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-__**

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

Entergy New Orleans, LLC ("ENO" or the "Company") respectfully submits this Application for Approval of its proposed Renewables Portfolio and Request for Cost Recovery and Related Relief (the "Application") to the Council of the City of New Orleans (the "Council").[1] In support thereof, the Company represents as follows:

INTRODUCTION

I.

ENO is a limited liability company duly authorized and qualified to do business in the State of Louisiana, created and organized for the purposes, among others, of manufacturing, generating, transmitting, distributing, and selling electricity for power, lighting, heating, and other such uses; and ENO is engaged in the business thereof in the City of New Orleans.

II.

Through this Application and supporting testimony, ENO seeks approval of its proposed renewable energy resources portfolio consisting of a 20 megawatts ("MW") self-build solar project located in New Orleans East ("New Orleans Solar Station" or "NOSS"), a 50 MW acquisition of a solar project located outside of Orleans Parish ("Iris Solar Facility" or "ISF"), and a 20 MW purchase power agreement ("PPA") from a solar project that is also located outside

[1] The instant Application also constitutes the Company's response to Resolution R-18-97.

of Orleans Parish ("St. James PPA") (collectively the "Renewables Portfolio"). As discussed more fully below, two of the projects were selected from the 2016 ENO Renewables Request for Proposals ("2016 RFP"), while the third resource, NOSS, originated from the 2016 RFP but was transitioned into a self-build due to a bidder's inability to hold its 2016 RFP price and dedicate sufficient resources to ensure the project could actually be completed.[2]

III.

In 2001, the Entergy Operating Companies ("EOCs"),[3] including ENO, became the first utility system in the United States to voluntarily commit to stabilizing CO_2 emissions as a part of their efforts to be environmentally responsible. According to a 2018 Benchmarking Air Emissions Report, in 2016 (the last year for which complete generation and emissions information is publicly available), Entergy was the sixth-largest of the top 100 power producers. At the same time, Entergy ranked fifth in the production of zero-emitting energy. The Entergy fleet's CO_2 emission rate was the fourth lowest among the top 20 privately owned and investor owned power producers, and its current commitment is to maintain CO_2 emissions from Entergy-owned power plants and controllable power purchases through 2020 at 20 percent below year 2000 levels.

IV.

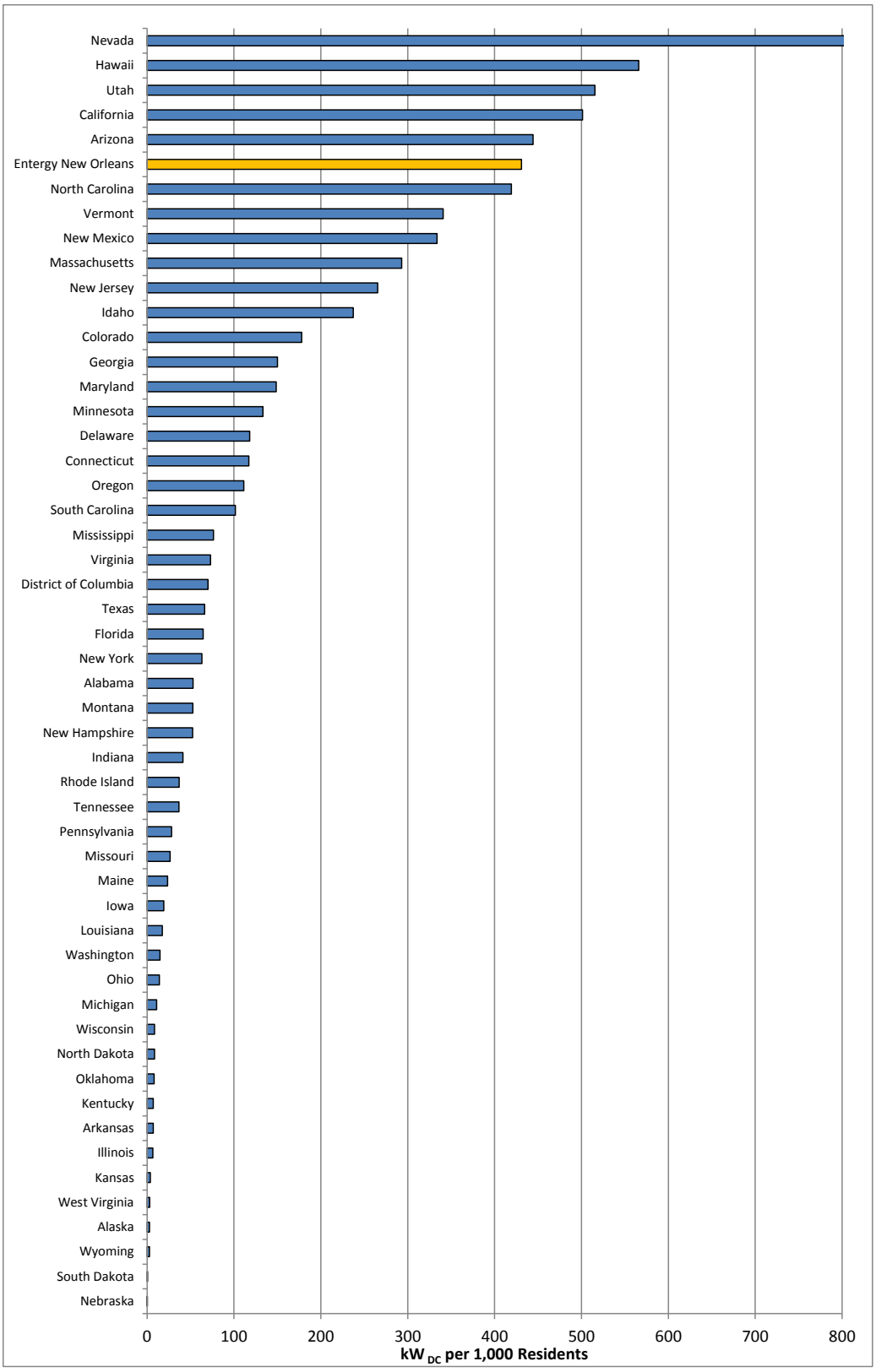
With respect to ENO specifically, only 2% of its resource mix is derived from coal resources, and the Company continues to invest in projects that will reduce emissions and produce benefits for its customers. In furtherance of these goals, in 2017, the Company made a

[2] It should be noted that while the St. James PPA has been executed and has obtained all necessary corporate approvals, both NOSS and ISF are in the final stages of development and are subject to all necessary corporate approvals. The Company will file the contracts related to NOSS and ISF in this docket once they are signed and all internal approvals have been received.

[3] The five current EOCs are Entergy Arkansas, Inc. ("EAI"), Entergy Louisiana, LLC ("ELL"), Entergy Mississippi, Inc. ("EMI"), ENO, and Entergy Texas, Inc. ("ETI").

voluntary commitment to pursue up to 100 MW of renewable energy resources. The proposed Renewables Portfolio, assuming it is approved, will help ENO and the Council achieve the 100 MW renewables goal and will propel the City of New Orleans into a leading role among regulatory utility jurisdictions in the United States with respect to the amount of solar energy as a percentage of its resource mix. As indicated in Figure 1 below, New Orleans would compare very favorably to areas as large as entire states, coming in at 6th overall, which will put it ahead of 46 other states, including the District of Columbia.[4]

[4] Figure 1 compares the Company's existing and planned solar resources, plus existing customer-owned solar resources in New Orleans (direct-current ("DC") basis), to the amount of cumulative solar located in each state through 2017.


Nevada
Hawaii
Utah
California
Arizona
Entergy New Orleans
North Carolina
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New Mexico
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Louisiana
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Arkansas
Illinois
Kansas
West Virginia
Alaska
Wyoming
South Dakota
Nebraska
0
100
200
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400
500
600
700
800
kW DC per 1,000 Residents

V.

Solar power works by putting a collection of Solar Photovoltaic ("PV") panels in place that produce direct current when the sunlight hits a panel's cells. The direct current flows from the panels to an inverter that transforms the energy into alternating current. The alternating current then helps to power homes and businesses. Accordingly, the Renewables Portfolio will generate zero-emissions electricity for customers—and the Company would expect to power approximately 14,000 homes if the plants are fully producing. On cloudy or rainy days, and at night, when solar panels aren't producing, those homes and businesses will be powered by some of the cleanest power in the U.S. through ENO's highly fuel-efficient fleet of natural gas and nuclear power, including the New Orleans Power Station ("NOPS"), which, as the Council has already found, has relatively low emissions, low ground water use, a low heat rate, and will be specifically designed to back-up renewable generation to provide reliable power 24/7.

VI.

The Renewables Portfolio will not only offer environmental benefits, but it will also offer substantial risk protection for ENO's customers. The Renewables Portfolio will primarily function as an energy resource that will further diversify the Company's resource mix, providing a partial long-term hedge against uncertainty in the production cost of the Company's existing portfolio. Examples of such risks include uncertainty in the level and volatility of future natural gas prices, changes in environmental regulations (*e.g.*, regulation of CO_2 emissions), and the Locational Marginal Price ("LMPs") of energy purchased from Midcontinent Independent System Operator ("MISO") at the New Orleans Load Zone.

VII.

As discussed more fully below, the Renewables Portfolio will also offer direct net benefits to customers (through the St. James PPA and ISF), and direct economic benefits to

Orleans Parish in the form of increased jobs, local spending, and tax revenues paid to the City of New Orleans over the life of the third project (through NOSS).

VIII.

ENO seeks a Council finding that the Renewables Portfolio is in the public interest. The Company also requests that the Council approve its cost recovery requests. Along with this Application, the Company is submitting the Direct Testimonies of Seth E. Cureington, Jonathan E. Long, Michael J. Goin, and Orlando Todd. The purpose of each testimony is summarized as follows:

- **Seth E. Cureington**: Mr. Cureington is the Director, Resource Planning and Market Operations for ENO. He provides data indicating that New Orleans will be a leading utility jurisdiction in solar. He also provides an overview of the 2016 RFP, including but not limited to an explanation of the timeline, procedural safeguards, and role of an independent monitor ("IM"), who was consulted at every major 2016 RFP milestone. Finally, Mr. Cureington provides ENO's rationale for selecting each resource included in the proposed Renewables Portfolio.
- **Jonathan E. Long**: Mr. Long is the Vice President, Capital Projects for ESI.[5] His testimony is limited to the NOSS Project. He provides an overview of the project, explains how its cost estimate was developed, and provides the current cost estimate and schedule for NOSS. He also describes the management approach that the Company intends to employ and the process used. He also discusses the risk mitigation measures put in place to control project risk. Finally, Mr. Long discusses the status of the required permits/approvals for the NOSS.

[5] ESI is an affiliate of the EOCs and provides engineering, planning, accounting, technical, and regulatory-support services to each of the EOCs.

- **Michael J. Goin**: Mr. Goin is the Director of Planning Analysis for ESI's System Planning and Operations organization ("SPO"). His testimony is limited to the St. James PPA and the Iris Solar Facility. He provides an overview and describes the commercial details and expected contract terms for both projects.
- **Orlando Todd**: Mr. Todd is the Finance Director for ENO. He presents the estimated revenue requirements for NOSS and ISF, and presents the Company's proposal for the recovery of the costs associated with all three projects.

ENO'S 2016 RENEWABLES RFP

IX.

As Company witness Mr. Cureington describes more fully, on March 22, 2016, ESI published a public notice that ENO intended to issue a renewables-specific 2016 RFP. The notice provided the expected near-term milestones, a high-level description of why ENO chose to undertake the 2016 RFP, the parameters around the types and sizing of renewable resources that the 2016 RFP intended to solicit, ENO's intention to submit a 5 MW "self-build" solar project into the 2016 RFP, and the engagement of Mr. Wayne Oliver of Merrimack Energy Group Inc., to serve as the IM. To support the 2016 RFP, ESI also set up a public website where all notices were placed, draft and final 2016 RFP documents provided, and comments and questions could be submitted and reviewed by prospective bidders and interested parties.

Mr. Cureington describes the numerous and extensive measures ENO and ESI implemented as safeguards to ensure that information provided by bidders in response to the 2016 RFP was kept confidential and not improperly disclosed to, or used by, an employee, consultant, or other ESI representative or any Entergy competitive affiliate.

X.

The RFP was for 20 MW from existing or new resources that would use commercially-proven run-of-river hydroelectric, solar PV, or onshore wind. The 2016 RFP also stated a preference for resources within the ENO region. Among other things, this preference was stated to provide ENO with specific insight into the costs and feasibility of deploying renewable resources in and around Orleans Parish and because of the benefits of locating generation resources near the load they serve.

XI.

Participation in the 2016 RFP was robust, as ENO initially received 17 proposals representing approximately 325 MW of total capacity, although only one bid was received for a utility-scale project within Orleans Parish, representing 20 MW. The conforming bids ENO received were all for solar PV resources.

XII.

