, major system improvement, service planning, and engineering activities to ensure the safe, efficient operation of the company’s facilities. From 2017 to 2018, I held the position of General Manager of Reliability for FPL, where I directed, managed, and coordinated enterprise-wide reliability programs in support of Distribution, Transmission, and Substation Operations. Additionally, I helped to develop and support key initiatives that enabled the successful deployment and implementation of programs that addressed the reliability of the Distribution system and the overall Bulk Electric System.

4. As Vice President, Distribution Operations – Louisiana, I am responsible for overseeing all aspects of safely delivering reliable electric service and excellent customer service within the service territories of ENO and ELL. Specific activities for which I am responsible within the Distribution organization include financial planning, forecasting, management, and reporting; establishing service to customers; designing, engineering, constructing, operating, and maintaining the distribution facilities and infrastructure of today and the future; and preparing for and executing response to outage and emergency events ranging from localized to catastrophic. With respect to emergency response and restoration, I am the State Incident Commander for Louisiana under Entergy Corporation’s Utility Incident Response Plan. The operations coordinators, supervisors, managers, and directors in the Louisiana Distribution Operations Center who implemented load-shed directives and instructions during and in
response to Winter Storm Uri work within the Louisiana Distribution Operations Organization that I lead.

5. Coordinating reliability in the EOCs’ service territories during Winter Storm Uri in February 2021 was the responsibility of the Midcontinent Independent System Operator (“MISO”).

6. Maintaining reliability is no easy task during any major storm because both the weather system at issue and the electric grid itself are very dynamic and constantly changing. For example, the availability of generation and transmission elements, just like in a hurricane, does not remain constant, causing the need for constant monitoring and adjustments by MISO and load serving entities such as Entergy.

7. When MISO orders a systemwide curtailment, it directs each Local Balancing Authority (“LBA”) to shed a certain amount of MW of load. The LBA then calculates the amount of load to be shed in specific load pockets. Once it receives a direction to curtail load, the Entergy LBA then send instructions to Entergy’s Transmission Control Center (“TCC”), which then relays those instructions to the relevant Distribution Operation Centers (“DOC”) in various areas. The DOC achieves a load shed or load reduction by using Entergy’s automatic load shed program in which substation feeder circuit breakers are pre-programmed. When the DOC receives instructions from the TCC to curtail load, the DOC then initiates the relevant load-shed program, which interrupts feeders in a quick, automated manner. At the time of a load shed event, Entergy DOCs do not make any decision on which breakers are opened or the order in which they are opened. The purpose of the automated load shed program is to be able to execute the directive in accordance with reliability standards established by the North American Electric Reliability Corporation.
8. ENO’s load is located entirely within the transmission-constrained Downstream of Gypsy (“DSG”) load pocket (which itself is located entirely within the Amite South load pocket). Furthermore, the Company’s service area is at the eastern geographic boundary of DSG and surrounded by water on three sides, which means that ENO relies heavily on high voltage transmission lines to import power from west to east.

9. The Louisiana DOC is located in Baton Rouge and has responsibility for all areas of the state, including New Orleans. In Louisiana, there are 6 load shed programs that correspond to various areas on the transmission system: ENO Amite South, ELL DSG, ELL ASI, EGSL WOTAB, EGSL Baton Rouge, and ELL West Monroe.

10. There were multiple load shed events during this emergency period created by Winter Storm Uri, two of which required constant action by the Louisiana DOC. ENO was impacted by only one of the load shed events, which occurred on February 16, 2021, at approximately 7:15 pm.

11. The directive from the LBA was for 26MW of load to be shed in New Orleans.

12. Although the DOC entered the 26 MW load shed into the system using the ENO Amite South Load Shed Program in compliance with the LBA directive, it was later determined that a total of approximately 105 MW was interrupted in New Orleans.

13. There are three reasons why a disproportionate share of the load shed occurred in New Orleans:

   (1) An undiscovered data entry error caused ENO feeders (instead of ELL feeders) to be shed when the ELL DSG Load Shed Program was executed at the DOC. There was an error in the automated system that executes the load shed that caused the interruption of ENO feeders in the DSG load pocket instead of ELL feeders in DSG. Simply put, it was necessary for load to be shed to protect the integrity of the system, but 60 MW of that load should have been shed on ELL’s feeders in DSG,
not ENO’s. Specifically, the system had an automated load-shed program incorporated into it called “ELL: Downstream of Gypsy,” which incorrectly contained all ENO breakers, resulting in ENO’s customers being shed instead of the ELL customers.

(2) Certain load measurement or telemetry issues resulted in approximately 19 MW being shed because load that already had been shed was not recorded as such by the system. Specifically, breaker load measurement issues on the system also caused unforeseen incremental load shed in New Orleans. These measurement issues are unrelated to the incorrect inclusion of ENO breakers in ELL’s DSG load shed program. Due to improperly functioning breaker load measurement in some breakers, the load shed program did not accurately record that load was actually shed when certain breakers were opened, and thus, the program opened (i.e., shed) more breakers than were needed to meet the required load shed amount. For example, if a breaker were inaccurately reading zero load, but there actually was load present, the load shed program would shed that breaker but not measure load reduction and then move to the next feeder in the sequence in search of the required load reduction.

(3) A cell reference error in the spreadsheet used to calculate the amount of load to be shed for each load shed program resulted in ENO being directed by the LBA to shed 26 MW rather than the 23 MW that it should have been directed to shed.

14. These three issues resulted in ENO shedding an additional 82 MW beyond the 23 MW that the LBA should have directed ENO to shed, resulting in a total of 105 MW being interrupted.
15. Feeder prioritization issues regarding the load shed list also resulted in Southport feeder B0527 (which serves the Sewerage & Water Board’s (“S&WB’s”) water intake facilities) being interrupted.

16. While the entire load shed event on February 16, 2021 had a maximum duration of 1 hour and 40 minutes, many customers were restored prior to that time. In all, approximately 25,000 of ENO’s customers were impacted by the event. In other words, approximately 12% of ENO’s customers experienced service interruptions.

17. In response to Winter Storm Uri, the Company has updated its processes and has implemented immediate measures to address the issues that arose during the load shed event. Other long-term measures are currently being evaluated to potentially supplement the process.

18. While the Company regularly practiced the communications aspects of load shed events and utilized on-the-job table top training sessions to prepare new operators, load shed test simulations were not historically performed. The Company is exploring test simulations for future applications, but such simulations may not provide the most effective option to mitigate the specific issues encountered in the recent winter event. Specifically, test simulations would have been unlikely to uncover the data entry issue that arose during the winter event because they are designed to compare the list of feeders entered into a load shed program against the tripping of those same feeders. Absent specific knowledge that the data entry error existed, it is not a given that the simulation would have identified that the wrong feeders were entered into the ELL:DSG Load Shed Program in the first place. Test simulations could have value for other reasons beyond identifying the specific issues with the recent load shed event, but, in my judgment, the most effective way to ensure that breakers are correctly selected and entered
into the correct load shed program is to implement an improved annual review/approval process.

