May 10, 2019

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

Re: Application of Entergy New Orleans, LLC for Approval of Renewables Portfolio and Request for Cost Recovery and Related Relief
CNO Docket NO.: UD-18-06

Dear Ms. Johnson:

Enclosed for your further handling please find an original and three copies of Entergy New Orleans, LLC’s (“ENO”) Public Version of the Second Supplemental Direct Testimony of Seth E. Cureington and Supplemental and Amending Direct Testimony of Jonathan E. Long. Please file an original and two copies into the record in the above referenced matter, and return a date stamped copy to our courier.

In connection with the Company’s filing, a Confidential Version of the above-described documents bearing the designation “Highly Sensitive Protected Materials” are being provided to the appropriate reviewing parties pursuant to the terms and conditions of the Official Protective Order adopted in Council Resolution R-07-432. Portions of the information included in the filing consist of Highly Sensitive Protected Materials pursuant to Council Resolution R-07-432, the disclosure of which could subject not only the Company, but also its customers, to a substantial risk of harm. As such, this confidential information has been redacted from the public version of this filing, and is exempt from public disclosure, pursuant to and subject to the provisions of Council Resolution R-07-432.

Thank you for your assistance with this matter.

Sincerely,

Harry M. Barton

HMB\bkd

Enclosures

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

APPLICATION OF ENTERGY NEW ORLEANS, LLC FOR APPROVAL OF RENEWABLES PORTFOLIO AND REQUEST FOR COST RECOVERY AND RELATED RELIEF

DOCKET NO. UD-18-06

SECOND SUPPLEMENTAL DIRECT TESTIMONY

OF

SETH E. CUREINGTON

ON BEHALF OF

ENTERGY NEW ORLEANS, LLC

PUBLIC VERSION

MAY 2019
I. INTRODUCTION AND PURPOSE

Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
A. My name is Seth E. Cureington. My business address is 1600 Perdido Street, New Orleans, Louisiana 70112.

Q2. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY, SUPPLEMENTAL DIRECT, AND SUPPLEMENTAL AND AMENDING DIRECT TESTIMONY IN THIS PROCEEDING?
A. Yes.

Q3. WHAT IS THE PURPOSE OF YOUR SECOND SUPPLEMENTAL DIRECT TESTIMONY?
A. I am testifying on behalf of Entergy New Orleans, LLC (“ENO” or the “Company”) in support of the Company’s Supplemental and Amending Application, which seeks approval of its proposed renewable energy resources portfolio consisting of a 20 megawatt (“MW”) self-build solar project located in New Orleans East (“New Orleans Solar Station” or “NOSS”), a 50 MW purchase power agreement from a solar project located outside of Orleans Parish (“Iris PPA”), and a 20 MW purchase power agreement from a solar project that is also located outside of Orleans Parish (“St. James PPA”) (collectively the “Renewables Portfolio”).

On July 31, 2018, I filed Direct Testimony in this Docket in which, among other things, I explained the 2016 RFP evaluation process and provided a general overview
of the evaluation results. I also provided the results of the Company’s economic analysis related to each of the resources in the Renewables Portfolio.

On November 9, 2018, I filed Supplemental Direct Testimony in the interest of transparency to update the results of the economic analysis for each of the solar resources reflecting current planning assumptions.

On March 14, 2019 I filed Supplemental and Amending Direct Testimony to provide the economics associated with the conversion of the 50 MW Iris build-own-transfer (“BOT”) to a 50 MW PPA.

I now file this Second Supplemental Direct Testimony to provide the updated economic analysis for NOSS and the 90 MW Portfolio Net Benefit, based on reductions in the previously estimated NOSS project cost. As discussed in the Supplemental Direct Testimony of Jonathan E. Long, the NOSS project team has engaged in further negotiations with the EPC vendor that have resulted in a reduction to the EPC contract price. The project team has also developed an innovative solution involving an alternative interconnection at distribution voltage that would result in a significant cost reduction compared to the transmission interconnection originally contemplated. These cost reductions would in turn drive reductions in non-EPC costs such as contingency and taxes that work to lower the overall project cost. As a result of these reductions, the project cost is now estimated at [redacted], a reduction of [redacted] from the original estimate of [redacted].
Q4. PLEASE DESCRIBE THE ASSUMPTIONS THAT WERE UPDATED FOR USE IN THIS ECONOMIC ANALYSIS.