As Mr. Cureington more fully describes, although the Company would have certainly preferred to bring its Application for the addition of renewables to the Council much sooner, certain circumstances in the 2016 RFP made this extremely difficult. There were several key events that contributed to the delay in concluding the 2016 RFP negotiations and making the instant filing.

XIII.

In April 2017, the Company announced that it would voluntarily increase its commitment from the 20 MW sought in the 2016 RFP and would now pursue up to 100 MW of renewable resources. In May 2017, ENO selected three proposals, totaling approximately 45 MW. In September 2017, however, a significant complication arose that added significant time to the 2016 RFP, namely, that ENO learned that the two separate 20 MW solar resources selected had

not appropriately captured and reflected transmission interconnection costs in their proposals and were not willing to take on the additional risks, which directly conflicted with the instructions to bidders in the 2016 RFP. Another complication was the unsettled Suniva/SolarWorld trade case regarding whether the U.S. would impose tariffs on imported solar equipment. As a result of these complications, instead of negotiations concluding with the parties reaching two agreements to be filed, which would have led to an application in late 2017, negotiations faltered and eventually broke down altogether.

XIV.

In response to these circumstances, the Company consulted the IM and decided to allow all shortlisted bidders the opportunity to re-submit their bids with updated pricing information in order to expedite the process and avoid even further delays. Thus, essentially, the Company, in consultation with the IM, had to receive updated bids from RFP bidders, evaluate those bids, and enter into a second round of contract negotiations, which added a significant amount of time to the 2016 RFP process.

XV.

The IM was consulted and concurred with all of these actions. In fact, the IM stated in his Final Report that "the failure of negotiations with the two third-party bidders, one for a PPA and the other for an acquisition option, appears to be more of a product of an immature market rather than issues with the solicitation process"[6] and noted that when California was an immature market, the failure rate of renewable energy projects at the initiation of the Renewables Portfolio standard solicitations was close to 50%.

[6] *See* HSPM Exhibit SEC-6, Updated Final Report of the IM, at 42.

XVI.

In January 2018, the Company selected the 20 MW St. James PPA and a 20 MW New Orleans-located project, but also selected the 50 MW Iris Solar Facility to help ENO meet its commitment to deploying 100 MW of renewable energy. Following selections, the Company drafted the necessary lengthy contracts and then commenced negotiations. In June 2018, the Company successfully completed negotiations and signed the St. James PPA. In July 2018, the Company and the counter-party to the Iris Solar Facility agreed on the substantial components of the deal, but the contract and necessary internal approvals are not yet completed. With respect to the 20 MW New Orleans project selected in the 2016 RFP, however, the Company eliminated it from consideration after the bidder requested an additional price increase and also indicated that it did not have the resources available to complete the project. Accordingly, in July 2018, after consultation with the IM, the Company obtained site-control from the counter-party and pursued the 20 MW New Orleans project as an ENO self-build, which is now called NOSS.

THE RENEWABLES PORTFOLIO: THE RESOURCES

XVII.

In selecting the three solar PV proposals in the Company's Renewables Portfolio, ENO had to balance a number of objectives. As more fully discussed by Mr. Cureington, the stated objectives of the 2016 RFP were to evaluate and potentially procure renewable resources that could provide cost-effective supply, fuel diversity benefits, meet ENO's commitment to pursue up to 100 MW of renewables, and other potential benefits to ENO's customers. The Company also expressed a preference for resources located within its service territory, which carries a host of economic and supply related benefits. Given all of these considerations, ENO selected three projects comprising 90 MW for inclusion in its Renewables Portfolio. The Council should also

note that the IM's Final Report concluded that ENO's selections were reasonable. The Application will now describe each project in detail and explain ENO's rationale for selecting each project:

New Orleans Solar Station

XVIII.

As Mr. Jonathan Long Discusses in his Testimony, NOSS will provide approximately 20 MW of solar generating capacity, consisting of tens of thousands of PV modules. The plant will be located in New Orleans, Louisiana, within the property boundaries of the National Aeronautics and Space Administration's ("NASA") Michoud Assembly Facility. The plant will be protected by levees constructed 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 project will be constructed by engineering, procurement, and construction ("EPC") contractors under a fixed price, date certain form of EPC contract, and, including an allowance for funds used during construction ("AFUDC"), will cost an estimated $[redacted], including the costs to interconnect to the transmission system. It should be noted, however, that the Company is actively exploring ways to reduce this cost, including potential cost reductions in the final design of transmission interconnection requirements. 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 second quarter of 2020.

XIX.

As Mr. Long describes, there is not likely a more appropriate location for a utility-scale solar project within Orleans Parish. The NASA property is only twelve miles northeast of downtown New Orleans, it has available, under-utilized land that is relatively flat and dry, and

the site is protected by 24/7 professional security provided by NASA. The site fared well during Hurricane Katrina and now has the benefit of significant additional protections against hurricanes, storm surge, and flooding. In short, the NASA facility is a unique and ideal location for a utility-scale solar project within the City of New Orleans.

XX.

Given the magnitude of the NOSS project, and the Company's existing infrastructure for construction and project management, the Company has chosen to use solar and transmission EPC contractors to ensure that the resources necessary to execute this substantial undertaking are brought to bear in a timely and cost-effective manner. The NOSS project team conducted a competitive procurement process for the solar EPC portion of the project, following Entergy's Procurement Policy, and solicited seven EPC contractors to participate. This process provided the EPC pricing indicators that were used to develop the cost estimate. The execution of the solar EPC agreement is expected to occur by the fourth quarter of this year, and the Company will supply the final version of the agreement once executed. Construction under the EPC agreement will not commence until the contractor receives notice to proceed from the Company following Council approval of the project.

XXI.

As discussed by Company witness Seth E. Cureington, the project originally was submitted into the 2016 RFP as a build-own-transfer acquisition that would have been constructed by another party and purchased by ENO upon completion. However, following the second round of failed negotiations, the Company elected not to abandon the resource altogether, but instead to purchase site control (*i.e.*, purchase the long-term land lease with NASA and the MISO Interconnection position) from the RFP bidder and pursue the project as a self-build given

that it was the only utility-scale solar resource located in Orleans Parish submitted into the 2016 RFP.

XXII.

As discussed by Mr. Cureington, except for the approved NOPS (estimated on-line in 2020) and the recently approved 5 MW DG resource (COD 2019), the overwhelming majority of ENO's installed capacity is located outside of its service territory. Thus, the Company has a stated goal of building new resources in proximity to the load they will serve, which carries a host of benefits for customers. For example, to the extent it is available and producing, the resource could limit transmission losses that result from importing energy from remote locations and potentially mitigate transmission congestion price risk and supply power to help mitigate customers' exposure to LMPs.

XXIII.

As stated, NOSS is estimated to cost approximately $[redacted], resulting in an approximately $[redacted] net cost to customers. This project represents perhaps the only opportunity to build a significant utility-scale solar project in Orleans Parish, and as stated by Company witness Jonathan Long, the conditions at the NASA facility are ideal for the development of a solar resource. The Company performed its due diligence to ensure that the self-build's cost estimate is competitive by issuing an RFP for the solar EPC Contractor.

XXIV.

It should also be noted that it is not unexpected for a project located in a land-constrained, mostly urban area such as New Orleans to cost more on a $/Watt basis, as compared to a utility-scale, ground-mounted solar PV facility built in a rural area where costs for items such as land, permitting, and property taxes are much lower and there are no land constraints. It is also important, however, that the project will provide a significant local economic impact in

Orleans Parish from construction and related use of local labor, as well as sales, use, and property taxes paid to the City. This important benefit must also be taken into consideration and weighed against the cost of the resource.

XXV.

As discussed by Mr. Cureington, to assist the Council in its consideration of this important factor, the Company engaged an expert economist to conduct an economic impact study of NOSS on the regional economy. Based on this HSPM economic impact study, the total economic impact of NOSS is estimated to generate 537 jobs, over $[redacted] in labor income, and add over $[redacted] in new spending to the local economy, for a total incremental economic impact of over $[redacted] Importantly, the project is conservatively estimated to produce approximately $[redacted] in tax revenues paid to the City of New Orleans over the life of the Project. Again, these important benefits cannot be overlooked when weighing the economics of the generating unit.

St. James PPA

XXVI.

As Mr. Goin discusses in his Testimony, the resource that underlies the St. James PPA is a 20 MW to-be-constructed solar PV plant located in St. James Parish near Vacherie, Louisiana. The facility is a "greenfield" project to be owned by St. James Solar, LLC, which has secured and maintained site control for the facility through a long-term lease agreement for 200 contiguous acres.

XXVII.

As Mr. Goin describes, the St. James PPA is a long-term (20-year) agreement for the purchase of 20 MW of must-take, unit-contingent, as-available capacity, capacity-related benefits, environmental attributes, energy and other electric products from the facility. The PPA

has an estimated total nominal value of $[redacted] based on the contractual Annual Guaranteed Energy Quantity ("AGEQ") and an estimated total nominal value of $[redacted] based on the contractual Annual Expected Energy Quantity ("AEEQ"). The delivery term is 20 years, but will be extended to the end of the MISO planning year if the delivery term and the MISO planning year do not align. The guaranteed commercial operation date is [redacted]. Mr. Going provides a summary of the St. James PPA's contract terms.

XXVIII.

The St. James PPA was selected from the RFP because it was the highest economically ranked proposal, with an estimated total net benefit of $[redacted] to customers in the form of reduced total supply cost savings.

Iris Solar Facility

XXIX.

As Mr. Goin discusses in his Testimony, the Iris Solar Facility is a 50 MW solar PV electric generation facility that will be constructed by a third-party and acquired by ENO. The facility will be located on a remote approximately 440 acre "greenfield" site in Washington Parish, Louisiana. The site will be subject to a long-term lease, with options to extend at the end of the term.

XXX.

The acquisition is structured as a build-own-transfer, or "B-O-T," asset acquisition. Under the proposed B-O-T structure, the seller would design and build the Iris Solar facility if ENO obtains the required regulatory approvals and other necessary conditions to the issuance of notice to proceed are met. After the plant has achieved a prescribed level of completion and other closing conditions have been satisfied, ENO would buy the plant and related assets from the seller for the pre-agreed purchase price. ENO structured the timing of the acquisition to

ensure that ENO would have the opportunity to obtain the federal investment tax credit ("ITC") available for the project. The closing of the Iris Solar transaction is projected to close in the first half of 2021. A summary of select expected contract terms is contained in Mr. Goin's testimony.

XXXI.

The estimated purchase price for the acquisition is $[redacted], subject to certain adjustments. The purchase price does not include approximately $[redacted] that is estimated for transaction costs (including regulatory costs), construction oversight costs, and contingency, bringing the total costs of the project to an estimated $[redacted]. It is important to note that these additional costs are based on a conservative estimate, and it is entirely possible that the full $[redacted] will not be incurred.

XXXII.

As discussed by Company witness Seth E. Cureington, the proposal was selected over an economic PPA in order to help ENO achieve its 100 MW renewable commitment and in order to give ENO more control over the asset, creating long-term cost certainty and stability for customers. As Mr. Cureington discusses, the project is estimated to produce a total net benefit of $[redacted] before accounting for the estimated transaction costs (including regulatory costs), construction oversight costs, and contingency, and the project is estimated to produce a total net benefit of $[redacted] once the additional costs are included.

COST RECOVERY REQUESTS

XXXIII.

ENO requests a Council decision, supported by the evidence and sound regulatory principles, that the Renewables Portfolio is in the public interest and, therefore, prudent. There are multiple potential benefits associated with the addition of the Renewables Portfolio. Those benefits, however, do not come without a cost. Therefore, ENO also requests that the Council

approve the proposed cost recovery treatment, which is discussed by Company Witness Mr. Orlando Todd.

XXXIV.

As Mr. Todd explains, the incremental costs associated with NOSS and ISF fall within two broad categories: (1) capital investment (*i.e.*, the cost to construct the projects) and ongoing operations and maintenance expense ("O&M"); and (2) any revenue or expense resulting from MISO market settlements. The Company proposes that the first category initially be recovered through the Purchased Power and Capacity Acquisition Cost Recovery Rider ("PPCACR Rider"), as modified by the 2018 Combined Rate Case, then realigned to base rates in the next Formula Rate Plan filing. Regarding the second category, MISO costs and revenues, the Company proposes that those market settlements be recognized in the Company's Fuel Adjustment Clause ("FAC"), consistent with the Council-approved treatment of those MISO market settlement revenues and expenses attributable to other ENO resources.

With respect to the costs associated with the St. James PPA, the Company proposes for its costs to be recovered through the Company's FAC, since they will be incurred in the form of energy-only payments that will be unaffected by the capacity provided by the facility.

CUSTOMER BENEFITS AND PUBLIC INTEREST

XXXV.