19. The Company has already adjusted and improved its annual review process and has performed an expedited review of all ENO feeders under the new procedures. The review involved members of ENO Customer Service, ENO Distribution Operations, Distribution Planning, the Louisiana DOC, Transmission, and Information Technology groups.

20. This process produced a revised load shed plan, which is very similar to the plan recommended by the Council’s Advisors. That is, a comprehensive review of all ENO distribution feeders was performed and all feeders with critical customers were identified. The plan now excludes all critical feeders, and there are randomly-generated numbers assigned to the load shed sequence. A manual validation was performed to ensure the breakers listed on the plan were programmed into the correct load shed program.

21. These improvements were designed to eliminate any gaps in the annual review process. Specifically, following a comprehensive, retrospective review of the events, the Company has concluded that there was not enough communication among the various groups within Entergy whose input was needed to create and implement the load shed list, and there was no validation and/or peer check once the load shed lists were programmed into the various load shed programs. These gaps have been addressed.

22. While the S&WB had back-up generation for the feeder that lost service and was not operationally affected, the Company has since met with the S&WB and has eliminated all feeders that S&WB considers critical from the load shed list. Additionally, as stated above, the Company ensured that no critical feeders currently populate the load shed list and
incorporated the improved communications with S&WB regarding their critical loads into the
Company’s improved annual review process.

23. In my judgment, the annual review process is the appropriate venue to review the Company’s
load shed plans and ensure their accuracy, not at the DOC level in real-time. The operators at
the DOC have a short window to execute the load shed programs, or the TCC will be required
to start interrupting entire substations, causing more widespread outages. The automated
process must be initiated quickly, therefore, by DOC supervisors, and operators rely on the
load shed program logic to deliver the directive values that were entered into each program.
There is no dashboard that would allow the operators in the heat of an emergency event to
manually validate the feeders shed by six different load shed programs and compare against
the targeted jurisdictional load in real-time. Moreover, in the recent winter event, once the
load shed program was executed, the focus in the Louisiana DOC quickly shifted to creating
plans to restore the S&WB, and shortly thereafter, to executing the directives to restore all
customers.

24. The Company has also made repairs to the equipment that caused the load measurement issues
at two substations. The Avenue C substation had a communications port issue that prevented
data from being communicated, and the Market Street substation had an intermittent password
mismatch between various equipment.

25. Under normal operations, this equipment would trigger a SCADA alarm in the event of a
malfuction. Once an alarm is triggered, Entergy dispatches a crew to diagnose the issue and
decide whether the issue will impact operational reliability.

26. The Company also performs regular maintenance on its substations, and the equipment related
to load shedding is inspected along with like equipment in the substation on regular intervals.
The maintenance task that would identify this issue is a DC Operation test that is set for 8 year intervals, or a relay calibration task that is set for 12 year intervals.

27. Although there is not an independent inspection program related to equipment involved in load shedding, the Company’s SCADA alarm system coupled with its regular substation inspection program is sufficient, in the Company’s view, to identify issues with load measurement communications equipment. In fact, the communications port issue at Avenue C was identified through a SCADA alarm in 2018, but, because that port was not critical to reliability from an operations perspective, it was not given priority over other repairs.

28. Regarding the password mismatch at Market Street, because there was no equipment failure, discovery of that issue would not have been likely, even with additional and/or preventative maintenance. The problem was further complicated because it was intermittent, functioning correctly with some equipment and malfunctioning with others.

29. A one-time total evaluation of all substation equipment with a load shedding function in New Orleans was recently performed, but going forward it is the Company’s position that a priority list for all equipment associated with load shedding is necessary so that crews can make expedited repairs even if such equipment is not operationally significant.

30. On balance, the Company’s global response to the Winter Storm Uri was reasonable and prudent, with outages in New Orleans lasting a maximum of 1 hour 40 minutes compared to days in other areas.
31. The above and foregoing is my sworn testimony in this Council proceeding. My statements are true and correct and based on my personal knowledge, except as to matters and things, if any, stated on information and belief, and, as to those matters and things, I verily believe them to be true and correct.

[SIGNATURE ON FOLLOWING PAGE]
SWORN TO AND SUBSCRIBED BEFORE ME,  
THIS 10th DAY OF JUNE, 2021.  

______________________________  
NOTARY PUBLIC  

RYAN N. OURS  
STATE BAR NO.: 27735  
STATE OF LOUISIANA  
MY COMMISSION EXPIRES AT DEATH
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.

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/

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.
# MISO 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.

<table>
<thead>
<tr>
<th>Message</th>
<th>Communication Intent</th>
<th>Potential Member/MISO Actions</th>
</tr>
</thead>
</table>
| 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](#).

<table>
<thead>
<tr>
<th>SSL 0 Low - Green</th>
<th>SSL Level 1 Elevated - Yellow</th>
<th>SSL Level 2 High - Orange</th>
<th>SSL Level 3 Severe - Red</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description:</strong> System status is normal. No adverse impacts.</td>
<td><strong>Description:</strong> Short, minor impact to system, can be quickly remedied. <strong>Examples:</strong> Temporary infrastructure issue.</td>
<td><strong>Description:</strong> Longer term, major impact to system, cause unknown. <strong>Examples:</strong> Loss of monitoring data or member infrastructure</td>
<td><strong>Description:</strong> Major impact on MISO’s ability to reliably operate system or market. <strong>Examples:</strong> Hardware failure, bomb threat, sabotage, control center evacuation</td>
</tr>
</tbody>
</table>
Pursuant to the authority granted to me by Louisiana Revised Statutes 30:4, et seq., and particularly La. R.S. 30:572 and 574, I hereby make the following findings, declaration and order.

FINDINGS AND DECLARATION

1. That an extreme cold weather event across the State of Louisiana has caused a potential for natural gas shortages.

2. That Governor John Bel Edwards issued Proclamation Number 21 JBE 2021 on February 11, 2021 declaring that a state of emergency exists statewide in Louisiana as a result of inclement weather which has created emergency conditions that threaten the lives and property of the citizens of Louisiana and that said Proclamation was amended on February 15, 2021 to include the potential for natural gas shortages.

3. That Entergy Louisiana’s (Entergy) “Ninemile 4”, “Ninemile 5”, “Waterford 2”, “Little Gypsy 2” and “Little Gypsy 3” (Legacy Gas Units) provide electricity to those businesses considered a “first priority” under LAC 43:XI.141.C.1.

4. That Entergy has requested an additional 100,000 MMBtu/day of additional gas supply to meet increased electricity demand should the Midcontinent Independent System Operator (MISO) call for max generation of power from its members.

5. That an electricity shortage poses a significant threat to the health and safety of the general population served by the Legacy Gas Units.

6. That EnLink Midstream (EnLink) and Enterprise Products Partners, LP (Enterprise) have subsidiaries which are intrastate natural gas pipeline operators per LAC 43:XI.101 and are subject to the rules and regulations of the Commissioner of Conservation.

