

Entergy Services, LLC 639 Loyola Avenue (70113) P.O. Box 61000 New Orleans, LA 70161-1000 Tel 504 576 6571 Fax 504 576 5579

Timothy S. Cragin
Assistant General Counsel
Legal Services - Regulatory

January 23, 2020

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") January 2020 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,

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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

Erin Spears Norman White

Sunni J. LeBeouf, Esq. Clinton A. Vince, Esq. Presley R. Reed, Jr., Esq. Emma F. Hand, Esq. Basile J. Uddo, Esq. J. A. Beatmann, Jr., Esq. Joseph W. Rogers, P.E.

Brian L. Guillot

Philip J. Movish, P. E.

Entergy New Orleans, LLC's January 2020 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 have been completed and further improve reliability in the near-term as the collaboration with SWBNO continues. Importantly, the remaining mid-term options under consideration do not represent a long-term solution. This report attaches a copy of the independent engineering analysis that identifies the preferred mid-term solution that would be reasonable to pursue prior to implementing the long-term solution.

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, with the most recent meeting having occurred via conference call on December 19, 2019. The focus of the December call involved coordination between ENO and SWBNO regarding power supply reliability to SWBNO pumping facilities given the recent loss of SWBNO's Turbine No. 5. Currently, ENO is providing additional power to supply SWBNO's back-up Carrollton frequency changers in the absence of Turbine No. 5. This additional power is being provided from existing capacity off the distribution system that serves the Carrollton potable water facility and should not be viewed as a long-term solution. Significant additional capital investments, including a new transmission level substation, will be necessary to transition SWBNO to the long-term solution.

As previously reported to the Council, the mid-term options relate solely to upgrades 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. In consultation with PCS, the JRT has finalized a preferred mid-term solution that has two complementary components designed to provide additional capacity on, and enhance reliability of, the distribution system that currently serves SWBNO's potable water system at its Carrollton plant. The first component will provide additional capacity at the Sycamore vault, facilitating SWBNO's plans to convert aging steam driven pumps to electric motor driven pumps. This requires ENO to replace 2-3.75 MVA transformers with 2-5 MVA transformers at Sycamore and build a new distribution feeder from ENO's Joliet Substation to Sycamore, providing the primary source of utility power to the Carrollton plant. A second component would further improve reliability of the distribution system that currently serves the Carrollton plant by providing a new backup source. The backup source would support uninterrupted pump operations when switching from primary to backup utility sources. ENO would extend distribution feeder 2016 to a new 10 MVA transformer that will be connected to the SWBNO generator turbine #6 bus to provide the new backup source. Additionally, SWBNO would be responsible for installing a high-speed motor bus transfer ("MBT") scheme at the SWBNO frequency changer bus. This MBT scheme has been modeled and verified by PCS and would be capable of transferring from the primary source of power to a back-up in fractions of one second.

The JRT recommends implementation of the preferred mid-term solution as a bridge to the long-term solution. The preferred mid-term solution would significantly improve the reliability of SWBNO potable water pumps under single contingency ENO feeder faults. Additionally, the preferred mid-term solution would allow SWBNO to begin its transition to ENO as the primary source of reliable and economic power while development of the long-term solution continues.

Long-Term Solution

As previously reported to the Council, while the preferred mid-term solution will improve reliability of the distribution system that powers the potable water system today, it will not 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. Importantly, the SWBNO's request for additional load-serving capacity on the distribution system highlights the need to expedite a transition to the long-term solution to construct a new transmission voltage substation allowing ENO to serve as the primary source of reliable and economic power.

Resolution R-19-78 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. ENO and SWBNO previously agreed to retain PCS 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.

PCS completed its report summarizing the results of their analysis, including findings that support implementation of the preferred mid-term and long-term solutions and that report was attached as Highly Sensitive Protected Material to the December 2019 monthly report. The Company will continue to update the Council on the progress of the ongoing collaboration, including the timing of a planned filing with the Council in future reports.