As this Application and supporting Direct Testimony explain, the Renewables Portfolio offers a number of potential benefits to customers, which include but are not limited to the following: (i) environmental benefits associated with providing incremental zero-emitting energy; (ii) protection against uncertainty in the level and volatility of future natural gas prices, changes in environmental regulations (*e.g.*, regulation of CO_2 emissions), and the LMPs of

energy purchased from MISO at the New Orleans Load Zone; (iii) substantial local economic benefits in the form of jobs, increased spending, and increased tax revenues to the City of New Orleans with respect to one of the projects; (iv) increased supply cost savings with respect to two of the projects; and (v) making New Orleans a leading regulatory jurisdiction for solar adoption.

XXXVI.

For all of the reasons described herein, and in the Direct Testimony filed in support of this Application, the Council should find that ENO's implementation of the Project is in the public interest.

SERVICE OF NOTICES AND PLEADINGS

XXXVII.

The Company requests that notices, correspondence, and other communications concerning this Application be directed to the following persons:

Gary E. Huntley
Vice President, Regulatory and
Governmental Affairs
Entergy New Orleans, LLC
1600 Perdido Street
New Orleans, Louisiana 70112

Timothy S. Cragin
Brian L. Guillot
Alyssa Maurice-Anderson
Harry M. Barton
Entergy Services, Inc.
639 Loyola Avenue
Mail Code: L-ENT-26E
New Orleans, Louisiana 70113

REQUEST FOR CONFIDENTIAL TREATMENT

XXXVIII.

Certain exhibits supporting the Direct Testimonies of Orlando Todd, Seth E. Cureington, Jonathan E. Long, and Michael J. Goin, as well as their Direct Testimonies and this Application, contain information considered by ENO to be proprietary and confidential. Public disclosure of certain of this information may expose ENO and its customers to an unreasonable risk of harm. This is especially true considering that two of the projects at issue are in the final stages of

development and commercially sensitive terms and pricing information are at issue. Therefore, in light of the commercially sensitive nature of such information, these exhibits bear the designation "Highly Sensitive Protected Materials" or words of similar import. The confidential information and documents included with the Application may be reviewed by appropriate representatives of the Council and its Advisors pursuant to the provisions of the Official Protective Order adopted in Council Resolution R-07-432 relative to the disclosure of Highly Sensitive Protected Materials. As such, these confidential materials shall be exempt from public disclosure, subject to the provisions of Council Resolution R-07-432.

REQUEST FOR TIMELY TREATMENT

XXXIX.

The Company also requests that the Council issue the approvals requested herein following a six-month procedural schedule. This procedural schedule will allow the Company to issue notice to proceed on the renewable projects and facilitate their commercial operation in a timely manner.

PRAYER FOR RELIEF

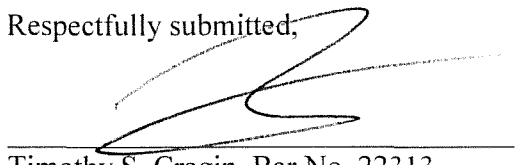
WHEREFORE, Entergy New Orleans, LLC respectfully requests that the Council, subject to the fullest extent of its jurisdiction, grant relief and give its approval as follows:

1. Find that the Company's proposed Renewables Portfolio serves the public convenience and necessity and is in the public interest, and is, therefore, prudent;

2. Find that costs associated with the St. James PPA, NOSS, and ISF are eligible for recovery from customers, and that the Company will have a full and fair opportunity to recover all prudently-incurred costs related to these projects;

3. With respect to NOSS and ISF, find that the retail revenue requirements associated with the projects (to be determined in a subsequent revenue requirement filing) are deemed eligible for recovery in the first billing cycle of the month following commercial operation via the applicable PPCACR Rider, which would be modified for such purpose, or a similar exact cost recovery rider;
4. With respect to the St. James PPA, approve recovery, though the FAC, of the energy costs and expenses incurred under the PPA;
5. Grant a waiver of any applicable requirement to the extent that such a waiver may be required to facilitate approval of the transaction described in this Application; and
6. Order such other general and equitable relief as to which the Company may show itself entitled.

Respectfully submitted;



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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-__**

DIRECT TESTIMONY

OF

SETH E. CUREINGTON

ON BEHALF OF

ENTERGY NEW ORLEANS, LLC

PUBLIC VERSION

HIGHLY SENSITIVE PROTECTED MATERIALS HAVE BEEN REDACTED PURSUANT TO COUNCIL RESOLUTION R-07-432

JULY 2018

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EXHIBIT LIST

Exhibit SEC-1	List of Prior Testimony
Exhibit SEC-2	Projected Load and Capability **(HSPM)** (CD-ROM)
Exhibit SEC-3	IMM State of the Market Report (June 2017) (CD-ROM)
Exhibit SEC-4	2016 Renewable RFP documents (CD-ROM)
Exhibit SEC-5	ENO Operating Committee presentation (Jan 2018)**(HSPM)**
Exhibit SEC-6	*Updated Final Report of the Independent Monitor: Entergy Services, Inc. 2016 Request for Proposals For Long-Term Renewable Generation Resources for Entergy New Orleans, Inc*., July 13, 2018, Prepared by Merrimack Energy Group, Inc. **(HSPM)** (CD-ROM)
Exhibit SEC-7	ENO Operating Committee presentation (May 2017)**(HSPM)** (CD-ROM)
Exhibit SEC-8	Scope of Work Activities for Independent Monitor Service
Exhibit SEC-9	NOSS Economic Impact Study **(HSPM)** (CD-ROM)

I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME AND CURRENT BUSINESS ADDRESS.

A. My name is Seth E. Cureington. My business address is 1600 Perdido Street, New Orleans, Louisiana 70112.

Q2. WHAT ARE YOUR CURRENT DUTIES?

A. I am employed by Entergy New Orleans, LLC, ("ENO" or the "Company") as Director, Resource Planning and Market Operations. In that capacity, among other activities, I provide resource planning services to ENO.

Q3. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying in this proceeding before the Council of the City of New Orleans ("CNO" or the "Council") on behalf of ENO.

Q4. WHAT ARE YOUR RESPONSIBILITIES AS DIRECTOR, RESOURCE PLANNING AND MARKET OPERATIONS?

A. As Director of ENO's Resource Planning and Market Operations Department, I am responsible for providing oversight to all of ENO's integrated resource planning efforts, implementation plans, and market operations in the Midcontinent Independent System Operator, Inc. ("MISO") regional transmission organization ("RTO"). I also serve as the Chairman of the ENO Operating Committee (the "OC").

Q5. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I earned a Bachelor of Science degree in 2001 and a Master of Science in Economics in 2004 from Louisiana State University.

I began my career with Entergy Services, Inc. ("ESI")[1] as a Senior Analyst with the System Planning and Operations ("SPO") organization in 2006, where I was responsible for providing technical and analytical support for a wide range of commercial and supply procurement activities for the EOCs. I remained with SPO for the following six years, during which time I was promoted to the role of Senior Wholesale Executive with the Commercial Operations Group where I was responsible for leading the technical and commercial evaluation of all long-term generation supply opportunities in support of the EOCs' portfolio transformation initiative. In 2011, I joined ENO's Regulatory Affairs organization as Manager, Resource Planning where I was responsible for providing oversight to the development of ENO's integrated resource plans and providing guidance and analytical support to ENO's Regulatory Affairs group with respect to the integrated resource planning process. In 2013, my responsibilities were expanded to include oversight of market operations in MISO, and in June 2016, I was promoted to Director, Resource Planning and Market Operations.

[1] ESI is a service company affiliate of the Entergy Operating Companies ("EOCs") and provides engineering, planning, accounting, technical, and regulatory-support services to each of the EOCs. The five current EOCs are Entergy Arkansas, Inc. ("EAI"), Entergy Louisiana, LLC ("ELL"), Entergy Mississippi, Inc. ("EMI"), ENO, and Entergy Texas, Inc. ("ETI").

Q6. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE CITY COUNCIL?

A. Yes. I have attached as Exhibit SEC-1 a listing of my prior testimony before the Council.

Q7. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am testifying in support of the Company's Application, which seeks approval of its proposed renewable energy resources portfolio consisting of a 20 megawatts ("MW") self-build solar project located in New Orleans East ("New Orleans Solar Station" or "NOSS"), a 50 MW acquisition of a solar project located outside of Orleans Parish ("Iris Solar Facility" or "ISF"), 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"). As discussed more fully below, two of the projects were selected from the 2016 ENO Renewables Request for Proposals ("2016 RFP"), while the third resource, NOSS, originated from the 2016 RFP and was transitioned into a self-build due to the bidder's inability to hold its 2016 RFP pricing or dedicate sufficient resources to the project such that it would actually be completed. It should be noted that while the St. James PPA has been executed and has obtained all necessary corporate approvals, both NOSS and ISF are in the final stages of development and are subject to all necessary corporate approvals. The Company will file the contracts related to NOSS and ISF in this docket once they are signed and all internal approvals have been received. My Direct Testimony proceeds as follows:

- First, I provide data indicating that New Orleans will be a leading utility jurisdiction in terms of solar adoption following completion of the Renewables Portfolio;
- I then provide an overview of ENO's long-term resource needs and how the Renewables Portfolio will help address those needs;
- Next, I provide an overview of the 2016 RFP, including but not limited to an explanation of the timeline, procedural safeguards, and the inclusion of an independent monitor ("IM"), who was consulted at every major RFP milestone;
- Finally, I explain the 2016 RFP evaluation process and provide a general overview of the evaluation results. I also provide ENO's rationale for selecting each resource included in the proposed Renewables Portfolio.

II. LONG-TERM RESOURCE NEEDS

Q8. PLEASE DESCRIBE THE COMPANY'S CURRENT RESOURCE PORTFOLIO.

A. As of June 1, 2018, the Company controls approximately 1,149 MW of existing long-term generating capacity either through ownership or life-of-unit PPAs with affiliate EOCs. Two additional projects are under construction, which together total another approximately 133 MW.[2] Table 1, below, summarizes the Company's long-term capacity resources by fuel type. As reflected therein, approximately one-half of the capacity in the Company's resource portfolio is from natural gas-fired, combined cycle gas turbine ("CCGT") resources. The bulk of the remaining capacity consists of nuclear and

[2] These two projects are the New Orleans Power Station and a 5 MW rooftop solar project, both of which were approved by the Council.

Reciprocating Internal Combustion Engine ("RICE") resources, followed by legacy gas,[3] coal, hydro, and solar photovoltaic ("PV") resources.[4]

Table 1

ENO Installed Capacity (2020)		
Fuel Type	**MW**	**%**
CCGT	631	49%
Nuclear	422	33%
RICE/CT	129	10%
Legacy Gas	59	5%
Coal	33	3%
Hydro	2	0%
Solar PV	6	0%
Total	1,283	100%

Q9. IF THE COUNCIL APPROVES ENO'S RENEWABLES PORTFOLIO, WOULD RENEWABLE RESOURCES BECOME A SIGNIFICANT PORTION OF ENO'S RESOURCE MIX?

A. Yes. Assuming the Council approves the proposed Renewables Portfolio, the amount of renewables in ENO's resource portfolio will total 98 MW. This amount includes 90 MW that are currently being proposed in this Application, the 5 MW distributed-scale solar project already approved by the Council in Docket No. UD-17-05, ENO's contract for 2 MW of legacy hydro currently in its portfolio, and the 1 MW solar plus battery storage facility currently located at ENO's A.B. Paterson site. Accordingly, from a capacity

[3] The term "Legacy Gas" refers to the EOCs' natural gas-fired steam turbine generators originally placed in service at various points in time during the 1950s, 1960s and 1970s.

[4] Table 1 does not include Load Modifying Resources, however, these resources are included in the Company's assessment of long-term resource needs shown in HSPM Exhibit SEC-2.

perspective the total amount of renewables in ENO's resource mix would be approximately ~8% of the Company's total capacity.

Q10. HOW WOULD THE RENEWABLES PORTFOLIO IMPACT THE MAKEUP OF THE COMPANY'S EXISTING RESOURCE PORTFOLIO?

A. As I indicate above, including the Renewables Portfolio in the Company's resource mix would represent approximately ~8% of the Company's total generating capacity. The Renewables Portfolio would largely meet the Company's voluntary commitment to pursue up to 100 MW of renewables, and by approving the Company's request, the Council would facilitate more than an 11-fold increase in the amount of clean emissions-free renewable resources within the Company's portfolio in a single certification proceeding.

Q11. HOW DOES THIS MAKEUP COMPARE TO OTHER STATES AND UTILITIES ACROSS THE COUNTRY?