7. That said entities are able to provide natural gas service either directly or indirectly through their subsidiaries to one or more of the Legacy Gas Units.
WHEREFORE, pursuant to the above findings, I hereby declare that a curtailment of natural gas deliveries is necessary and in the public’s interest and that the following measures are necessary to ensure adequate electrical service to the communities served by Legacy Gas Units to prevent substantial damage or serious threat to life or safety.

ORDER

It is hereby ordered that should Entergy notify EnLink and Enterprise of a max generation power call from the MISO, pursuant to the Commissioner’s authority under LAC 43:XI.141, EnLink and Enterprise shall implement the following:

1. Curtail deliveries of intrastate natural gas to those customers falling under priorities six through nine as articulated under the Louisiana Administrative Code, Title 43, Part XI, Section 141. Each entity shall be responsible for curtailing 50% of the total amount requested by Entergy or 50,000 MMBtu, whichever is less and shall not curtail plant protection gas as per LAC 43:XI.141.N.

2. Increase natural gas deliveries to the Legacy Gas Units at a rate commensurate with the curtailments required in “1”.

3. Notify the Commissioner immediately if irreparable harm would be caused to customers along the intrastate systems of EnLink or Enterprise as a result of compliance with this ORDER.

Furthermore, Entergy, EnLink and Enterprise shall provide daily updates to the Commissioner of Conservation concerning gas supply needs and the status of curtailments.

This Emergency Administrative Order shall take effect immediately upon execution, and shall expire at midnight on February 20, 2021 or upon notification by Entergy that the MISO max power generation request has ended, whichever comes first.

DONE AND ORDERED on this 15th day of February, 2021 in Baton Rouge, Louisiana.

[Signature]
COMMISSIONER OF CONSERVATION
IMPLEMENTATION OF EMERGENCY GAS SHORTAGE ALLOCATION PLAN
AMENDMENT TO EMERGENCY ORDER PL NO. 2021-001

Pursuant to the authority granted to me by Louisiana Revised Statutes 30:4, et seq., and particularly La. R.S. 30:572 and 574, I hereby amend this ORDER to read as follows:

FINDINGS AND DECLARATION

1. That an extreme cold weather event across the State of Louisiana has caused a potential for natural gas shortages.

2. That Governor John Bel Edwards issued Proclamation Number 21 JBE 2021 on February 11, 2021 declaring that a state of emergency exists statewide in Louisiana as a result of inclement weather which has created emergency conditions that threaten the lives and property of the citizens of Louisiana and that said Proclamation was amended on February 15, 2021 to include the potential for natural gas shortages.

3. That Entergy Louisiana’s (Entergy) “Ninemile 4”, “Ninemile 5”, “Waterford 1”, “Waterford 2”, “Little Gypsy 2” and “Little Gypsy 3” (Legacy Gas Units) provide electricity to those businesses considered a “first priority” under LAC 43:XI.141.C.1.

4. That Entergy has requested up to an additional 180,000 MMBtu/day of additional gas supply to meet increased electricity demand per the Midcontinent Independent System Operator (MISO) call for max generation of power from its members and the request that Entergy return to service the Waterford 1 unit.

5. That an electricity shortage poses a significant threat to the health and safety of the general population served by the Legacy Gas Units.

6. That EnLink Midstream (EnLink) and Enterprise Products Partners, LP (Enterprise) have subsidiaries which are intrastate natural gas pipeline operators per LAC 43:XI.101 and are subject to the rules and regulations of the Commissioner of Conservation.

7. That said entities are able to provide natural gas service either directly or indirectly through their subsidiaries to one or more of the Legacy Gas Units.
WHEREFORE, pursuant to the above findings, I hereby declare that a curtailment of natural gas deliveries is necessary and in the public’s interest and that the following measures are necessary to ensure adequate electrical service to the communities served by Legacy Gas Units to prevent substantial damage or serious threat to life or safety.

ORDER

It is hereby ordered that for the reasons stated above and pursuant to the Commissioner’s authority under LAC 43:XI.141, EnLink and Enterprise shall implement the following:

1. Curtail deliveries of intrastate natural gas to those customers falling under priorities six through nine as articulated under the Louisiana Administrative Code, Title 43, Part XI, Section 141. Each entity shall be responsible for curtailing 50% of the total amount requested by Entergy or 90,000 MMBtu, whichever is less and shall not curtail plant protection gas as per LAC 43:XI.141.N.

2. Increase natural gas deliveries to the Legacy Gas Units at a rate commensurate with the curtailments required in “1”.

3. Notify the Commissioner immediately if irreparable harm would be caused to customers along the intrastate systems of EnLink or Enterprise as a result of compliance with this ORDER.

Furthermore, Entergy, EnLink and Enterprise shall provide daily updates to the Commissioner of Conservation concerning gas supply needs and the status of curtailments.

This Emergency Administrative Order, now identified as Emergency Order PL No. 2021-001A, shall take effect immediately upon execution, and shall expire at midnight on February 20, 2021 or upon notification by Entergy that the MISO max power generation request has ended, whichever comes first.

DONE AND ORDERED on this 16th day of February, 2021 in Baton Rouge, Louisiana.
March 10, 2021
(Via Electronic Mail Only)

Re: Follow-Up on February 16, 2021 New Orleans Winter Storm Load Shed Event

Dear Councilmembers:

This letter is an update to Entergy New Orleans, LLC’s (“ENO’s”) presentation regarding the February 16, 2021 load shed event discussed at the February 23, 2021 Special Joint Meeting.
of the Council’s Public Works Committee and Utilities, Cable, Telecommunications and Technology Committee (“UCTTC”). At that meeting, the Committee asked ENO to provide additional details regarding the load shed event that occurred in New Orleans on the night of February 16, 2021, where approximately 25,000 of ENO’s 206,000 customers (12%) were interrupted for a maximum duration of 1 hour and 40 minutes. Since the UCTTC meeting on February 23, we have continued to gather, verify, and analyze the facts surrounding the load shed event to assure the accuracy and transparency of our communications to the Council and our customers. The Company understands that it is important to keep the Council updated on an expedited basis and commits to doing so as additional relevant information becomes available.

As this Council is aware, the electric grid was in a state of emergency during the recent winter storm; and ENO acted to interrupt customers on an emergency basis as a part of a system-wide load shed event directed by the Midcontinent Independent System Operator (“MISO”) to protect the bulk electric system. New Orleans receives most of the daily power to serve its demand from the transmission lines that make up the bulk electric system, so during times when that system is under stress, ENO and other neighboring electric utilities must act quickly to protect the integrity of the system. ENO’s actions on February 16, along with those of the other Entergy Operating Companies and other entities in MISO-South, prevented catastrophic damage to the system, which would have caused widespread customer outages lasting days or more, instead of hours.

