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Timothy S. Cragin Assistant General Counsel Legal Services - Regulatory

July 24, 2019

By Hand Delivery

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

Re: Monthly Progress Report on Entergy New Orleans, LLC's Collaboration with Sewerage & Water Board of New Orleans re: Reliability of Electric Service, Submitted Pursuant to Council Resolution R-19-78

Dear Ms. Johnson:

Please find enclosed for your further handling an original and three copies of Entergy New Orleans, LLC's ("ENO") July 2019 Monthly Progress Report on Its Collaboration with the Sewerage and Water Board of New Orleans to Improve Reliability of Electric Service and Expedite a Long-Term Solution, which is submitted pursuant to Council Resolution R-19-78. Please file an original and two copies into the record and return a date-stamped copy to our courier.

Thank you for your assistance with this matter.

Sincerely

Timothy S. Cragin

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**Enclosures** 

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cc (via electronic mail): Council President Helena Moreno

Council Vice President Jason Rogers Williams

Councilmember Joseph I. Giarrusso, III

Councilmember Jay H. Banks

Councilmember Kristin Gisleson Palmer

Councilmember Jared C. Brossett Councilmember Cyndi Nguyen

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## Entergy New Orleans, LLC's July 2019 Monthly Progress Report on Its Collaboration with the Sewerage and Water Board of New Orleans To Improve Reliability of Electric Service and Expedite a Long-Term Solution

Pursuant to Council Resolution R-19-78, Entergy New Orleans, LLC ("ENO" or the "Company") submits this monthly progress report regarding its collaboration with the Sewerage and Water Board of New Orleans ("SWBNO") to develop solutions to help ensure the reliability of electric service to SWBNO facilities, and to facilitate the transition of SWBNO to ENO as the primary source of reliable and economic power. As previously reported to the Council, the Company has already completed short-term mitigation measures to improve reliability to SWBNO until a long-term solution is in place, which have resulted in tangible results as discussed below. The Company has also identified certain improvements previously classified as mid-term that can be acted upon now to further improve reliability in the near-term as the collaboration with SWBNO continues, which improvements have now been completed. Importantly, the remaining mid-term options under consideration do not represent a long-term solution, and further engineering analysis is necessary to identify what, if any, of the mid-term options would be reasonable to pursue prior to implementing the long-term solution. This report provides a status update on these efforts.

## **Short-term Risk Mitigation Measures**

In its March 2019 report to the Council, the Company summarized the short-term measures undertaken to improve reliability in the near-term, including distribution feeder inspection and repair, substation maintenance and upgrades, as well as steps taken to improve communication between SWBNO and Entergy operations personnel. These improvements continue to provide improved reliability to SWBNO by reducing the risk of outages related to equipment failure.

In addition to the short-term measures completed to date, as previously reported to the Council the Company has identified certain improvements previously classified as mid-term improvements that have been acted upon now to further improve reliability in the near-term as the collaboration with SWBNO continues. These improvements continue to provide improved reliability to SWBNO by providing the ability to isolate service points from feeder faults occurring outside of the backbone that serves SWBNO.

## **Mid-Term Options**

As previously reported to the Council, ENO and SWBNO formed a Joint Reliability Team ("JRT") to collaborate in developing mid-term options and a long-term solution to help ensure the reliability of electric service to SWBNO facilities. The JRT meets at least once per month having previously met on the following dates prior to this report: December 5, 2018; and January 16, January 31, February 13, March 13, April 17, May 15, June 12, and July 17, 2019.

As previously reported to the Council, the mid-term options relate solely to improvements that can be made to improve reliability of the distribution system that serves SWBNO's Carrollton plant today and are not a long-term solution. The JRT has identified two mid-term options that could provide additional capacity and enhance reliability on the distribution system that currently serves SWBNO's potable water system at its Carrollton plant; however, both options require

further study to determine feasibility, cost, and time to construct. Power and Control Systems International, Inc., ("PCS"), an independent 3rd party engineering firm, has been engaged to assist with analysis of the mid-term options. Additional details on the scope of the mid-term options are included in the April 2019 report.