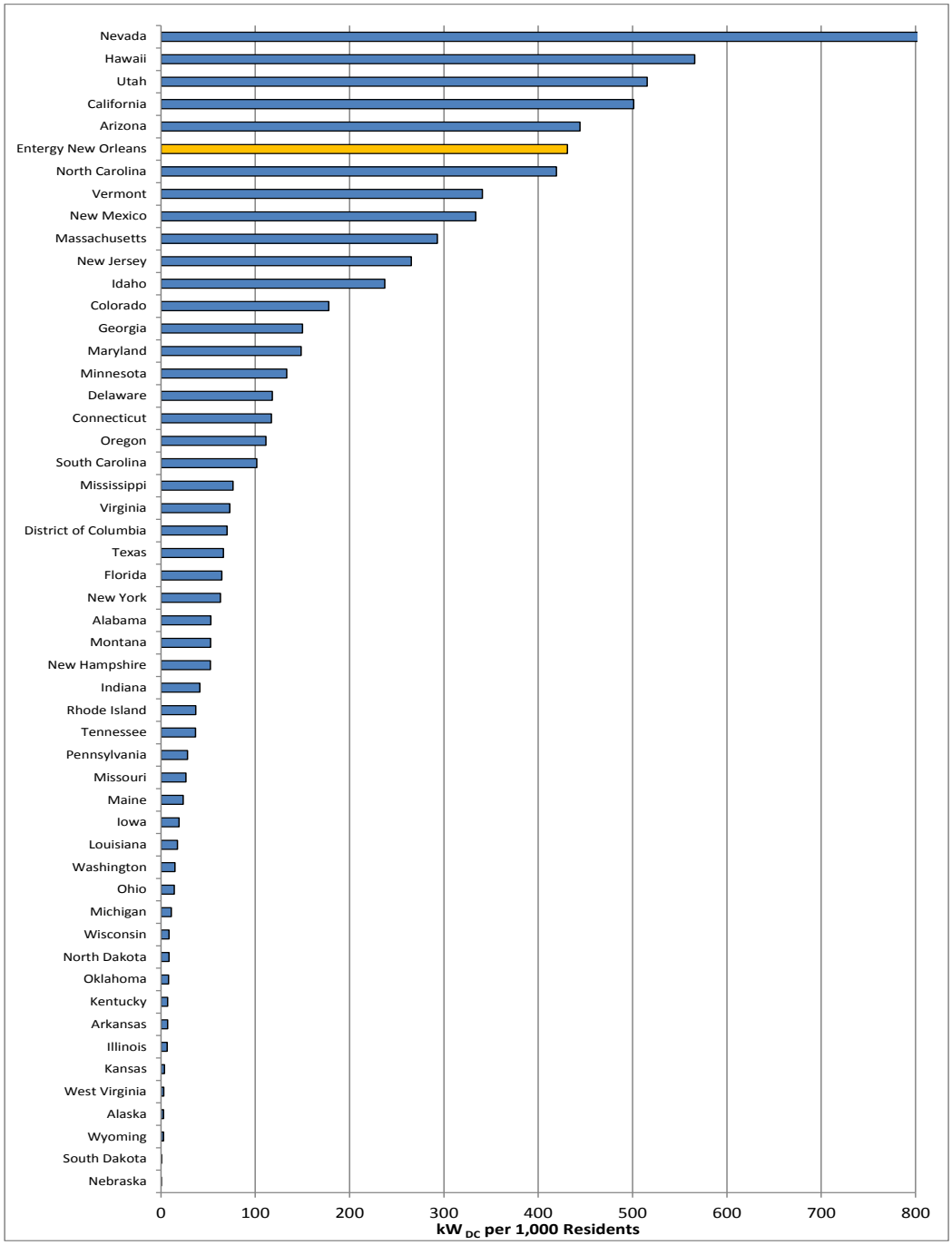
A. If the Renewables Portfolio is approved, New Orleans would be a leader in the U.S. As indicated in Figure 1 below,[5] which compares the Company's existing and planned solar resources plus existing customer-owned solar resources (all on a direct current, or DC, basis) to the cumulative amount of solar located in each state through 2017, New Orleans would compare very favorably to areas as large as entire states, coming in at 6th overall, which will put it ahead of 46 other states including the District of Columbia. It should be

[5] Sources: EIA/GTM Solar Market Insight Report, Year End 2017 & EIA 861.

noted that Figure 1 reflects ENO's planned solar resources, but does not reflect planned additions in other states that may come on-line over the next few years.

Figure 1: Cumulative Solar Installations through 2017

Includes customer-owned solar



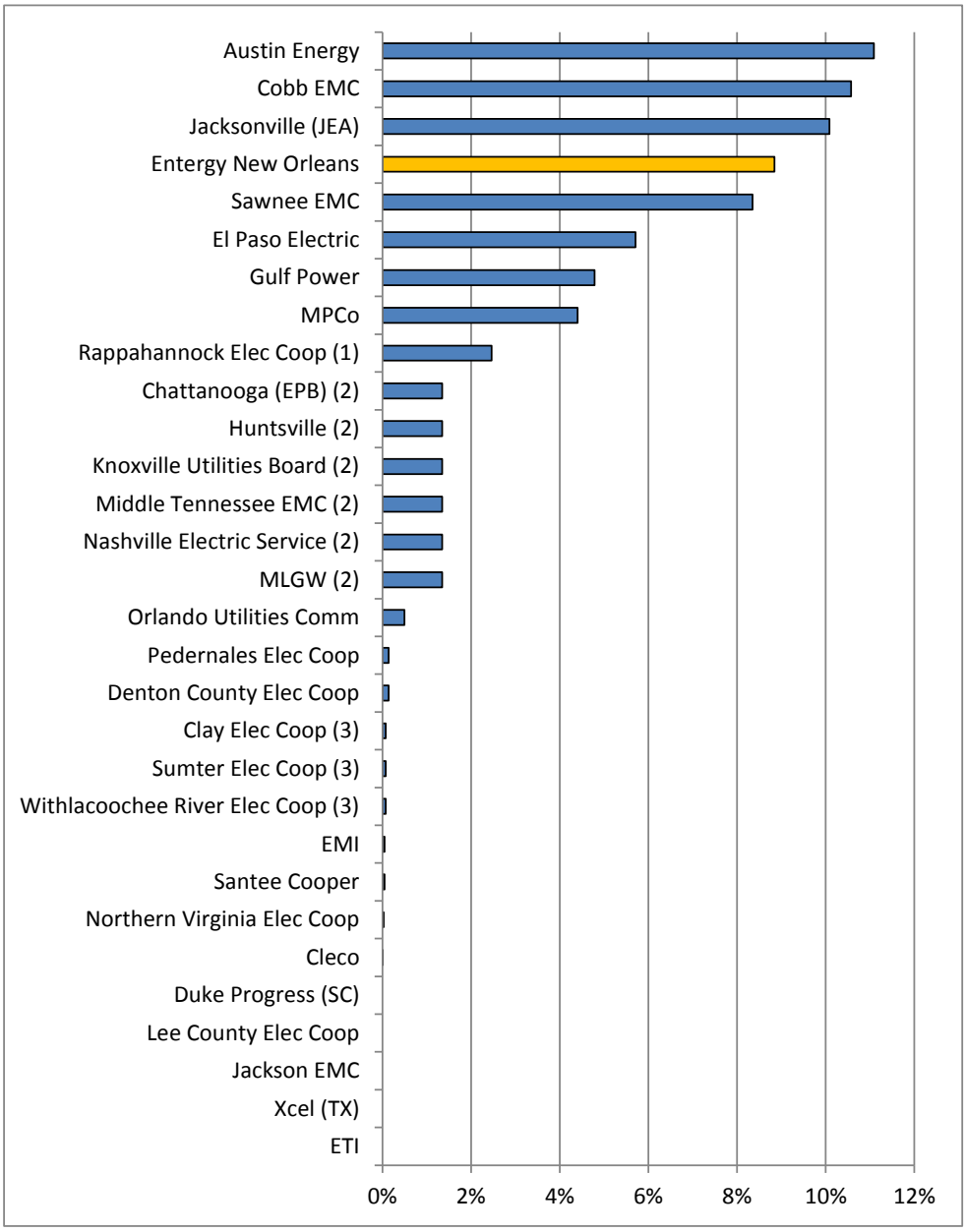
Q12. HOW DOES ENO'S SOLAR DEPLOYMENT COMPARE TO UTILITIES OF A SIMILAR SIZE?

A. When looking at similarly-sized utilities in the region, the Company compares favorably. As shown in Figure 2,[6] among electric utilities in the southern U.S. with between 150,000 and 500,000 retail electric customers, ENO would rank 4th out of 30 utilities for total solar capacity as a share of generating portfolio capacity, placing the Company among only a handful of similarly-sized utilities that have achieved such a significant adoption of solar.

[6] Sources: EIA 861 2016 Data, internal research effort.

Figure 2: Solar Capacity as a % of 2016 Portfolio Generation Capacity

Does not include customer-owned solar
Only utilities with 150,000 to 500,000 customers



Notes:
(1) Rappahannock purchases wholesale electricity from Old Dominion Electric Coop; chart reflects portion of ODEC's load served by solar.
(2) Chattanooga, Huntsville, Knoxville, Middle Tennessee, Nashville, and MLGW purchase wholesale electricity from TVA; chart reflects portion of TVA's load served by solar.
(3) Clay, Sumter, and Withlacoochee River purchase wholesale electricity from Seminole Electric Coop; chart reflects portion of Seminole Electric Coop's load served by solar.

Q13. WOULD ADDING RENEWABLE CAPACITY BENEFIT ENO'S CUSTOMERS?

A. Yes. The addition of the Renewables Portfolio will provide benefits to customers. The Renewables Portfolio will further diversify the Company's mix of generating resources, which will provide a partial long-term hedge against uncertainty in the production cost of the Company's existing portfolio. Examples of such risks the Renewables Portfolio would mitigate include uncertainty in the level and volatility of future natural gas prices, changes in environmental regulations (*e.g.*, regulation of CO_2 emissions), and the Locational Marginal Price ("LMPs") of energy purchased from MISO at the New Orleans Load Zone. Finally, the Renewables Portfolio would support the Company's longstanding efforts to reduce its carbon footprint.[7]

Q14. DOES ENO VIEW THE ADDITION OF RENEWABLES AS A BUSINESS PRIORITY?

A. Yes. It is important to state at the outset that the commitment to pursue 100 MW was a voluntary commitment and is a vital part of ENO's transitioning into the future. Although the Company would have certainly preferred to bring its Application for the addition of renewables to the Council much sooner, certain circumstances in the 2016 RFP, which are discussed more fully below, made this extremely difficult. Nevertheless, the addition of renewables is an important business goal, and ENO remains committed to meeting that goal and providing the benefits of renewable resources to its customers. Indeed, other Entergy Operating Companies are also pursuing renewable resources, as reflected in the

[7] http://www.entergy.com/environment/

recent announcement by Entergy Corporation's Chief Executive Officer ("CEO") that the EOCs are collectively pursuing ~1,000 MW of renewable resources, which are in various stages of development. Impressively, upon approval and construction of the Renewables Portfolio, ENO will own roughly 10% of the 1,000 MW of renewable resources in the Entergy Fleet as currently planned, even though it only serves roughly 5% of total Entergy load.

Q15. BEFORE DISCUSSING ENO'S CAPACITY NEEDS, HOW WILL THE RENEWABLES PORTFOLIO FIT WITHIN ENO'S EXISTING GENERATING PORTFOLIO?

A. The Renewables Portfolio fully complements ENO's existing and planned resource portfolio. Solar generation is mainly an energy resource since its capacity value is diminished by its intermittent nature. Thus, MISO discounts the capacity assigned to solar resources by 50% in the first year of operation. That amount is subject to further adjustment in subsequent years based on actual unit performance. In other words, much of the value of renewable resources is in the energy they generate, which is produced at a low variable cost and is emission free. It is also important to note, however, that when the sun isn't shining, the output of solar resources diminishes; thus, to support their integration into a supply portfolio requires that utilities have other resources that can be ramped up and down in response to intermittency of the solar generation. ENO's gas generation is well suited for this purpose, especially the New Orleans Power Station

which will be located in New Orleans and designed to provide back-up to intermittent renewable resource additions.

Q16. ACKNOWLEDGING THAT MUCH OF THE VALUE OF SOLAR RESOURCES LIES IN THEIR ENERGY PRODUCTION, CAN ENO USE THE ASSUMED DISCOUNTED LEVEL OF CAPACITY FOR PURPOSES OF LONG-TERM PLANNING?

A. Yes. ENO has a need for long-term capacity and includes the capacity of planned solar resources, discounted to 50% of nameplate capacity, in its capability projections to help meet this long-term need. To calculate the Company's long-term capacity needs, I've attached a Projected Load and Capability analysis as HSPM Exhibit SEC-2, which compares ENO's projected non-coincident peak load (grossed up for transmission and distribution losses) plus a target Planning Reserve Margin ("PRM") of 12%, against its portfolio of existing and approved supply- and demand-side resources (based on dependable capacity ratings). The results of the analysis provide ENO's projected long-term capacity needs, with and without the proposed Renewables Portfolio.

Q17. WHAT DOES THE ANALYSIS INDICATE?

A. Projected peak load plus the target PRM results in a long-term capacity need that exceeds the Company's long-term supply and demand-side resources in many years of the planning horizon, indicating a need to deploy additional long-term resources. As shown in HSPM Exhibit SEC-2, without the Renewables Portfolio, the Company projects an overall need for approximately 19 MW of capacity by 2021 and up to 96 MW by 2032.