The measures taken to protect the grid from catastrophic damage were successful, and our region withstood the winter system much better than neighboring regional transmission organizations, where customers endured significantly longer outages and other adverse consequences. The local generation that the Council wisely approved to be constructed, as well as the additional measures taken by other Entergy Operating Companies (e.g., canceling planned outages and proactively starting-up generator on reserve shutdown), provided the region with much needed generation. Also, all ENO-owned generating units were operational during the load shed event, which benefited New Orleans by preventing more shedding for potentially longer durations.¹

That said, despite these successes, there were also some challenges, as discussed below; and these challenges present a significant learning and improvement opportunity given that a load shed event of this type had not been executed at Entergy in more than 20 years. Although all of the Entergy Operating Companies, in aggregate, met the system-wide target required to protect the bulk electric system and prevent widespread outages, the Company has since ascertained that more ENO customers were interrupted than otherwise should have been due to the issues highlighted below.

The Company was in the early stages of assessing the facts and outcomes of the system-wide load shed event at the time of the February 23 UCTTC meeting. While the Company was confident in the number of customers that were affected at the time of the UCTTC meeting, it was

¹ The Company notes that Ninemile 6, while not an ENO-owned unit, was on a 4-week planned outage that began in January before the winter storm was forecasted.
still working to understand potential issues with the automated program that executed the load shed and their ramifications, including determining the actual amount of load that was shed during the event. As discussed below, the Company has now determined that due to several issues with the automated load shed process, the total amount of ENO load shed during the event was approximately 105 MW, and approximately 25,000 customers were interrupted.

There were two reasons for the incremental shedding beyond the 26MW load shed directive for ENO’s service area:

1. **Incorrect Breakers Shed (60 MW):** There was an error in the automated system that executes the load shed that caused the interruption of ENO feeders in the Downstream of Gypsy (“DSG”) load pocket instead of Entergy Louisiana, LLC (“ELL”) feeders in DSG. Simply put, it was necessary for load to be shed to protect the integrity of the system, but 60 MW of that load should have been shed on ELL’s feeders in DSG, not ENO’s. Specifically, the system had an automated load-shed program incorporated into it called “ELL: Downstream of Gypsy,” which incorrectly contained all ENO breakers, resulting in ENO customers being shed instead of the ELL customers. This error has been corrected by replacing all ENO breakers under the “ELL:DSG” program with ELL breakers. The corrections have been validated. In addition, we have confirmed that there are no ENO breakers in any of the other Entergy Operating Companies’ load-shed programs. Thus, if a load shed event occurred today, ENO is confident that only breakers from the appropriate specified Entergy Operating Company would be interrupted. ENO will generate relevant reports and provide documentation to the Council’s Advisors to confirm the identification of the error and that it has been addressed. In sum, the incorrect programming resulted in ENO shedding approximately 60 MW of load that should have been shed by ELL.

2. **Breaker Load Measurement (19 MW):** Breaker load measurement issues on the system also caused unforeseen incremental load shed in New Orleans. These measurement issues are unrelated to the incorrect inclusion of ENO breakers in ELL’s DSG load shed program. Due to improperly functioning breaker load measurement in some breakers, the load shed program did not accurately record that load was actually shed when certain breakers were opened, and thus, the program opened (i.e., shed) more breakers than were needed to meet the required load shed amount. For example, if a breaker were inaccurately reading zero load, but there actually was load present, the load shed program would shed that breaker but not measure load reduction and then move to the next feeder in the sequence in search of the required load reduction. Although these measurements and associated data systems are complex and will always have some risk of inaccuracy, Entergy is continuing to analyze them in order to develop short-term action items,\(^2\) while also

---

\(^2\) Two substations have been identified as having load measurement issues. For Avenue C substation (3 feeders), it was discovered that there was a communications port issue that prevented data from being communicated. Repairs are being planned for completion by 3/12/21. The second substation, Market Street (2 feeders), contained a
continuing to analyze long-term solutions to shore up the performance. The breaker load measurement issue accounted for approximately 19 MW of incremental ENO load being shed.

These two issues combined to cause ENO to shed an additional 79 MW beyond the 26 MW directive provided by the Local Balancing Authority, resulting in a total of 105 MW being interrupted. Again, the relevant organizations at Entergy have taken steps to identify the issues that resulted in incremental load shedding and are continuing their work to ensure that they do not reoccur.

The Council also had questions regarding 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.

Once a load shed event involving ENO is called, the Louisiana Distribution Operations Center in Baton Rouge operates the automated load shed programs for various parts of the state, including in New Orleans. Once the automated program is initiated, it rapidly begins shedding breakers included in the load shed plan based upon a directed load shed amount. Regarding the “ENO: Amite South” load shed program, which covered New Orleans, 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. It should be noted, however, that interruptions are intended to be conducted on a rolling basis. Once a feeder is shed, it goes to the back of the rotation. In other words, those breakers interrupted on February 16 as a result of the event will go to the back of the list. The Company also notes that ENO intends to undertake further review of the load shed process to identify additional improvement opportunities and intends to engage the Council Utilities Regulatory Office (“CURO”) and the Advisors for their input.

Another outstanding issue was the interruption of a feeder serving the Sewerage & Water Board’s (“S&WB’s”) water intake facilities. The feeder at issue, Southport feeder B0527, was included in the 2020 load shed plan but has since been removed. The Company is also working to identify any additional feeders serving critical S&WB load that should not be included in the load shed plan. It should be noted, however, that because S&WB load is widely dispersed throughout the City, it would be impractical to prevent all S&WB load from being interrupted during a load situation where there was a mismatch of passwords between various equipment preventing data from being communicated. The password mismatch has been resolved as of 3/2/21.
Members of the New Orleans City Council  
March 10, 2021  
Page 5

shed event. The Company commits to working with the S&WB to identify critical S&WB load and remove those feeders from the load shed plan where feasible. ENO is committed to working through a collaborative approach to ensure that as circumstances change, such changes are captured in the plan.

In closing, we hope that the foregoing information is helpful to the Council. We have already taken corrective action to avoid similar problems in the event of another emergency situation. As always, we will continue to work collaboratively with the Council and its Advisors. The Company understands that the Council has asked for more detailed information relating to the load shed event of February 16. ENO takes this opportunity to provide an important interim update given that it now has more information than was available at the time of the February 23 UCTTC Meeting. The Company is cooperating with the Council’s independent examination of the load shedding event. Moreover, the Company will submit periodic updates to the Council, CURO, and the Council Advisors, reporting on additional progress as relevant information becomes available and/or as requested.