A. The following assumptions were updated in this analysis:

- Updated Capital Cost—As discussed in Mr. Long’s Supplemental Direct Testimony, the Project capital cost was reduced through further negotiations with the EPC vendor and the identification of a distribution interconnection solution.

- Updated Property Tax and Insurance—Property taxes and insurance costs were lowered due to the lower capital cost. The insurance cost escalation rate increased from 2% to 5% based on prevailing market conditions.

- ITC Utilization Schedule—The first year the ITC could be utilized was moved from 2021 to 2029 based on internal financial assumptions.

- ITC Eligible Basis—The portion of the project cost on which the 30% ITC was calculated was increased from 80% to 85%.

- Capacity Credit Grossed Up for Line Losses—Because the project will be interconnected at distribution voltage, the resource’s net capacity credit is grossed up by 2.3% for transmission line losses.
Q5. PLEASE SUMMARIZE THE UPDATED ECONOMIC ANALYSIS OF THE 90 MW PORTFOLIO REFLECTING THE REDUCTION IN COST OF THE NEW ORLEANS SOLAR STATION PROJECT.

A. The Company updated the three cases previously provided using the updated assumptions described above and scenarios for capacity values used in the updated analysis presented in my November 2018 Supplemental Direct Testimony. The results of the updated economic analysis for NOSS and the 90 MW portfolio are as follows:

**Case 1: Levelized Wärtsilla Capacity Value (HSPM)**

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<td>Property Tax modeled as both a cost and a benefit to ENO Customers (NOSS only) [2017$ - $M]</td>
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<td>90 MW Portfolio Net Benefit</td>
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Net Benefit with Fuel Diversity Value and Property Tax Benefit [2017$ - M]
### Case 2: Levelized CT Capacity Value (HSPM)

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## Case 3: MISO Revenues as Capacity Value (HSPM)

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Q6. DOES THIS CONCLUDE YOUR SECOND SUPPLEMENTAL DIRECT TESTIMONY?

A. Yes, at this time.
AFFIDAVIT

STATE OF LOUISIANA
PARISH OF ORLEANS

NOW BEFORE ME, the undersigned authority, personally came and
appeared, SETH E. CUREINGTON, who after being duly sworn by me, did depose and
say:

That the above and foregoing is his sworn testimony in this proceeding
and that he knows the contents thereof, that the same are true as stated, except as to
matters and things, if any, stated on information and belief, and that as to those matters
and things, he verily believes them to be true.

Seth E. Cureington

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 10th DAY OF MAY, 2019.

[Signature]
NOTARY PUBLIC

My commission expires: at death

Harry M. Barton
Notary Public
Notary ID# 90845
Parish of Orleans, State of Louisiana
My Commission is for Life
BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

APPLICATION OF ENTERGY NEW ORLEANS, LLC FOR APPROVAL OF RENEWABLES PORTFOLIO AND REQUEST FOR COST RECOVERY AND RELATED RELIEF)

DOCKET NO. UD-18-06

SUPPLEMENTAL AND AMENDING DIRECT TESTIMONY OF JONATHAN E. LONG ON BEHALF OF ENTERGY NEW ORLEANS, LLC

PUBLIC VERSION

MAY 2019
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I. INTRODUCTION AND PURPOSE

A. Qualifications

Q1. PLEASE STATE YOUR NAME AND CURRENT BUSINESS ADDRESS.
A. My name is Jonathan E. Long. My business address is 639 Loyola Avenue, New Orleans, Louisiana 70113.

Q2. ARE YOU THE SAME JONATHAN E. LONG WHO PREVIOUSLY FILED DIRECT TESTIMONY IN THIS DOCKET?
A: Yes, I am.

B. Purpose of Testimony

Q3. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL AND AMENDING DIRECT TESTIMONY?
A. My testimony supports the Company’s Application in this proceeding, which seeks, among other things, approval to proceed with constructing a 20 MW solar photovoltaic (“PV”) ground mounted system at the Michoud Assembly Facility in New Orleans, Louisiana, an installation of the National Aeronautics and Space Administration (“NASA”). I will describe the results of the Company’s efforts to lower the overall estimated cost of the project through further vendor negotiations and a re-evaluation of the proposed interconnection solution.
II. PROJECT OVERVIEW

Q4. PLEASE PROVIDE A BRIEF OVERVIEW OF THE NOSS PROJECT.