When the Renewable Portfolio is accounted for, the analysis shows a very modest average 29 MW surplus (*i.e.*, an average of 2% of the Company's projected total load requirement) for eight years of the 20-year planning horizon, after which the Company projects the need for additional capacity associated with the deactivation of legacy gas and coal units, which need is projected to substantially increase upon the deactivation of Union Power Block 1.

Q18. IS IT REASONABLE FOR THE COMPANY TO MAINTAIN A VERY MODEST SURPLUS IN SEVERAL YEARS OF THE PLANNING HORIZON?

A. Yes. Developmental capacity additions are necessarily "lumpy." It is not feasible for ENO to add exactly the amount of incremental capacity it projects it will need each year and continue to serve customers reliably at a reasonable cost. Importantly, it is unreasonable to expect that resource additions can be perfectly matched to resource needs regardless of the technology under consideration. In fact, the MISO Independent Market Monitor has recently stated that load-serving entities "have generally built resources to achieve a small surplus over the minimum requirement because: Investment in new resources is 'lumpy,' occurring in increments larger than necessary to match the gradual growth in a [utility's] requirement; and the costs of being deficient are large."[8]

When making long-term resource planning decisions, it is appropriate to consider the entire planning horizon over which resource needs have been identified. Without the addition of the Renewables Portfolio, the Company is projected to maintain a capacity

[8] *See* Exhibit SEC-3, page 16. in its 2016 State of the Market Report, released in June 2017.

deficit throughout the 20-year planning horizon, which deficit is projected to grow, exposing customers to a volatile and potentially risky capacity market. When the Renewables Portfolio is added, as mentioned above, the Company is projected to maintain a modest surplus in 8 years of the 20-year planning horizon. In that 8-year period, given that the modest surplus is well within the margin of error in the Company's load forecasting, it is certainly possible that the Company would not maintain a surplus even if the Renewables Portfolio is added. Moreover, any temporary excess capacity (assuming all contemplated resources materialize) provides a hedge, albeit a modest one, against unforeseen events such as deactivation of legacy gas generation earlier than currently assumed and potential load growth beyond that reflected in the most recent load forecast (*i.e.*, such as might occur through increased use of electric vehicles ("EVs")).

Q19. PLEASE ELABORATE ON THE CIRCUMSTANCES THAT COULD INCREASE ENO'S NEED FOR GENERATING CAPACITY.

A. Several of the existing legacy gas-fired units included in the Company's portfolio are approaching the end of their useful lives and are subject to deactivation earlier than expected. There are approximately 60 MW of allocated capacity associated with legacy units scheduled for deactivation within the planning horizon. Also, the Company's portfolio also currently includes approximately 33 MW of coal-fired generating capacity originating from long-term power purchase agreements with EAI for the White Bluff and Independence generating facilities. If even a portion of this capacity is deactivated sooner

than scheduled, the Company's resource needs would increase sooner than projected, further exposing ENO's customers to market and supply-related risks.

III. 2016 RFP OVERVIEW

Q20. PLEASE DESCRIBE THE 2016 RFP.

A. On March 22, 2016, ESI published a public notice that ENO intended to issue a renewables-specific 2016 RFP. The notice provided the expected near-term milestones, a high-level description of why ENO chose to undertake the 2016 RFP, the parameters around the types and sizing of renewable resources that the 2016 RFP intended to solicit, ENO's intention to submit a 5 MW "self-build" solar project into the 2016 RFP, and the engagement of Mr. Wayne Oliver of Merrimack Energy Group Inc. to serve as the IM. To support the 2016 RFP, ESI also set up a public website[9] where all notices were placed, draft and final 2016 RFP documents provided, and comments and questions could be submitted and reviewed by prospective bidders and interested parties.

On May 6, 2016, ESI provided notice to prospective bidders and other interested parties that the website had been updated with the various draft 2016 RFP documents and that a public bidder's conference would be held at ENO's offices on June 1, 2016. The notice of the public bidder's conference also provided dial-in information for interested participants who could not attend in person. ENO held the public bidder's conference as scheduled on June 1, 2016, and 22 attendees, representing a range of interested parties, participated. At the conference, ESI and ENO staff, including myself, presented

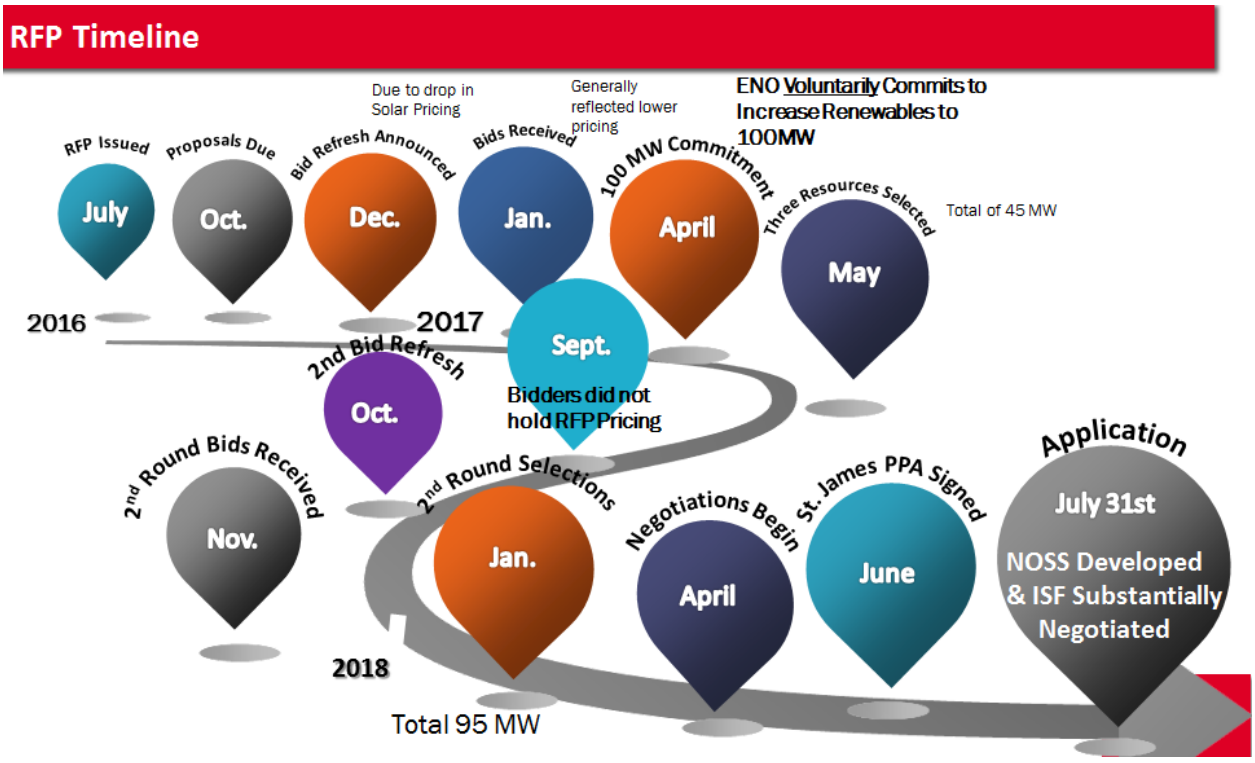
[9] https://spofossil.entergy.com/ENTRFP/SEND/2016ENOIRenewableRFP/Index.htm

information about ENO's 2016 RFP and addressed any questions or concerns raised by prospective bidders. Additionally, the 2016 RFP website also provided a specific email address to the 2016 RFP Administrator for the submission of questions and comments. All questions and answers were reviewed with the IM and posted on the RFP website for the benefit of other potential bidders and interested parties.

ENO and ESI issued the final 2016 RFP documents on July 13, 2016, which are attached as Exhibit SEC-4. The Company's self-build proposal was due September 30, 2016, and all other 2016 RFP bids were due the week of October 3, 2016 but no later than October 6, 2016.

Q21. PLEASE DESCRIBE THE EVENTS FOLLOWING THE OCTOBER 2016 RFP DEADLINE FOR BIDDER PROPOSALS AND EXPLAIN WHY IT HAS TAKEN NEARLY 2 YEARS TO FILE THE INSTANT APPLICATION.

A. The following graphic illustrates the 2016 RFP timeline:



As shown on the graphic above, there were several key events that contributed to the delay in concluding the 2016 RFP negotiations and making the instant filing.[10] To begin, in January 2017, following the initial evaluation of bids received and the selection of its shortlisted bidders, ENO allowed shortlisted bidders to submit a best and final offer in hopes of taking advantage of a potential decrease in solar panel pricing that was

[10] See Exhibit SEC-5, ENO Operating Committee presentation (HSPM), at slides 5-7. See also Exhibit SEC-6: Updated Final Report of the Independent Monitor: Entergy Services, Inc. 2016 Request for Proposals For Long-Term Renewable Generation Resources for Entergy New Orleans, Inc., July 13, 2018, Prepared by Merrimack Energy Group, Inc., which generally corroborates all of the events described in this response.

occurring at the time. Several bidders took advantage of that opportunity and submitted updated offers reflecting lower overall pricing. Following the submission of best and final offers, ENO continued to evaluate the bids received using detailed evaluation criteria, which is described more fully below.

In April 2017, ENO's CEO Charles L. Rice, Jr. sent a letter to the Council's Advisors stating that although ENO had issued a 2016 RFP for 20 MW of renewable resources, the Company would voluntarily increase its commitment and would now pursue up to 100 MW of renewable resources.

In May 2017, ENO selected three proposals, totaling approximately 45 MW (*i.e.*, a 20 MW solar PPA, the 5 MW distributed rooftop solar project subsequently approved in Docket No. UD-17-05, and a 20 MW utility-scale project located in New Orleans).[11]

In September 2017, however, a significant complication arose that added significant time to the 2016 RFP, namely, that ENO learned the shortlisted bidders representing separate 20 MW solar resources had not appropriately captured and reflected transmission interconnection costs in their proposals and were not willing to take on the additional risks of increased transmission costs (*i.e.*, they would not maintain their proposals as bid). This failure to include transmission interconnection costs directly conflicted with the instructions to bidders in the RFP. As a result, instead of negotiations concluding with the parties reaching two agreements to be filed, which would have led to an application in late 2017, negotiations faltered and eventually broke down altogether.

[11] *See* ENO Operating Committee presentation (HSPM), attached as Exhibit SEC-7.

Another complication that occurred in 2017 was the unsettled Suniva/SolarWorld trade case regarding whether the U.S. would impose tariffs on imported solar equipment. The trade case was filed in April 2017 and started to gain traction and attention during the summer of 2017 as industry experts began to forecast potential impacts on module pricing. This created a risk to bidders whose costs would be affected by new tariffs.

In response to these circumstances, the Company consulted the IM, who suggested that two reasonable paths forward would be to (1) allow all shortlisted bidders the opportunity to re-submit their bids with updated pricing information, or (2) re-open the 2016 RFP to all potential bidders.[12] The Company and the IM agreed that in order to expedite the process and avoid even further delays, the path allowing all shortlisted bidders to reprice was the most reasonable, fair, and expedient course of action. In October 2017, the Company notified all shortlisted bidders of the opportunity to update their bids to account for all costs, including those related to transmission and the unsettled trade case.

In November 2017, ENO received updated pricing from four out of five shortlisted bidders. Bidders offered over 20 pricing options, which included pricing with and without tariffs given that there was no clear outcome to the trade case at that time. After receiving the updated bids, ENO began to evaluate them using the RFP evaluation process.

In January 2018, the White House announced its decision related to the U.S. International Trade Commission investigation into imported solar panels. In late January 2018, ENO completed its evaluation and made its selections. The Company selected the

[12] *See* Exhibit SEC-6, Updated Final Report of the IM, at 39.

20 MW St. James PPA and a 20 MW New Orleans-located project, but also selected the 50 MW Iris Solar Facility to help ENO meet its commitment to deploying 100 MW of renewable energy. Following selections, the Company drafted the lengthy contracts necessary to start negotiations and then commenced negotiations in April 2018.

In June 2018, the Company successfully completed negotiations on the St. James PPA, and in July 2018, the Company and the counter-party to the Iris Solar Facility agreed on the substantial components of the deal, which are discussed more fully by Company witness Michael J. Goin. With respect to the 20 MW project in New Orleans, however, the Company sent a letter to the counter-party eliminating it from the 2016 RFP in July 2018 after the bidder requested an additional price increase and also indicated that it did not have the resources available to complete the project. Accordingly, in July 2018, after consultation with the IM, the Company obtained site-control from the counter-party and pursued the project as an ENO self-build (referred to herein as the New Orleans Solar Station, or NOSS), the technical details of which are discussed more fully in the testimony of Company witness Jonathan E. Long.

In summary, the timeline associated with the 2016 RFP was extended mainly by the need to allow pricing updates as I describe above, and consequently a second round of 2016 RFP evaluations, followed by another extensive negotiation process. While the Company would have certainly preferred to bring its Application to the Council much sooner, the circumstances made doing so extremely difficult.