Regarding the first mid-term option detailed in the April 2019 report, SWBNO has requested to expand the scope of the analysis to evaluate the feasibility of increasing the load serving capability of the Sycamore station from 10 MW identified in the April report to 15 MW. In addition, SWBNO has requested that the 2<sup>nd</sup> feed that would provide back-up to the primary feed from Sycamore instead be rerouted to the Carrollton Plant's main frequency changer. SWBNO has requested that the 2<sup>nd</sup> feed also be capable of providing 15 MW of capacity. These changes will require additional time and further study to determine feasibility of the distribution system to provide the additional load serving capability beyond the original 10 MW scope.

Regarding the second mid-term option detailed in the April 2019 report, PCS recently completed preliminary modeling of the Fast Bus Transfer (FBT) and presented preliminary results to SWBNO and ENO at the July 17<sup>th</sup> JRT meeting. The results confirmed that a FBT relay scheme could significantly improve potable water pump ride through capability for single contingency feeder faults on existing ENO distribution feeders serving the Carrollton Plant. However, SWBNO informed PCS of a recent electrical configuration change to SWBNO's system that will require PCS to rework their analysis. At the May 22<sup>nd</sup> kick-off meeting with PCS, SWBNO identified a spare breaker position on the plant frequency changer bus that could be used for the FBT scheme. In June, SWBNO completed conversion of potable water Pump A from steam drive to 60 cycle electric motor drive; using the spare breaker position to source power for the pump conversion. At the July 17<sup>th</sup> meeting, the JRT continued its collaboration and worked to identify a new spare breaker position on the turbine generator #6 bus that SWBNO agreed to make available for the FBT scheme. PCS is reworking their analysis to determine if the spare breaker position on the generator bus is feasible to use for the FBT scheme.

## **Long-Term Solution**

As previously reported to the Council, while the mid-term options will improve reliability of the distribution system that powers the potable water system today, neither of those options can provide the increased capacity necessary to power SWBNO's drainage pumping system served by the aging inefficient generation at the Carrollton plant. The long-term solution must provide both increased reliability and the additional capacity necessary to transition to ENO as SWBNO's primary source of power, including power for the drainage pumping system. The JRT has agreed that the long-term solution is to construct a new transmission substation adjacent to SWBNO's Carrollton plant. The new substation would provide increased reliability by routing power directly from the transmission system which is inherently less susceptible to outages, while also providing the increased capacity necessary to serve drainage pumps currently powered by aging and inefficient SWBNO generation. The additional capacity necessary to transition to ENO as the primary source of power simply would not be feasible using the distribution system that serves the Carrollton plant today.

Resolution R-19-78 also directs ENO to expedite the development of a long-term solution and to provide a timeframe in which such a solution could be presented to the Council. Because

the mid-term options and long-term solution will require significant time and resources to design, engineer and construct, to avoid a situation where a mid-term option has been constructed only to be replaced soon after by the long-term solution, ENO and SWBNO previously agreed to retain PCS, an independent 3rd party engineering firm, to:

- i) Conduct an independent and impartial audit of the electrical facilities that serve the Carrollton plant;
- ii) Jointly evaluate the mid-term options and long-term solution; and
- iii) Provide a written report that makes recommendations for an optimized solution set.

The JRT previously agreed that PCS would be provided all necessary information and access to both ENO and SWBNO facilities that PCS requires to conduct the evaluation and make recommendations. To comply with the Council's directive, ENO retained PCS in May to begin the study in earnest and held a kick-off meeting with PCS and SWBNO on May 22<sup>nd</sup> to begin the process of gathering necessary information. PCS previously issued data requests to both ENO and SWBNO and is actively working to complete data analysis and modeling activities. The Company will continue to update the Council on the progress of the study in future reports.