Sincerely,

[signature]

David D. Ellis  
President and CEO

cc: Ms. Erin Spears, CURO  
Mr. Clint Vince, Esq.  
Mr. Joseph Rogers, P.E.  
Ms. Becky Knox  
Mr. Brian Guillot, Esq.
BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: ENTERGY NEW ORLEANS, LLC
LOAD SHED PROTOCOLS AND ALL EVENTS AND DECISIONS RELATED TO THE FEBRUARY 2021 WINTER STORM URI EVENT

DOCKET NO. UD-21-01

EXHIBIT 7

HIGHLY SENSITIVE PROTECTED MATERIAL

INTENTIONALLY OMITTED

JUNE 2021
BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: ENTERGY NEW ORLEANS, LLC
LOAD SHED PROTOCOLS AND ALL
EVENTS AND DECISIONS RELATED
TO THE FEBRUARY 2021 WINTER
STORM URI EVENT

DOCKET NO. UD-21-01

EXHIBIT 8

HIGHLY SENSITIVE
PROTECTED MATERIAL

INTENTIONALLY OMITTED

JUNE 2021
BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

IN RE: ENTERGY NEW ORLEANS, LLC )
LOAD SHED PROTOCOLS AND ALL )
EVENTS AND DECISIONS RELATED ) DOCKET NO. UD-21-01
TO THE FEBRUARY 2021 WINTER )
STORM URI EVENT )

AFFIDAVIT OF LEE SABATINI

STATE OF LOUISIANA
PARISH OF ORLEANS

NOW BEFORE ME, the undersigned authority, personally came and appeared, LEE

SABATINI, who after being duly sworn by me, did depose and say:

1. My name is Lee Sabatini, and I am the Manager of Communications for Entergy New Orleans, LLC (“ENO” or the “Company”) and have held that position since January 1, 2020.

2. Prior to my taking my current position at ENO, I held the position of Communications Specialist with Entergy Louisiana, LLC.

3. I have worked in the fields of Corporate Communications and Public Relations at positions of increasing responsibility, for more than 20 years.

4. I was personally involved in ENO’s communications with local media and the public regarding the events leading up to, and including, the Winter Storm Load Shed Event (the “Event”) that affected New Orleans customers on the evening of February 16, 2021.

5. This was my first time participating in the response to a systemwide load shed event and, on information and belief, Entergy has not experienced a systemwide load shed event for at least 20 years.
6. Prior to and during the Event, ENO issued multiple communications to customers via text, email, phone calls, web posts, and social media.

7. These communications alerted customers about the overall situation, called on customers to conserve energy, and communicated the risk of temporary or periodic service interruptions.

8. On the evening of February 15, 2021, at 5:37 p.m., more than 24 hours before the Event, ENO messaged customers via text message and voice scripts (i.e., phone calls) regarding the need to conserve energy use and warned that it may be necessary to begin temporary outages.

9. The message customers received was the following: “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.”

10. Based on media reports in the days and hours prior to the Event, it is clear that members of the public and the media had a heightened sensitivity to the possibility of customer interruptions given the events transpiring in Texas.

11. Several New Orleans media outlets echoed the Company’s call for conservation and its warning of the possibility of outages in their coverage, including, for example, the following messages from NOLA.com, WGNO, WDSU, and Fox 8:

- NOLA.com, February 15, posting - 3 p.m.: “What is the risk that customers in Louisiana will face similar outages over the next day or so as temperatures dip? The short answer: it's a possibility, and residents should be prepared. Additionally, as power companies have been explaining this week, utilities operating in the south have set up
their grids more to deal with extreme heat and thus are vulnerable to issues caused by rare bouts of extreme cold.”

- WGNO, February 15: “Entergy customers asked to conserve electricity to prevent further outages.”

- WDSU, February 15 - (Mayor’s press conference) noon: “…we're all going to hear from a representative from Entergy New Orleans. That's the next big concern for the city of New Orleans… power outages. Could we and will we lose power here too?”

- Fox 8, February 16, 8 a.m. newscast: “…conserve electricity because the extra use could put a strain on the system. Entergy says its current load forecast is approaching an all time peak.”

- February 16, WDSU, noon newscast: “If the power system is not able to keep up with the demand, then rolling blackouts may occur -- rolling blackouts may occur. [Randi:] Entergy is asking customers to turn down their thermostat, use ceiling fans to circulate air, and cook foods at the lowest possible setting.”

12. The Company’s public messages, combined with the media’s coverage of those messages, provided information to the public well before the Load Shed event occurred and gave customers more than 24 hours to understand the need to conserve usage and to make plans in the event of service interruption.

13. Messages shared on the Company's website and social media requesting customers to conserve energy with the explanation of why, began on February 14, 2021, and continued in the following days leading up to the Event.

14. There were multiple MISO alerts on the morning and evening of February 16, 2021, and at approximately 5:44 p.m., MISO called a Max Gen Event Step 2, followed at 6:43 p.m. with a
MISO directive that the Entergy Operating Companies, among others, begin to curtail customers.

15. By 7:14 p.m., customer curtailments had begun in New Orleans.

16. Immediately after the start of the Event, I communicated with four local media outlets in New Orleans and confirmed for them that ENO was instructed by MISO to curtail its customers.

17. Specifically, I spoke with WDSU at 7:30 p.m., Fox 8 at 7:35 p.m., NOLA.com at 7:49 p.m., WWL at 8:30 p.m. and confirmed for these local media outlets that ENO had been instructed to curtail customers and that outages were occurring as a result.

18. The information provided during my calls with the media included basic information that the media could have used to inform the public.

19. Later that night, at 8:44 p.m., the Company issued a detailed news release stating that there were mandatory rolling outages directed by MISO, and updated customers on social media after load shed was complete.

20. ENO has reviewed communications during Winter Storm Uri with a critical eye and has implemented a new procedure regarding news releases following a MISO directive to shed load.

21. Specifically, were a similar situation to occur today, a streamlined news release would be communicated promptly to the media containing basic information such as: (1) confirming that MISO has issued a directive to curtail load, and (2) identifying the specific jurisdiction where the load shed has occurred.

22. The Company believes that, going forward, this improved process will allow it to provide basic information through a written news release in an expedited manner, to supplement other channels of communication.
23. Based on my years of experience in the field of Corporate Communications and Public Relations, and while acknowledging that, as here, there are often potential process improvements that may come to light after a response to an emergency situation, I believe that our communications prior to and during the Event, taken as a whole and considering all of the exigent circumstances, was reasonable and provided sufficient information to the media and the public to allow them to understand, prior to the event, the risk and possibility of power outages due to the extreme conditions being experienced in the region.

24. The above and foregoing is my sworn testimony in this Council proceeding. My statements are true and correct and based on my personal knowledge, except as to matters and things stated on information and belief, and, as to those matters and things, I believe them to be true and correct.
SWORN TO AND SUBSCRIBED BEFORE ME, 
THIS 6TH DAY OF JUNE, 2021.

Timothy S. Cragin
Notary Public

TIMOTHY S. CRAGIN
NOTARY PUBLIC (La. Bar No. 22313)
Parish of Orleans, State of Louisiana
My Commission is issued for Life
Notary ID # 58749
Response of: Entergy New Orleans, LLC
to the First Set of Data Requests
of Requesting Party: Advisors to the Council
of the City of New Orleans

Question No.: ADVISORS 1-15 Part No.: Addendum: 3

Question:

Please provide all documents in ENO’s possession, custody or control related to how the February 2021 Max Gen Event and the Load Shed event were communicated to customers, the public-at-large, and the news media, including, but not limited to, all protocols, policies, procedures, and practices in place related to such communications and to emergency communications to customers generally.