Moreover, it should also be noted that the IM was consulted and concurred with all of the actions discussed in this response. In fact, he concluded in his Final Report that the

market for renewables in Louisiana is very immature, and it is not therefore unexpected that projects ultimately will fail and not be constructed.[13] The IM stated that "the failure of negotiations with the two third-party bidders, one for a PPA and the other for an acquisition option, appears to be more of a product of an immature market rather than issues with the solicitation process" and noted that not all of the 2016 RFP bidders had reached Phase II in the MISO interconnection process before submission of their proposals into the RFP, as compared to mature markets."[14] This means that the projects were not mature and it is therefore unsurprising that they encountered significant complications.

The IM notes that when California was an immature market, the failure rate of renewable energy projects at the initiation of the Renewables Portfolio standard ("RPS") solicitations was close to 50%. Ultimately, this 2016 RFP process was successful in that it led to the selection of 95 MW of renewable resources, but also in that it was an invaluable learning experience for the Company. Several adjustments have been made to the process going forward, which coupled with the eventual maturation of the renewables market in Louisiana, should result in a much more efficient process for future renewable RFPs.

Q22. WHAT WERE THE OBJECTIVES OF THE 2016 RFP?

A. Several contributing factors motivated ENO's management to pursue a renewable-specific RFP in early 2016. First, feedback from Stakeholders and the Council's Advisors during

[13] *See* Exhibit SEC-6, Updated Final Report of the IM, at 42.
[14] *See* Exhibit SEC-6, Updated Final Report of the IM, at 42.

the 2015 Integrated Resource Plan ("IRP") process led ENO to develop an Action Plan.[15] As part of the IRP Action Plan, ENO made the commitment to conduct a renewables-specific RFP in order to obtain better information on the cost and deliverability of renewable resources in ENO's footprint and the surrounding area.

Second, during the time ENO considered developing the 2016 RFP, ENO was in the process of constructing a ~1 MW ground-mounted solar and advanced Li-ion battery storage project at the A.B. Paterson site in eastern New Orleans. Conducting a renewables-specific RFP would allow ENO to build upon that experience of owning and operating renewable resources.

Finally, and perhaps most importantly, ENO wanted to see if renewable resources were available that could provide cost-effective supply, fuel diversity benefits, and other potential benefits to ENO's customers. In order to facilitate the 2016 RFP process and meet these multiple objectives, ENO limited qualifying renewable technologies to existing or new resources that would use commercially-proven run-of-river hydroelectric, solar PV, or onshore wind. The 2016 RFP also sought to further these objectives by stating a preference for resources within the ENO region with a primary focus on Orleans Parish. Among other things, this preference was stated to provide ENO with specific insight into the costs and feasibility of deploying renewable resources in and around Orleans Parish and the benefits of locating generation in close proximity to the load they serve.

[15] *See* Docket No. UD-08-02, ENO Final 2015 Integrated Resource Plan Report dated February 1, 2016, pp. 76-77.

Q23. WHAT PROCESS SAFEGUARDS WERE ESTABLISHED TO ENSURE THAT THE 2016 RFP WAS CONDUCTED IN AN OBJECTIVE AND IMPARTIAL MANNER?

A. ESI established a number of process safeguards and procedures to ensure that information provided by bidders in response to the 2016 RFP was kept confidential and not improperly disclosed to, or used by, an employee, consultant, or other ESI representative or any other Entergy competitive affiliate. Each of these procedures is summarized[16] below:

- ESI retained an IM (Mr. Wayne Oliver of Merrimack Energy Group Inc.) to oversee the design and implementation of the 2016 RFP processes to (i) ensure that the processes were fair and objective, and (ii) to help ensure that all proposals were treated in a consistent fashion and without undue preference given to any bidder.

- All employees of ESI or any Entergy Operating Company were required to adhere to the Entergy Affiliate Rules and Codes of Conduct, which, among other things, prohibit actions that provide an unfair competitive advantage or preferential treatment to competitive affiliates, and prohibits the inappropriate transfer of confidential information to competitive affiliates.

- Each person participating in the evaluation of proposals was required to adhere to an Evaluation Confidentiality Acknowledgement, which limits and restricts the use of information.

- ESI utilized an RFP Administrator to perform several duties, which included acting as an intermediary between ESI and bidders to address questions and issues and to ensure that each evaluation team had the relevant information needed to perform its respective analyses and that all information was evaluated on a collaborative basis.

- ESI also established an RFP Administrative Team to assist the RFP Administrator. The RFP Administrative Team acted to ensure that each evaluation team had the information needed to perform its analyses in a manner that was fair and impartial and that would result in the selection of the most viable and economic renewable resources consistent with the overall objectives of the 2016 RFP.

[16] More specific details concerning these measures are provided in various sections of the main body of the 2016 Renewables RFP, as well as in Appendix G (Process for Protection of Proposal Information).

- As described in detail in Appendix G of the 2016 RFP, a detailed process was developed for submitting, reviewing, segregating, and evaluating proposals in order to ensure the objective and impartial treatment of all bidders and to appropriately preserve the confidentiality of certain information provided by bidders under the 2016 RFP.

- To maintain impartiality and confidentiality, separate evaluation teams were created to review specific, distinct aspects of each proposal.

Ultimately, as the IM's Final Report concluded, the "2016 ENO Renewable Resource RFP solicitation process was undertaken in a fair, equitable, and unbiased manner by ESI with the oversight of the IM. The solicitation process initiated by ESI is a consistent and equitable process designed to treat all proposals the same throughout the process. The IM found that ESI followed its protocols and objectives throughout the solicitation."[17]

Q24. WHAT WAS THE ROLE OF THE IM IN THE 2016 RFP PROCESS?

A. The IM was engaged and consulted for every major milestone in the 2016 RFP. Retention of Mr. Oliver was disclosed in ENO's 2016 RFP notification and no objections to his qualifications were received. The role of the IM is defined in the "Scope of Work Activities" for the IM, which has been attached to this testimony as Exhibit SEC-8. In summary, the IM's role was to (i) monitor the design and implementation of the solicitation, evaluation, selection, and contract negotiation processes to ensure their impartiality and objectivity and (ii) provide an objective, third-party perspective on ESI's efforts to ensure that all proposals were treated consistently and without undue preference to any bidder. It is important to note the IM selected for the 2016 RFP process functioned independently and will not be providing testimony on behalf of ENO. The IM's

[17] *See* Exhibit SEC-6, Updated Final Report of the Independent Monitor, at 41.

conclusions are provided in an updated report, which is made available to the parties in this proceeding as Exhibit SEC-6 of my Direct Testimony.

IV. EVALUATION AND RESOURCE SELECTIONS

Q25. WAS THERE ROBUST PARTICIPATION IN THE 2016 RFP?

A. Yes, to the extent that ENO received 17 proposals representing approximately 325 MW of total capacity. The conforming bids ENO received were all for proposed solar resources.

Q26. PLEASE DESCRIBE THE EVALUATION PROCESS USED IN THE 2016 RFP.

A. The evaluation process involved four distinct evaluation efforts, which were conducted by separate teams:

- the Viability Assessment Team ("VAT");[18]
- the Economic Evaluation Team ("EET");[19]
- the Accounting Evaluation Team ("AET"); and
- the Credit Evaluation Team ("CET").

Q27. PLEASE DISCUSS THE WORK OF THE VIABILITY ASSESSMENT TEAM.

A. The VAT reviewed and assessed the technical, environmental, interconnection, deliverability, transmission, energy source supply, and commercial merits of proposals. This assessment was carried out by subject matter experts with expertise in the areas of (1) plant and equipment/operations and maintenance, (2) environmental, (3) fuel supply and

[18] The Delivery Assessment Team is a sub-team of the VAT.
[19] The Production Cost Assessment Team is a sub-team that supports the EET.

transportation, (4) commercial, (5) planning, and (6) interconnection, deliverability and transmission. The VAT performed a qualitative assessment of various criteria to score and compare the relative risks of proposals. As HSPM Exhibit SEC-5 shows, the 20 MW New Orleans resource (Proposal 7436), the 50 MW Iris Solar Facility (Proposal 9008), and the 20 MW St. James PPA (Proposal 2987), along with every other proposal in the 2016 RFP shortlist, had VAT scores that put them in the "viable/limited mitigation" range, ranging from [redacted] Most importantly, the VAT identified no fatal flaws with any proposal.

Q28. PLEASE DESCRIBE THE RESULTS OF THE ECONOMIC EVALUATION PROCESS.

A. The EET conducted an analysis that indicated that the 20 MW PPA (Proposal 2987) ranked at the top of the PPAs evaluated, producing an estimated $[redacted]/kW-yr. ($[redacted]) net benefit. The Iris Solar Facility (Proposal 9008) also produced an estimated $[redacted]/kW-yr ($[redacted][20] net benefit. The final project, the 20 MW New Orleans resource (Proposal 7436), did not perform as favorably due to its location in land-constrained Orleans Parish, creating a $[redacted]/kW-yr. ($[redacted] net cost. After taking control of the project and transitioning it into a self-build now called NOSS, as discussed more fully below, it is now expected to result in a $[redacted]/kW-yr. ($[redacted] net cost, but it is now much more likely that this local resource will actually be constructed and that the project's estimated cost estimate will hold. It is also important to note that

[20] It should be noted that for purposes of the RFP evaluation, transaction costs, oversight costs, and contingency were not added to any project evaluated.

this net-benefit analysis does not take into account the significant local economic benefits that accrue to Orleans Parish as a result of this resource's construction and the tax revenues that the City of New Orleans will realize as a result of the resource's construction, which is discussed in more detail below.

Q29. PLEASE DISCUSS THE WORK OF THE ACCOUNTING EVALUATION TEAM.

A. The AET was responsible for assessing each proposal submitted to ensure compliance with the terms of the 2016 RFP and to determine the accounting treatment for each proposal. In performing the accounting assessment, the AET evaluated each proposal based on both the accounting standards in effect at the time of proposal submission as well as based on the accounting standards expected to be in effect during the delivery term of the proposal, such as the new lease standard issued by the Financial Accounting Standards Board ("FASB").[21]

The 2016 RFP main body included language in Section 6.1.5 which specified that "ENOI will not enter into a PPA or any related agreement pursuant to this 2016 RFP that will or may result in the recognition of a long-term liability on the books of ENOI (or any of its Affiliates), whether the long-term liability is due to lease accounting, the accounting for a VIE or derivatives, or any other applicable accounting standard." In order to give effect to this provision, the primary role of the AET was to determine if a proposal

[21] On February 25, 2016, the FASB amended the Accounting Standards Codification, the source of authoritative generally accepted accounting principles for nongovernmental entities, and created Topic 842, Leases. The new standard becomes effective no later than January 1, 2019 for ENO and applies to any contract that is, or contains a lease. Please note that while, as stated, it is not expected that the St. James PPA will trigger any adverse financial implications as a result of a debt imputation or lease accounting, the Company reserves the right to seek rate relief in the future should the PPA result in a debt imputation or lease accounting that affects its financial condition.

triggered the accounting results proscribed by the 2016 RFP.

All proposals were evaluated under the new lease guidance, as this standard would be effective either during the term or at the commencement of the agreements. Under the new guidance, none of the proposals appeared to contain a lease for purposes of lease accounting, as ENO would not have the right to control any PPA resources.

Q30. PLEASE DISCUSS THE WORK OF THE CREDIT EVALUATION TEAM.

A. The CET's evaluation sought to ensure that the credit quality of the bidders, when considered in light of their 2016 RFP proposals, complied with Entergy's corporate risk management standards and that any associated requirements for collateral or security in connection with a PPA. No bidder was eliminated from the 2016 RFP on the basis of credit.

Q31. PLEASE SUMMARIZE WHY THE RENEWABLES PORTFOLIO WAS ULTIMATELY SELECTED.

A. In selecting the three solar PV proposals at issue in this Application, ENO had to balance a number of objectives. As discussed above, the stated objectives of the 2016 RFP were to evaluate and potentially procure renewable resources that could provide cost-effective supply, fuel diversity benefits, meet ENO's 100 MW renewable commitment, and other potential benefits to ENO's customers. The Company also expressed a preference for resources located within its service territory, which carries a host of economic and supply related benefits. Given all of these considerations, ENO selected three projects

comprising 90 MW for inclusion in its Renewables Portfolio. The Council should also note that the IM's Final Report concluded that ENO's selections were reasonable. I will now describe ENO's rationale for selecting each of the three projects:

St. James PPA

As discussed more fully by Company witness Michael Goin, the St. James PPA is an agreement with St. James Solar, LLC for the purchase of 20 MW of must-take, unit-contingent, as-available capacity, capacity-related benefits, environmental attributes, energy and other electric products. The solar facility will be physically located in St. James Parish, Louisiana; and is expected to begin in May 2021. The St. James PPA has an estimated total nominal value of $[redacted] million based on the Annual Guaranteed Energy Quantity ("AGEQ") and an estimated total nominal value of $[redacted] million based on the Annual Expected Energy Quantity ("AEEQ"). The Agreement includes a price of [redacted] No capacity payments are due under the energy-only Agreement. The proposal is the highest ranked PPA, with an estimated total net benefit of $[redacted]

New Orleans Solar Station

As discussed more fully by Mr. Jonathan Long, the New Orleans Solar Station is projected to enter into commercial operations by June 2020. The project originally was submitted into the 2016 RFP as an acquisition in that it would have been constructed by another party and ENO would have purchased it upon completion, but following these

failed negotiations, the Company elected to purchase the site control (*i.e.*, the long-term land lease with National Aeronautics and Space Administration ("NASA") and the MISO Interconnection position) and pursue the project as a self-build. The project was initially selected in the 2016 RFP and is now being pursued as a self-build because it was the sole utility-scale solar project submitted that would be located within Orleans Parish.