A. As I described in my Direct Testimony, NOSS will provide approximately 20 MW of solar generating capacity, consisting of tens of thousands of solar PV modules. The plant will be located in New Orleans, Louisiana, within the property boundaries of NASA’s Michoud Assembly Facility. The plant will be protected by levees along the Gulf Intracoastal Waterway (“GIWW”), NASA’s pumping stations, and the Lake Borgne surge barrier, all of which were improved or constructed after Hurricane Katrina.

The updated Project cost, including an allowance for funds used during construction (“AFUDC”), is estimated at [redacted], or roughly [redacted] per kilowatt (“kW”), including the costs to interconnect to the distribution system. This represents a reduction of approximately [redacted] compared to the original estimate. If there are no unanticipated project delays due to the inability to obtain necessary regulatory approvals, permits, materials, and equipment, NOSS is expected to enter service in the third quarter of 2020.

III. UPDATED ESTIMATED PROJECT COST AND SCHEDULE

Q5. WHAT HAS BEEN YOUR ROLE IN THE DEVELOPMENT OF THE UPDATED NOSS PROJECT COST ESTIMATE?

A. I and the members of my organization who make up the Project Team have been primarily responsible for the negotiations with the EPC contractor, evaluating
alternatives to the transmission interconnection arrangement originally proposed, and

refining the estimates of non-EPC costs.

Q6. CAN YOU SUMMARIZE THE CHANGES THAT LED TO THE UPDATED

PROJECT COST ESTIMATE?

A. Yes. As I described in my Direct Testimony, the Project cost estimate is composed of

three major cost components. The changes to these components are summarized

below:

1) Solar EPC agreement costs (“EPC Costs”): Through further negotiations, the

Project Team and EPC vendor have agreed on a lower price for the EPC contract. The

contract price has been reduced to approximately [REDACTED] compared to the previous amount. The final EPC agreement is still subject to Entergy internal approvals and, therefore, has not been executed. It will be filed in this docket once those reviews are complete and the agreement has been executed.

2) Interconnection costs (“Distribution Interconnection”): As originally contemplated, the Project was going to interconnect to the Company’s transmission system. However, following additional evaluations and reviews in conjunction with the Company’s distribution planning and engineering organizations, the Project Team arrived at a viable solution for interconnecting the Project to the Company’s distribution system instead. This solution resulted in an estimated interconnection cost of [REDACTED], a reduction of [REDACTED] compared to the original transmission interconnection solution.
3) Costs outside of the EPC agreement (“Non-EPC Costs”): As a result of the lower EPC contract and interconnection costs, there were reductions to project contingency of approximately $X, internal loaders of approximately $Y, and sales taxes of approximately $Z.

Q7. WHAT IS THE CURRENT ESTIMATE OF THE COSTS TO COMPLETE NOSS?

A. The current estimate of the NOSS Project costs is approximately $Z, inclusive of, among other things, expenses related to seeking Council certification, costs related to distribution interconnection, contingency, and AFUDC. A summary of the components of the current cost estimate is shown below:

<table>
<thead>
<tr>
<th>NOSS Capital Cost Estimate (Millions)</th>
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Q8. PLEASE ELABORATE FURTHER ON WHY THE COMPANY HAS REDUCED THE AMOUNT OF PROJECT CONTINGENCY FROM TEN PERCENT TO SEVEN PERCENT IN ITS TOTAL COST ESTIMATE.

A. The distribution interconnection solution represents a significantly lower cost and reduced level of construction risk as compared to the original transmission
interconnection. Given this change in the overall Project plan and from continued project development including site geotechnical testing, the Company was able to re-evaluate and lower the contingency assumption in the overall Project cost estimate. The current Project estimate contains a contingency line item of approximately seven percent of the total project costs, which is reasonable for a project of this nature and at this stage of development. It should be noted that the full seven percent contingency may not be required; as I discussed in my Direct Testimony, only contingency that is actually used will be included in the final Project cost.

Q9. PLEASE EXPLAIN THE WORK NECESSARY FOR THE DISTRIBUTION INTERCONNECTION COMPONENT OF THE PROJECT.

A. The distribution interconnection plan includes building three new distribution lines from the Project to three existing distribution feeders located in the vicinity as shown in the picture below:
Q10. **DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes, at this time.
CERTIFICATE OF SERVICE
Docket No. UD-18-06

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.

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16690 Swingly Ridge Road, Suite 140  
Chesterfield, MO 63017

New Orleans, Louisiana, this 10th day of May, 2019.

__________________________
Harry M. Barton