Response:

Information responsive to this request has been designated as Highly Sensitive Protected Material (“HSPM”) under the terms and provisions of the Official Protective Order adopted pursuant to Council Resolution R-07-432 relative to the disclosure of Protected Material and is being provided in accordance with the same.

Subject to the foregoing general objections, the Company is in the process of collecting any responsive documents that may exist. The Company anticipates producing a supplement to this response (including appropriate objections) within 7 days after an appropriate but expedited legal review.

Please see the highly sensitive attachments identified below:

1. Power Shortfall Communications Plan Updated: August 31, 2020
2. ETR Emergency Outage Response Communications Plan
3. Correspondence between ENO and media contacts, regarding the Load Shed and Max Gen Event

Press releases/Entergy Newsroom posts
2/10
Customers Encouraged to Prepare for Cold Weather, Increased Energy Usage
2/14
Entergy Louisiana Winter Storm Alert
https://www.entergynewsroom.com/article/entergy-louisiana-winter-storm-alert-2-14-21-3-p-m/
Preparing for extreme cold
https://www.entergynewsroom.com/article/preparing-for-extreme-cold/
Entergy System Winter Storm Alert
https://www.entergynewsroom.com/article/entergy-system-winter-storm-alert-2-14-21-4-p-m/

2/15
Entergy Customers Asked to Conserve Electricity
Winter Storm Alert
System winter storm update

2/16
Crews Continuing Assessing Damage, Restoring Power Following Winter Storm
Entergy’s Louisiana Companies Winter Storm Update
https://www.entergynewsroom.com/storm-center/archive/?page=4&tags=
Entergy System Winter Alert
https://www.entergynewsroom.com/article/entergy-system-winter-storm-update-2-16-21-10-30-m/
Entergy Forced to Initiate Power Outages to Customers Across Its Service Area
Entergy Forced to Initiate Power Outages to Customers in Southwest Louisiana
Mandatory Rolling Outages Ended For Now
https://www.entergynewsroom.com/storm-center/article/mandatory-rolling-outages-ended-for-now/

2/17
Entergy’s Louisiana Customers Asked to Conserve Electricity
Entergy’s Louisiana Companies Winter Storm Update
Entergy’s Louisiana Companies Winter Storm Update
https://www.entergynewsroom.com/article/entergy-s-louisiana-companies-winter-storm-update-2-17-21-6-p-m/
Smart thermostats save energy and money
https://www.entergynewsroom.com/article/smart-thermostats-save-energy-money/

2/18
Entergy System Winter Storm Update
Entergy’s Louisiana Utilities Winter Storm Update
https://www.entergynewsroom.com/article/entergy-s-louisiana-utilities-winter-storms-update-2-17-21-3-30-p-m/
How Does Heating and Cooling Your Home Impact Energy Usage

Media Coverage
2/14
Parishes make winter storm preparations
WWL, Feb. 14, 2021

Preparing for extreme cold
Public Now, Feb. 14, 2021
https://www.publicnow.com/view/CC6FBDBE6027EF24B53C9D3DAA5EFD669610DBF9

Entergy on WDSU-NO (NBC) - New Orleans, LA
WDSU News at 5PM Weekend
2/14/2021 5:06:25 PM
we have been on the phone with d.o.t. d as well as energy -- Entergy to make sure that we are all on the same place. we are monitoring the weather and making sure that we have pre-staged any road closures.
emergency declaration as the city the sewage and water board and Entergy prepare for temperatures to drop below freezing. they're urging people to start getting ready.

… and because of this cold weather, Entergy has some advice for you, so you don't get a big bill next month. remember, seal any air leaks, try to conserve your hot water.

it could get much colder in the upcoming days. Entergy has some advice for you so you don't get a big bill next month. make sure you seal any air leaks, conserve your hot water.

open your blinds, your curtains, to let that warm light in. Entergy also says this type of weather could lead to downed limbs and power outages.

Power outages grow as winter weather impacts the area
Fox 8, Feb. 15, 2021
https://www.fox8live.com/2021/02/15/power-outages-grow-winter-weather-impacts-area/

Entergy on freezing weather: We've been preparing for this
WWL TV, Feb. 15, 2021
https://www.wwltv.com/video/news/local/orleans/entergy-on-freezing-weather-weve-been-preparing-for-this/289-22263cc3-c8ec-47da-9a4a-f82ebcf48cfe

What is a rolling blackout and why is it needed?
NOLA.com, Feb. 15, 2021
Transformer explodes in Mid-City, causes power outages during Louisiana winter storm
NOLA.com, Feb. 15, 2021

Entergy asks customers to reduce electricity usage between 5 p.m. and 9 p.m. to avoid blackouts
NOLA.com, Feb. 15, 2021
https://www.nola.com/news/weather/article_2a86c1a8-6fdd-11eb-bafd-23a2cdc1ad54.html

Entergy, Cleco customers asked to conserve electricity
Fox 8, Feb. 15, 2021

Entergy asking customers to use less power due to critical shortage caused by freeze
WWL, Feb. 15, 2021

Entergy customer asked to conserve electricity to prevent further outages
WGNO, Feb. 15, 2021

New Orleans warns of likely water main breaks, city-wide boil water advisory
WWL, Feb. 15, 2021

Texans warned of lengthy power outages as temperatures plunge across southern Plains
CBS News, Feb. 15, 2021

Thousands without power as winter storm moves through Louisiana
WWL, Feb. 15, 2021
https://www.wwltv.com/article/weather/severe-weather/power-outages-latest-updates-winter-storm-louisiana/289-c55bfe6f-b4fd-41e5-835d-58873d70c671
are seeing outside is power outages. we have john from Entergy to give you advice on what you can do if the power is out and prevent yourself from having a big bill.

emergency declaration is in place, right now. both Entergy and the sewerage and waterboard crews are on standby by this morning, and parish leaders say they are prepared.

encouraged to take precautions. Entergy says it's on standby in case the weather causes power outages. remember if the power does go out, restoration can take time

already seeing ice. it is expected to get colder. Entergy has some advice for you. remember to seal any of your air leaks, conserve hot water, keep doors and windows closed.

electricity in the next few days. Entergy customers are encouraged to try to conserve energy during this time. so here's a few things that could help lower your central
this point, and we're all going to hear from a representative from Entergy New Orleans. That's the next big concern for the city of New Orleans. Power outages will we lose power? How long will it be out for what?

New Orleans also joined by Ms. Sandra Diggs Miller, our vice president of service for Entergy New Orleans. Thank you all for being here and thank you for your tireless efforts.

Winter weather moves across the area in New Orleans, the city is working with Entergy and the sewage and water board to make sure that proper precautions are in place. Good afternoon everyone.