Except for the approved New Orleans Power Station (estimated on-line in 2020) and the approved 5 MW DG resource (COD 2019), the overwhelming majority of ENO's installed capacity is located outside of its service territory. Thus, the Company has a stated goal of building new resources in proximity to the load they will serve, which carries a host of benefits for customers. For example, the 20 MW of local solar capacity at issue, to the extent that it is available, will reduce transmission losses that result from importing energy from remote locations. The resource could also potentially mitigate transmission congestion price risk and supply power to help mitigate customers' exposure to LMPs. This means that when there is congestion on the transmission system between generating resources and load, load LMPs typically increase, increasing costs to customers. If ENO faces higher LMPs in the ENO load zone, the increased LMP revenues received by a local resource can act as a hedge to offset the increased cost of load purchases from MISO as compared to remotely-located resources upstream of the transmission congestion that may receive lower MISO revenues.

It should also be noted that it is not unexpected for a project located in a land-constrained, mostly urban area such as New Orleans to cost more on a $/Watt basis, as compared to a utility-scale, ground-mounted solar PV facility built in a rural area where

costs for items such as land, permitting, and property taxes are much lower. As stated, the developer submitted the project at a cost of $[redacted] in the RFP, which was estimated to produce a $[redacted] net cost to customers. In a sense, this unreliable RFP bid creates a quasi-point-of-comparison, meaning that directionally, it would be reasonable to expect the cost of ENO's NOSS self-build option to be higher than this underbid RFP submittal. The New Orleans Solar Station is estimated to cost approximately $[redacted] resulting in an approximately $[redacted] net cost to customers. However, this project represents perhaps the only opportunity to build a significant utility-scale solar project in Orleans Parish and as stated by Company witness Jonathan E. Long, the conditions at the NASA facility are ideal for the development of a solar resource. The Company performed its due diligence to ensure that the self-build's cost estimate is competitive by issuing an RFP for the engineering, procurement, and construction ("EPC") Contractor, which comprises nearly 70% of a self-build project's cost on average.

It is also important to consider that the project will provide a significant local economic impact in Orleans Parish from construction and related use of local labor as well as sales, use and property taxes paid to the City. This important benefit must also be taken into consideration and weighted against the cost of the resource. To assist the Council in its consideration of this important factor, the Company engaged an expert economist to conduct an economic impact study of NOSS on the regional economy, which is attached as HSPM Exhibit SEC-9. Based on this, study the total economic impact of NOSS is estimated to generate 537 jobs, over $[redacted] in labor income, and add over $[redacted] in new spending to the local economy, for a total incremental economic impact of

over $[redacted] Importantly, the Project is conservatively estimated to produce approximately $[redacted] in tax revenues paid to the City of New Orleans over the life of the Project. Again, these significant and important local economic impacts to Orleans Parish cannot be overlooked when weighing the economics of the generating unit.

Iris Solar Facility

As discussed more fully by Company witness Michael J. Goin, the Iris Solar Facility is an agreement for the acquisition of a 50 MW solar facility to be constructed in Washington Parish, Louisiana. The facility is expected to enter commercial operations by [redacted] The purchase price for the project is $[redacted] producing an estimated total net benefit of $[redacted] before accounting for transaction costs, oversight costs, and contingency. The project's total net benefit is estimated at $[redacted] once these additional costs are considered.[22] The proposal was selected over an economic PPA in order to help ENO achieve its 100 MW renewable commitment and to give ENO more control over the asset, creating long-term cost certainty and stability for customers.

In other words, while there were other economically beneficial PPAs evaluated in the 2016 RFP, ownership has substantial benefits over contracts to purchase power. For example, customers receive the benefits of the asset over the life of the unit, which is expected to exceed the 20-year term of a PPA by at least 10 years. Put differently, when a PPA's term has expired, the Company must either negotiate an extension of the contract

[22] ENO included a conservative estimate of $[redacted] for transaction costs, oversight costs, and contingency related to this project. It should be noted the full amount estimated for these additional costs may not be incurred to complete the project, which would improve the overall economics of the project.

or build additional capacity, which in either event often involves a significant premium that customers must absorb. If an asset is owned by the utility, however, it is very unlikely that the Company would need to replace that capacity until the end of the asset's useful life, helping to significantly defer any premiums for replacement capacity and energy.

A renewable asset can also be considered a long-term gas hedging/stabilization tool, and owning the asset provides a longer period of price stabilization for customers. Moreover, it should also be noted that a counter-party to a long-term PPA may encounter future financial difficulties that create added risk around maintaining the asset and its deliverability, which could also create cost uncertainty for customers. For these reasons, while it was appropriate to include some amount of PPAs in its Renewables Portfolio, the Company has a preference for the majority of its Renewables Portfolio to be composed of owned assets.

Q32. DOES THIS CONCLUDE YOUR 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 30 DAY OF JULY, 2018.

NOTARY PUBLIC

Alyssa A. Maurice
LA Bar #28388-LA Notary 68053
Notary Public in and for the
State of Louisiana
Commission Issued for Life

My commission expires: _____

List of Prior Testimony Filed by Seth E. Cureington

DATE	TYPE	SUBJECT MATTER	REGULATORY BODY	DOCKET NO.
10/30/2014	Direct	Algiers Assest Transfer	CNO	UD-14-02
02/09/2015	Direct	Union Power Station PPA	CNO	UD-15-01
08/21/2015	Supplemental	Union Power Station PPA	CNO	UD-15-01
06/20/2016	Direct	New Orleans Power Station	CNO	UD-16-02
11/18/2016	Supplemental	New Orleans Power Station	CNO	UD-16-02
07/06/2017	Supplemental Direct	New Orleans Power Station	CNO	UD-16-02
10/06/2017	Direct	Rooftop Solar Project	CNO	UD-17-05
11/30/2017	Rebuttal	New Orleans Power Station	CNO	UD-16-02

ATTACHMENT 1

SCOPE OF WORK ACTIVITIES FOR INDEPENDENT MONITOR SERVICES RELATING TO THE 2016 ENTERGY NEW ORLEANS, INC. REQUEST FOR PROPOSALS FOR LONG-TERM RENEWABLE RESOURCES

Mr. Wayne Oliver has been selected and has agreed to serve as the Independent Monitor ("IM") for the 2016 Entergy New Orleans, Inc. Request for Proposals for Long-Term Renewable Generation Resources (the "RFP"). Entergy New Orleans, Inc. ("ENOI") will prepare the RFP with support from Entergy Services, Inc. ("ESI"). The RFP will include the market-test of a self-build aggregated solar photovoltaic ("Solar PV") resource option developed by or on behalf of ENOI that will be generally described in the RFP (the "Self-Build Option"). Competitive affiliates of ENOI will not be allowed to submit proposals in the RFP.

The IM is being engaged by ESI, as ENOI's agent, to help ensure that the RFP design, processes, and reviews described in this Scope of Work are impartial and objective, the Self-Build Option and all proposals submitted in the RFP are treated in a consistent fashion, and no undue preference is given in connection with the RFP to the Self-Build Option or to any proposal or any potential bidder in the RFP, including the group developing and submitting the Self-Build Option in the RFP, the Entergy Self-Build Commercial Team (as defined in the RFP).

This document outlines the scope of the IM's responsibilities and activities for the RFP. These responsibilities and activities include oversight, review, monitoring, and reporting and cover several different phases of the RFP, including:

1) the overall design of the RFP;
2) the proposal solicitation process (RFP issuance, bidder registration, and proposal submission);
3) the proposal evaluation process (including methods of evaluation);
4) the proposal selection process;
5) the due diligence and negotiation process; and
6) regulatory review, as needed and requested.

In carrying out the IM's tasks and services hereunder, the IM will have access to (i) any employee of ESI or ENOI, (ii) any data, process, or analytic tool created, followed, or utilized by ESI or ENOI in connection with the RFP, and (iii) any other material or information reasonably available to ESI or ENOI related to the RFP to the extent the IM deems such access necessary for ensuring that the RFP design, processes, and reviews are developed or conducted in a fair and impartial manner and subject to appropriate confidentiality safeguards to protect, among other things, data, methods, proposal information and evaluations, and the integrity of present and future RFPs conducted by ESI or ENOI ("Confidentiality Safeguards"). The IM will have the ability to communicate directly with the New Orleans City Council members that are

participating in overseeing the RFP process ("Participating Staff"), subject to appropriate Confidentiality Safeguards.

A. Independent Monitor (IM)

The scope of the IM's role and engagement in each phase of the RFP process includes:

1. RFP Development

a. The IM will review and comment on the proposed product specifications and planning criteria to ensure that they are reasonably aligned with ENOI's stated resource needs and have not been designed to provide undue preferential treatment to any potential bidder, including the Entergy Self-Build Commercial Team, or any proposal or resource, including the Self-Build Option. The IM will not evaluate or determine ENOI's planning criteria or its present or future resource needs.

b. The IM will review, evaluate, and comment on whether the technical product descriptions developed for, and the types of products solicited in, the RFP are reasonably designed to meet the overall and stated objectives of the RFP and to facilitate a robust response from market participants.

c. The IM will review and comment on the key technical RFP proposal evaluation criteria (and any other information it deems appropriate) to ensure that the RFP products solicited have not been designed to provide undue preference to any potential bidder, including the Entergy Self-Build Commercial Team.

d. The IM will review and comment on draft RFP documents to ensure that the terms therein and the procedures related to the development, issuance, and modification of such RFP documents support a robust and fair solicitation process.

e. The IM will review and comment on the structure of the RFP evaluation teams and the processes for protection of proposal information used by the evaluation teams, endeavor to identify and, if identified, notify ESI of any issue, concern, or deficiency in such structure or processes, and work with ESI to address and resolve any such issue, concern, or deficiency.

f. The IM will review and comment on the proposed RFP processes to ensure that they are designed to comply with all applicable Codes of Conduct, Standards of Conduct, affiliate rules, confidentiality agreements and restrictions, and acknowledgment forms and agreements, and will monitor ESI's and ENOI's compliance therewith. The IM will not communicate to any employee or agent of ESI or any of its affiliates or others any information that, pursuant to the provisions of the RFP and the relevant Codes of Conduct, Standards of Conduct, affiliate rules, agreements, restrictions, and documents identified herein, cannot be shared with such employee or agent.

g. Throughout the RFP process, the IM will make recommendations, as needed and appropriate, in the IM's opinion, to improve the RFP process (*e.g.*, recommending changes to draft RFP documents and commenting on changes proposed by Participating Staff and market participants during the RFP consultation process).

h. The IM will review and comment on ESI's evaluation methods, analytical tools and processes, data inputs and assumptions, and price and non-price evaluation criteria for the Self-Build Option and RFP proposals, including its methods and analytical tools used in the evaluation process, and including specifically, but without limitation, the economic, viability, accounting, deliverability, and credit evaluation and assessment procedures. The IM will evaluate such methods, tools, processes, data, assumptions, and criteria from both a price and a non-price perspective. The IM will endeavor to identify any issue, concern, or deficiency in such evaluation methods, tools, processes, data inputs and assumptions, and criteria, and will work with ESI to address and resolve any such issue, concern, or deficiency.

i. The IM will review and comment on the description of the evaluation processes to be provided in the RFP documentation to ensure that such processes are accurately and appropriately described.

j. The IM may recommend that ESI consider using or analyzing different inputs, scenarios, and sensitivities in addition to those that ESI plans to use in the proposal evaluations conducted under the RFP.

2. Proposal Solicitation (RFP Issuance, Bidder Registration, and Proposal Submission)

a. The IM will monitor implementation of the RFP to ensure that the RFP process is administered in a manner that is objective and impartial to all potential bidders and that no undue preference is given to any potential bidder, including the Entergy Self-Build Commercial Team, or any resource, including the Self-Build Option.

b. The IM will participate in any technical or bidders conference that ESI may hold for the RFP. The IM will monitor questions submitted by prospective bidders to ESI during any such conference or via the RFP website and work with ESI to ensure that timely, accurate responses to the questions submitted are provided, consistent with appropriate Confidentiality Safeguards.

c. The IM will review bidder registration information received from prospective bidders and determine whether additional information is needed.

d. The IM will oversee the receipt and handling of all RFP proposals timely submitted during the proposal submission period, including submission of information pertaining to the Self-Build Option.

e. The IM will have the ability to respond directly to, and to communicate directly with, bidders with respect to questions, issues, or concerns that may arise during the RFP process and will communicate those questions, issues, or concerns, as appropriate, to both ESI and Participating Staff.

