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

April 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") April 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

TSC\rdm

Enclosures

RECEIVED
APR 24 2019
BY:

Apr 24 3 08

cc (via electronic mail):

Council President Jason Rogers Williams
Council Vice President Helena Moreno
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.
Philip J. Movish, P. E.

Entergy New Orleans, LLC's April 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 from 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 can be put into place. These short-term measures 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. 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 have resulted in improved reliability to SWBNO by reducing the risk of outages related to equipment failure. To the extent an outage occurs, the steps taken to establish a direct line of communication between SWBNO and Entergy operations personnel help ensure that corrective action on the part of both SWBNO and Entergy is informed by actual events on the ground. As an example, at approximately 8:42 am on March 27, Entergy experienced an outage on a nearby feeder that does not serve SWBNO. Shortly after the outage SWBNO contacted Entergy stating they experienced an electrical disturbance on feeder 2022 that serves the Claiborne vault, causing two SWBNO pumps to trip offline. Through the improved communication protocols, Entergy confirmed power was still available to feeder 2022 allowing SWBNO to quickly restart the lost pumps without first switching to an alternative source of power, which would have extended the amount of time before the pumps could be restarted.

In addition to the short-term measures completed to date, the Company has identified certain improvements previously classified as mid-term improvements that can be acted upon now to further improve reliability in the near-term as the collaboration with SWBNO continues. The Claiborne and Sycamore vaults are critical points of delivery to power SWBNO's potable water pumps. The improvements will further reduce the exposure of distribution feeders 2016 and 2022 that serve the Claiborne and Sycamore Vaults, and include the installation of new reclosers, relocation of an existing recloser, and moving an open point on the network that serves SWBNO. Engineering for these projects is underway and the Company anticipates completing them in July 2019.

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 SWB 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, and April 17, 2019.

To be clear, 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. Option 1 would be implemented in two phases, where Phase I would increase the capacity of the existing Sycamore vault to 10 megawatts. This increase would allow SWBNO to convert aging steam driven pumps to electric motor driven pumps. Phase II includes adding a 2nd feeder into the Sycamore vault with an automatic transfer switch that would provide a back-up source of power in the event of an outage on the primary feeder. The JRT has identified two separate feeds that could be used to provide a back-up source of power; however, the preferred source would require additional transformer capacity at the Southport substation to be accelerated to make the first mid-term option feasible.

The second mid-term option would further improve reliability of the distribution system that currently serves the Carrollton plant; however, it requires completion of Option 1 first. This option would include construction of a new service vault with a primary and back-up source of power. The new vault would be designed with 'fast bus' transfer equipment capable of completing transfers from the primary source of power to a back-up in fractions of one second. While the second option would further enhance reliability by reducing the likelihood that SWBNO equipment will be 'tripped' offline when switching between primary and back-up power, it would involve additional cost and time to engineer and construct.

Long-Term Solution

Currently ENO does not provide a primary source of power to SWBNO's drainage pumping system. 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. 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 have agreed to retain Power and Control Systems International, Inc. ("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 an independent and impartial evaluation and make recommendations. To comply with the Council's directive to expedite the long-term solution, ENO has proactively engaged with PCS to begin the study in earnest. The Company will provide additional information on the timeframe for completion of PCS' study in the next monthly report.