Alerts to try to conserve electricity. Entergy says the frigid temperatures are creating a shortage of power and the ice leading to fall trees and are felled trees and limbs has also

Time. The sewerage board is working closely with Entergy... As power outages could also lead to a drop in pressure. To help ease the water system, the sewerage and water board urges people to run just a
alerts asking customers to conserve electricity. Entergy says the frigid temperatures are creating a shortage of power. The ice is an issue as well leading to falling trees and

outages tonight still a bit concern. There are thousands of Entergy customers tonight without power. That's right. Many of the customers were in our viewing area.

2/16
Rolling outages hit New Orleans region
WWL radio, Feb. 16, 2021

What are rolling blackouts?
NOLA.com, Feb. 16, 2021

Entergy initiates power outages due to strain on power grid
Fox, Feb. 16, 2021
https://www.fox8live.com/2021/02/16/entergy-initiates-power-outages-across-swla-due-strain-power-grid/

Power restoration underway throughout Louisiana
WWL Radio, Feb. 16, 2021
https://www.fox8live.com/2021/02/16/entergy-initiates-power-outages-across-swla-due-strain-power-grid/

Power mostly restored across Southeast, LA after winter storm
WDSU, Feb. 16, 2021
https://www.wdsu.com/article/power-outage-updates-from-entergy-cleco-1613475614/35518071

Entergy crews continue to assess damage and restore power following winter storm
WGNO, Feb. 16, 2021
Power outages will persist as winter weather impacts area
Fox 8, Feb. 16, 2021
https://www.msn.com/en-us/weather/topstories/power-outages-will-persist-as-winter-weather-impacts-the-area/ar-BB1dHzUH

Entergy on WVUE-NO (FOX) - New Orleans, LA
FOX 8 News
2/16/2021 4:02:45 AM
state line. thousands are without power tonight... but both Entergy and Cleco urge customers who do have power to conserve electricity because the extra use could put a strain on the

Entergy on WDSU-NO (NBC) - New Orleans, LA
Today
2/16/2021 8:09:57 AM
Entergy is asking customers to turn down their thermostat, use ceiling fans to circulate air, and cook foods at the lowest possible setting.

Entergy Louisiana on WVUE-NO (FOX) - New Orleans, LA
FOX 8 Morning Edition at 8am
2/16/2021 8:04:46 AM
electricity because the extra use could put a strain on the system. Entergy says its current load forecast is approaching an

Entergy on WDSU-NO (NBC) - New Orleans, LA
Today
2/16/2021 7:15:22 AM
charter-spectrum 136/185, and randi: right now at 7:15, we are seeing entergy outages increasing, about 54,000 in the dark and closer to home, about 1100 in the dark in tangible how.

Entergy on WDSU-NO (NBC) - New Orleans, LA
WDSU News At Noon
2/16/2021 12:35:01 PM
then rolling blackouts may occur -- rolling blackouts may occur.
randi: Entergy is asking customers to turn down their thermostat, use ceiling fans to circulate air, and cook foods at the lowest possible setting.

Entergy on WDSU-NO (NBC) - New Orleans, LA
WDSU News at 10PM
2/16/2021 10:02:17 PM
looked around and it seemed to be everyone on the street. shay: both Entergy and Cleco are asking customers in New Orleans and the Northshore to conserve energy as much as possible. to try and prevent the rolling blackouts. Cleco is governed by the same agency is Entergy and for about an hour and a half some customers experienced outages that lasted about an hour a cleco spokesperson says she

Entergy on WWL-NO (CBS) - New Orleans, LA
Eyewitness News at 10
2/16/2021 10:02:33 PM
Entergy and Cleco were forced to shed power tonight. here's a look at the Entergy outage map tonight. you can see there are over, and that power is being restored. Entergy says that they were doing this across four states as a way to prevent more extensive prolonged power outages and this was something

Entergy on WVUE-NO (FOX) - New Orleans, LA
FOX 8 News at 9pm
2/16/2021 9:00:42 PM
outages are scattered throughout New Orleans. They say there's been a mandatory request to Entergy New Orleans to conserve per
the request co "midcontinent independent "miso"

2/17
Entergy asking customers to lower power use Wednesday to avoid rolling blackouts
WWL, Feb. 17, 2021

Conserve power Wednesday night to prevent extensive outages, Entergy says
Fox, Feb. 17, 2021
https://www.fox8live.com/2021/02/17/conserve-power-wednesday-night-prevent-extensive-outages-entergy-says/

Energy asking customer to conserve power to prevent rolling blackouts
WDSU, Feb. 17, 2021
https://www.wdsu.com/article/rolling-blackouts-end-southeast-la-power-mostly-restored/35533270

Conserve power Wednesday night to prevent extensive outages, Entergy says
Fox, Feb. 17, 2021
https://www.fox8live.com/2021/02/17/conserve-power-wednesday-night-prevent-extensive-outages-entergy-says/

Entergy and Cleco announce the start of rolling blackouts – then back off
WGNO, Feb. 17, 2021

Rotating power outages: Why the lights went out in New Orleans, on the Northshore
WWL, Feb. 17, 2021

Entergy’s rolling blackouts cut power to drinking water pumps, SWB, confirms
WWL, Feb. 17, 2021

Entergy on WVUE-NO (FOX) - New Orleans, LA
FOX 8 News at 5pm
2/17/2021 5:05:54 PM
Entergy issued an apology for any inconvenience to conserve energy to
avoid outages. they also say

Entergy vice president John Hawkins says neighborhood selected for rolling blackouts were done so based on equipment and not customer.

This is a live look at the Entergy outage map. meantime, the public service commission is investigating the decision to cut off electricity to homes across our state during

hammer broke that story this afternoon and begins our coverage tonight when Entergy cut power to customers in the Carrollton riverbend areas during Tuesday night's freeze, the sewage and water board was

Entergy is asking residents to continue to conserve, to avoid more rolling blackouts. some residents say they were caught off guard by those night... and

cut to a picture of customers 

the water >> utilities executive director gassan corban even called Entergy New Orleans CEO David Ellis to complain >> it has been transitioned over to the critical task and it for us it
and not know when it will come back on. Jennifer: Entergy New Orleans only got a 30 minute heads up that they needed to start stripping power. hear from the vice president,

but Entergy New Orleans John Hawkins says you're always trying to balance your load and supply.

moment. travers: here is a look at the Entergy outage map area about 38,000 customers without power across the state. that is a far cry from yesterday.

carrollton water treatment plant. entergy said it never should have had those feeder lines on its list for rolling blackouts >>. those fears shouldn't have been

no serious injuries were reported. there are over 52,000 entergy customers in the dark. many of you tonight have been abiding by the call from all utility companies in our viewing
Emergency declaration because of the weather impacts. Cleco, Entergy and Washington St. Tammany Co-op say it is customers to power where the request comes as for energy is exceeding the availability because of the extreme cold and weather conditions. The request is due to the weather impacts.

