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Harry M. Barton
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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)

RECEIVED
MAY 10 2019

BY: 

MAY 12 2019

**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

1 of the evaluation results. I also provided the results of the Company's economic
2 analysis related to each of the resources in the Renewables Portfolio.

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

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

9 I now file this Second Supplemental Direct Testimony to provide the updated
10 economic analysis for NOSS and the 90 MW Portfolio Net Benefit, based on reductions
11 in the previously estimated NOSS project cost. As discussed in the Supplemental
12 Direct Testimony of Jonathan E. Long, the NOSS project team has engaged in further
13 negotiations with the EPC vendor that have resulted in a reduction to the EPC contract
14 price. The project team has also developed an innovative solution involving an
15 alternative interconnection at distribution voltage that would result in a significant cost
16 reduction compared to the transmission interconnection originally contemplated.
17 These cost reductions would in turn drive reductions in non-EPC costs such as
18 contingency and taxes that work to lower the overall project cost. As a result of these
19 reductions, the project cost is now estimated at [REDACTED], a reduction of [REDACTED]
20 [REDACTED] from the original estimate of [REDACTED].

21

1 Q4. PLEASE DESCRIBE THE ASSUMPTIONS THAT WERE UPDATED FOR USE IN
2 THIS ECONOMIC ANALYSIS.

3 A. The following assumptions were updated in this analysis:

4
5 • Updated Capital Cost—As discussed in Mr. Long’s Supplemental Direct Testimony,
6 the Project capital cost was reduced through further negotiations with the EPC vendor
7 and the identification of a distribution interconnection solution.

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

11 • ITC Utilization Schedule—The first year the ITC could be utilized was moved from
12 2021 to 2029 based on internal financial assumptions.

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

15 • Capacity Credit Grossed Up for Line Losses—Because the project will be
16 interconnected at distribution voltage, the resource’s net capacity credit is grossed up
17 by 2.3% for transmission line losses.

18

1 Q5. PLEASE SUMMARIZE THE UPDATED ECONOMIC ANALYSIS OF THE 90 MW
 2 PORTFOLIO REFLECTING THE REDUCTION IN COST OF THE NEW
 3 ORLEANS SOLAR STATION PROJECT.

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

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

Levelized Wärtsilla Capacity Value			
Proposal	Reference Case Net Benefit [2017\$ - \$M]	Net Benefit with Property Tax Sensitivity <i>Property Tax modeled as both a cost and a benefit to ENO Customers (NOSS only)</i> [2017\$ - \$M]	Net Benefit with Fuel Diversity Value and Property Tax Benefit [2017\$ - M]
50 MW IRIS Solar PPA	██████████	██████████	██████████
20 MW New Orleans Solar Station Self-Build	██████████	██████████	██████████
20 MW Sunchase PPA	██████████	██████████	██████████
90 MW Portfolio Net Benefit	██████████	██████████	██████████

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Case 2: Levelized CT Capacity Value (HSPM)

Levelized CT Capacity Value			
Proposal	Reference Case Net Benefit [2017\$ - \$M]	Net Benefit with Property Tax Sensitivity <i>Property Tax modeled as both a cost and a benefit to ENO Customers (NOSS only)</i> [2017\$ - \$M]	Net Benefit with Fuel Diversity Value and Property Tax Benefit [2017\$ - M]
50 MW IRIS Solar PPA	██████████	██████████	██████████
20 MW New Orleans Solar Station Self- Build	██████████	██████████	██████████
20 MW Sunchase PPA	██████████	██████████	██████████
90 MW Portfolio Net Benefit	██████████	██████████	██████████

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Case 3: MISO Revenues as Capacity Value (HSPM)

MISO Capacity Revenues as Capacity Value			
Proposal	Reference Case Net Benefit [2017\$ - \$M]	Net Benefit with Property Tax Sensitivity <i>Property Tax modeled as both a cost and a benefit to ENO Customers (NOSS only)</i> [2017\$ - \$M]	Net Benefit with Fuel Diversity Value and Property Tax Benefit [2017\$ - M]
50 MW IRIS Solar PPA	██████████	██████████	██████████
20 MW New Orleans Solar Station Self-Build	██████████	██████████	██████████
20 MW Sunchase PPA	██████████	██████████	██████████
90 MW Portfolio Net Benefit	██████████	██████████	██████████

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4 Q6. DOES THIS CONCLUDE YOUR SECOND SUPPLEMENTAL DIRECT

5 TESTIMONY?

6 A. Yes, at this time.

AFFIDAVIT

STATE OF LOUISIANA

PARISH OF ORLEANS

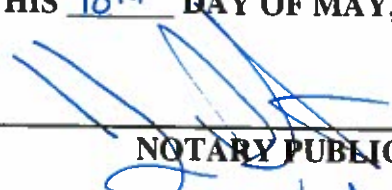
NOW BEFORE ME, the undersigned authority, personally came and appeared, **SETH E. CUREINGTON**, who after being duly sworn by me, did depose and say:

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.



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.

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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

1 alternatives to the transmission interconnection arrangement originally proposed, and
2 refining the estimates of non-EPC costs.

3

4 Q6. CAN YOU SUMMARIZE THE CHANGES THAT LED TO THE UPDATED
5 PROJECT COST ESTIMATE?

6 A. Yes. As I described in my Direct Testimony, the Project cost estimate is composed of
7 three major cost components. The changes to these components are summarized
8 below:

9 1) Solar EPC agreement costs (“EPC Costs”): Through further negotiations, the
10 Project Team and EPC vendor have agreed on a lower price for the EPC contract.
11 The contract price has been reduced to approximately [REDACTED]
12 [REDACTED] compared to the previous amount. The final EPC agreement is still
13 subject to Entergy internal approvals and, therefore, has not been executed. It will
14 be filed in this docket once those reviews are complete and the agreement has been
15 executed.

16 2) Interconnection costs (“Distribution Interconnection”): As originally contemplated,
17 the Project was going to interconnect to the Company’s transmission system.
18 However, following additional evaluations and reviews in conjunction with the
19 Company’s distribution planning and engineering organizations, the Project Team
20 arrived at a viable solution for interconnecting the Project to the Company’s
21 distribution system instead. This solution resulted in an estimated interconnection
22 cost of [REDACTED], a reduction of [REDACTED] compared to the original
23 transmission interconnection solution.

1 interconnection. Given this change in the overall Project plan and from continued
2 project development including site geotechnical testing, the Company was able to re-
3 evaluate and lower the contingency assumption in the overall Project cost estimate. The
4 current Project estimate contains a contingency line item of [REDACTED] approximately
5 seven percent of the total project costs, which is reasonable for a project of this nature
6 and at this stage of development. It should be noted that the full seven percent
7 contingency may not be required; as I discussed in my Direct Testimony, only
8 contingency that is actually used will be included in the final Project cost.

9

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

12 A. The distribution interconnection plan includes building three new distribution lines
13 from the Project to three existing distribution feeders located in the vicinity as shown
14 in the picture below:



1 Q10. DOES THIS CONCLUDE YOUR TESTIMONY?

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



Harry M. Barton