Social media (Facebook and Twitter)

2/14
https://www.facebook.com/EntergyNOLA/photos/a.351000798304817/4975993239138860/
https://twitter.com/MISO_energy/status/1360953918302412802
https://www.facebook.com/entergy/photos/a.404402996290446/4008936592503717/
https://www.facebook.com/entergy/photos/a.404402996290446/4008402389223804/
https://twitter.com/MISO_energy/status/1360953918302412802/photo/1

2/15
https://www.facebook.com/EntergyNOLA/photos/a.351000798304817/4979515668786617/
https://www.facebook.com/EntergyNOLA/photos/a.351000798304817/4981038288634355/
https://www.facebook.com/entergy/photos/a.404402996290446/4011745065556203
https://twitter.com/EntergyNOLA/status/1361349501416574980
https://twitter.com/EntergyNOLA/status/1361385797397683201
https://www.facebook.com/EntergyNOLA/photos/a.351000798304817/4980285088709675/
https://www.facebook.com/entergy/photos/a.404402996290446/4012182305512479/
https://twitter.com/EntergyNOLA/status/1361414481528508416/photo/1
https://www.facebook.com/EntergyNOLA/photos/a.351000798304817/4980425538695630/
https://twitter.com/Entergy/status/1361355846761009153
https://twitter.com/EntergyNOLA/status/1361426670377459715
https://www.facebook.com/EntergyNOLA/photos/a.351000798304817/4980569472014570/
https://www.facebook.com/EntergyNOLA/photos/4976314509106733
https://www.facebook.com/EntergyNOLA/photos/4979956445409206
https://www.facebook.com/EntergyNOLA/photos/4979515668786617
https://twitter.com/EntergyNOLA/status/1361441059885240322
https://twitter.com/Entergy/status/1361426670377459715
https://twitter.com/Entergy/status/1361426568816570374/photo/1

https://twitter.com/Entergy/status/1361463512976003072
https://www.facebook.com/EntergyNOLA/photos/a.351000798304817/4980848288653355/
On the evening of February 16, 2021, Lee Sabatini spoke with the media and advised that ENO was instructed by MISO to shed load to its customers. Following the calls, Ms. Sabatini emailed an official press release regarding the Load Shed Event. The following list includes those members of the media that Ms. Sabatini spoke with:

Rhi Ryals - WDSU
Mykal Vincent, Fox 8
In addition, see the Highly Sensitive Protected Material attachments that summarize communications with ENO’s residential and business customers.

**ADDENDUM 2:**

In addition, see the Highly Sensitive Protected Material ENOL Message Summary attachment that has been updated to include date and time stamps.

**ADDENDUM 3:**

On the evening of February 16, 2021, Lee Sabatini spoke with the media and advised that ENO was instructed by MISO to shed load to its customers. Following the calls, Ms. Sabatini emailed an official press release regarding the Load Shed Event. The following list includes those members of the media that Ms. Sabatini spoke with:

- Rhi Ryals – WDSU, 7:30 p.m.
- Mykal Vincent, Fox 8, 7:35 p.m.
- Kaitlyn Umholz, NOLA.com, 7:49 p.m.
- Paul Dudley, WWL, 8:30 p.m.
- Shay O’Connor, WDSU, 8:55 p.m.
Response of: Entergy New Orleans, LLC
to the First Set of Data Requests
of Requesting Party: Advisors to the Council
of the City of New Orleans

Question No.: ADVISORS 1-19  Part No.:  Addendum:

Question:

Please provide a chronology of events from the first MISO communication of statuses or warnings that lead to its eventual ordering the Load Shed Event through the time of the restoration of service to all customers affected by the Event. Please include readable maps showing the progression of the chronology through the affected areas.

Response:

Subject to the foregoing general objections, the Company responds as follows and will supplement as additional information becomes available.

The chronology of events from the first MISO communication of statuses or warnings that led to its eventual ordering of the Load Shed Event through the time of restoration of service to all customers affected by the Event is set forth below:

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.
18:48 – Lead Operator in Entergy Transmission Control Center North (“TCC-N”) in Little Rock, Arkansas verifies load shed directive with MISO RC.

18:49 – TCC sends notice picked up from MISO’s MCS as MISO declares Max Gen emergency event step 5 from 2/16/21 at 19:40 EST until 2/17/21 01:00 EST due to forced generation outage and higher than expected load forecast.

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

18:52 – LBA issues TCC load shed instruction and allocations by email and LBA issues system-wide ELRAL 2 effective 2/16/21 18:35 CPT to 2/17/21 01:00 CPT.

LBA load shed instruction was for a total of 448MW.
- LA DOC: 222 MW of firm load as follows:
  - 69 MW using EGSL: Louisiana Load Shed Program
  - 55 MW using ELL: Down Stream of Gypsy Load Shed Program
  - 38 MW using ELL: Amite South Load Shed Program
  - 23 MW using ELL: West Monroe Load Shed Program
  - 26 MW using ENOI: Amite South Load Shed Program
  - 11 MW using EGSL: Lafayette Load Shed Program
- Mississippi DOC: 57 MW of firm load using EMI: Jackson Load Shed Program
- Arkansas DOC: 89 MW of firm load using EAI Load Shed Plan
- Texas DOC: 80 MW of firm load using ETX: Texas Load Shed Program

18:56 - 19:07 - TCC notifies all DOCs of load shed directive
- 18:56 – TCC-N to TX DOC
- 19:00 – Entergy Transmission Control Center South (“TCC-S”) in Jackson, Mississippi to MS DOC
- 19:02 – TCC-N to LA DOC for NLA Load
- 19:07 – TCC-N to AR DOC
- 19:07 – TCC-S to LA DOC for SLA Load

19:12 – Transmission Control Center issues directive for Louisiana Distribution Operations Center (DOC) to drop the following load: 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 are used to 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; the following steps are used to execute the load shed:
- Select LoadShed under the EMP Application menu
- Select ENO Amite South 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 open automatically in the order documented in the Load Shed Program.
Question No.: ADVISORS 1-19

19:16 – ENO Amite South Load Shed Complete

19:17 – ELL Downstream of Gypsy Load Shed Complete

19:29 – TCC reports to LBA load shed execution complete as of 19:25

19:37 – LBA issued system-wide ELRAL 3 effective 2/16/21 1950 until 20:20

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

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

19:58 - 20:00 – TCC notifies DOCs that up to 193 MW can be restored as allocated by the LBA.
   19:58   TCC-N notifies TX DOC to restore 35MW in TX
   19:59 TCC-N notifies LA DOC to restore 23MW in NLA
   20:00 TCC-S notifies LA DOC to restore 71MW in SLA
   Released 30 of 69 MW in EGSL: Louisiana Load Shed Program
   Released 5 of 55 MW using ELL: Down Stream of Gypsy Load Shed Program
   Released 16 of 38 MW using ELL: Amite South Load Shed Program
   Released 23 of 23 MW using ELL: West Monroe Load Shed Program
   Released 10 of 11 MW using ENO: Amite South Load Shed Program
   20:00 TCC-N notifies AR DOC to restore 38MW in AR
   20:00 TCC-S notifies MS DOC to restore 25MW in MS

20:31 – Southport B0527 (S&WBNO) Breaker restored

20:33 – Napoleon 1911 Breaker restored

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

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

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

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