3. Proposal Receipt

a. Prior to the deadline for submission of third-party proposals in the RFP, the IM will be provided with detailed information regarding the Self-Build Option, including the projected cost. The IM will review the information submitted regarding the Self-Build Option and each proposal a bidder submits in the RFP. In coordination with ESI, the IM will evaluate whether the information provided regarding the Self-Build Option and the submitted proposals meet the threshold requirements stated in the RFP and determine whether additional information is needed.

b. The IM will review and monitor the distribution of data reports generated for each area of proposal evaluation.

c. ESI, with the oversight of the IM, will determine whether a non-conforming proposal should be rejected, whether the bidder should be permitted to cure the proposal, and if the bidder is permitted to cure, the requirements for cure.

d. The IM will have access to any document, process, or other information that the IM deems necessary to ensure that the proposal receipt process is conducted in a fair and impartial manner and subject to appropriate Confidentiality Safeguards.

4. Proposal Evaluation and Selection

a. The IM will oversee the RFP evaluation and selection process to ensure that the process is objective and impartial to all bidders and that no undue preference is given any potential bidder, including the Entergy Self-Build Commercial Team, or any proposal or resource, including the Self-Build Option.

b. The IM will obtain and review, and may comment on, all proposed written communications concerning or relating to the RFP between ESI and bidders, including members of the Entergy Self-Build Commercial Team, in advance of ESI's issuance of such communications.

c. The IM will monitor the economic evaluation of all proposals and review the quantitative and qualitative analyses performed in connection with such evaluation to ensure that the analyses appropriately address the economic elements of proposals and are conducted impartially and objectively.

d. The IM will monitor the evaluation of the interconnection/transmission-related and other non-price aspects of proposals and review formal quantitative and qualitative analyses performed in connection with such evaluation, including any filings made to or studies provided by or for Midcontinent Independent System Operator, Inc. relating directly to such evaluation.

e. The IM will monitor the credit evaluation of bidders and review formal quantitative and qualitative credit analyses, as necessary, to ensure an impartial and objective process.

f. The IM will monitor the viability assessments performed in the RFP to ensure that such assessments are reasonable and appropriate.

g. The IM will monitor the cost estimates associated with the Self-Build Option, as further described in the Appendix hereto.

h. If, during the evaluation process, ESI determines that it is necessary or appropriate to modify the evaluation process (for example, by concluding that a need exists for additional evaluation or that the timing of the evaluation should be modified or inputs or scenarios changed), the IM will request, review, and provide comments on the proposed changes. If the IM disagrees with a modified evaluation process, the IM will be entitled to request that, in addition to the modified analyses that ESI wishes to perform, ESI also perform the analysis as originally contemplated.

i. The IM will review all written recommendations and materials to be presented to the Entergy Operating Committee ("EOC") (or members thereof), the Entergy New Orleans, Inc. Operating Committee (or equivalent) ("ENOI OC") (or members thereof), the President and Chief Executive Officer of ENOI, the Chief Executive Officer of Entergy Corporation, the Senior Vice President and Chief Accounting Officer of Entergy Corporation, the Executive Vice President and Chief Financial Officer of Entergy Corporation, the Executive Vice President and Chief Operating Officer of Entergy Corporation, and the Group President of Utility Operations of Entergy Corporation (collectively, the "Authorized Entergy Executives") concerning the evaluation and selection process associated with the RFP, subject to the redaction of attorney-client privileged communications or attorney work product or materials or information required for each of ESI and ENOI to remain in compliance with its legal duties under applicable law or contractual obligations to third parties.

j. The IM will review any preliminary or final proposal ranking, portfolio selection, or proposal selection or elimination in the RFP. Such review will occur before this information is presented to the EOC (or members thereof) or the ENOI OC (or equivalent) (or members thereof), as applicable, or Authorized Entergy Executives. If the IM disagrees with any such ranking, selection, or elimination, and ESI does not resolve such disagreement to the IM's satisfaction, the IM may set forth the nature and the IM's assessment and view of the issue in a

report presented to the EOC (or members thereof) or the ENOI OC (or members thereof), as applicable, and/or Authorized Entergy Executives.

k. The IM will not make decisions regarding the selection of proposals for the primary selection list or the secondary selection list; rather, those decisions will be made by the Entergy Operating Committee, consistent with the requirements of the Entergy System Agreement, if in effect, or the President and Chief Executive Officer of ENOI, as applicable.

5. Due Diligence and Negotiations

a. The IM will have access to all materials and information used by or reasonably available to ESI regarding the establishment and implementation of the RFP's due diligence and negotiation processes, in whatever form the IM reasonably deems necessary, to ensure that (i) such processes are objective and impartial to all bidders, (ii) such processes are conducted in a fair and impartial manner and subject to appropriate Confidentiality Safeguards, and (iii) no undue preference is given to any potential bidder, including the Entergy Self-Build Commercial Team, or any proposal or resource, including the Self-Build Option.

b. The IM will participate in all aspects of negotiations between ESI and representatives of any Self-Build Option to ensure that the process is objective and impartial and conducted at arm's-length.

c. The IM may monitor negotiations with third-party bidders arising out of the RFP, subject to appropriate limitations required by any bidder. From time to time, the IM may request updates on the status of such negotiations and other reports or information regarding such negotiations. Subject to appropriate confidentiality and privilege restrictions and protections, ESI will provide the IM with the updates, reports, and information reasonably requested by the IM.

d. The IM will monitor the adequacy and thoroughness of due diligence performed by ESI in the RFP's due diligence and negotiation processes on any proposal or the Self-Build Option.

B. Interactions among IM, Participating Staff, and ESI; Final Reports

1. Communications with Participating Staff

a. The IM and Participating Staff may communicate with each other on matters relating to the RFP process without restriction other than restrictions set forth in this document. Such communications may be confidential as needed and do not require the participation of ESI.

b. The IM will prepare and provide formal written reports and updates to ESI and, if Participating Staff requires or requests them, Participating Staff. If such reports or

updates contain, or if the IM otherwise desires to communicate, information to Participating Staff that is highly sensitive, privileged, or otherwise protected, such reports, updates, or information may be provided only pursuant to a Protective Order or confidentiality agreement acceptable to the entity(ies) whose confidential or otherwise protected information would be revealed.

c. The IM acknowledges that it is a party to that certain Confidentiality Agreement, dated April 20, 2015, with ESI. Without limiting the terms of the Confidentiality Agreement, the IM agrees that it will not comment on or otherwise communicate any information about or arising out of the RFP with any third parties, except to bidders, Participating Staff, and in testimony in accordance with this document and the Confidentiality Agreement.

2. Disagreements between ESI and Bidders

If there are disagreements during the RFP process between ESI and a bidder that are not resolved to the IM's satisfaction, the IM may communicate such disagreement to Participating Staff, subject to the other terms hereof.

3. Final Reports

a. At the conclusion of the RFP process or at the appropriate point in time (for example, at the time of the filing of an application seeking regulatory approval of a contract or project arising out of the RFP), the IM will prepare one or more reports stating the IM's analysis of and conclusions regarding the RFP process, including any suggestions for improvement (a "Final Report"); however, if the RFP is terminated because ENOI or ESI (i) did not select any proposal for negotiation of a definitive agreement and did not move forward with the Self-Build Option, (ii) did not enter into a definitive agreement arising out of and based on a proposal submitted in the RFP or for the Self-Build Option, or (iii) exercised its rights under the RFP to withdraw, terminate, or otherwise cancel the RFP, the IM will not issue a Final Report, or will issue only a highly abbreviated summary Final Report, unless requested in writing by Participating Staff, the New Orleans City Council, ESI, or ENOI to issue a comprehensive Final Report. The IM may supplement the Final Report as a result of due diligence or contract negotiations or to provide clarification, correct errors or omissions, or make improvements.

b. The Final Report (including any supplement thereto) will be prepared independently by the IM. Neither ESI nor any market participant will be entitled to review, alter, edit, or comment on any draft Final Report prior to its publication, except ESI in conjunction with the redaction process identified below. During preparation of the Final Report, the IM will not discuss any of the IM's findings or recommendations with ESI or any other third party. Although not required to do so, the IM may, in the IM's discretion, share a draft Final Report with Participating Staff. The IM may also discuss RFP issues and request information from Participating Staff, market participants, and ESI, to the extent the IM has determined that such

discussions would assist in the report's preparation and subject to the restrictions on disclosure of confidential, privileged, or otherwise protected information expressed herein. Nothing in this Section B is intended to preclude the IM from seeking to verify or confirm with ESI or any market participant any information the IM may reflect in or desire to consider in the preparation of the Final Report (including any supplement thereto). Before a Final Report (including any supplement thereto) is provided to any third party or made public, the IM will submit the Final Report to ESI for the sole purpose of having ESI redact non-public confidential information before a public version of the Final Report is issued.

c. Promptly after receipt, ESI will provide the confidential version of the Final Report to a member of Participating Staff and post the public version on the RFP website.

d. After the Final Report is filed or posted, ESI, Participating Staff, market participants, and interested persons may submit comments on the report. At the IM's discretion, the IM may submit a revised Final Report and/or prepare a response to those comments as the IM determines to be appropriate.

e. Any party in a regulatory proceeding may seek to offer the Final Report (and any response to comments prepared by the IM) into evidence in lieu of, as part of, or in addition to pre-filed testimony. Any such party also may call the IM as a third-party witness to testify regarding the report, the response to comments, and the RFP process. If the testimony of the IM is sought by a party in such a proceeding, the IM will testify in such proceeding, subject to applicable rules, orders, laws, and confidentiality obligations.

C. Additional IM Matters

1. Document Retention

The IM will have the right, in the IM's discretion, to retain any document the IM deems necessary regarding the RFP design and RFP processes, subject to maintaining the confidentiality of such documents in accordance with the terms of the Confidentiality Agreement between the IM with ESI and other terms specified herein.

2. Conflicts Reduction Measures

The IM will establish within the IM's firm such ethical guidelines and screening procedures as are necessary and appropriate to ensure that no present or future conflict of interest will arise in connection with the IM's responsibilities under this Scope of Work Activities. The IM will promptly bring to the attention of ESI and Participating Staff any conflict of interest issue that may arise in connection with its work on the RFP.

Appendix
Self-Build Option Monitoring

The IM will monitor the cost estimates associated with the Self-Build Option. The IM's cost estimate monitoring will evaluate the reasonableness of various cost elements of the Self-Build Option developed by the Entergy Self-Build Commercial Team, including the following specific general cost categories:

- Equipment;
- Bulk Materials;
- Engineering, Construction Management, and Start-up Services;
- Insurance;
- Taxes, Legal Expenses, and Permits & Fees;
- Contingency Costs; and
- Owner's Costs.

The IM may identify other cost categories not then developed by the Entergy Self-Build Commercial Team that the IM would reasonably expect to arise in the construction of the Self-Build Option.

The IM will identify any deficiency in the assumptions and methods used in developing the Self-Build Option costs and will work with ESI to address and resolve such deficiencies.

ESI, in consultation with the IM, may request further analysis of engineering issues that arise in the RFP evaluation, including, but not limited to, issues relating to the cost estimates of other proposals for developmental resources offered in the RFP and issues addressed by Evaluation Teams.

To the extent relevant to the evaluations or the processes in the RFP, the IM may communicate and share information regarding the IM's Self-Build Option cost evaluation with Participating Staff and others as appropriate in accordance with the requirements and limitations of the IM Scope Document.

BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

APPLICATION OF ENTERGY NEW ORLEANS, LLC FOR APPROVAL OF RENEWABLE PORTFOLIO AND REQUEST FOR COST RECOVERY AND RELATED RELIEF	**)**	**DOCKET NO. UD-18-__**

EXHIBITS SEC-3 and SEC-4 (on CD)

JULY 2018

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EXHIBIT SEC-2
EXHIBIT SEC-5
EXHIBIT SEC-6
EXHIBIT SEC-7
EXHIBIT SEC-9

HIGHLY SENSITIVE PROTECTED MATERIALS
HAVE BEEN REDACTED PURSUANT TO
COUNCIL RESOLUTION R-07-432

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DIRECT TESTIMONY

OF

JONATHAN E. LONG

ON BEHALF OF

ENTERGY NEW ORLEANS, LLC

PUBLIC VERSION

HIGHLY SENSITIVE PROTECTED MATERIALS HAVE BEEN REDACTED PURSUANT TO COUNCIL RESOLUTION R-07-432

JULY 2018

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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. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Entergy Services, Inc. ("ESI")[1] as Vice President, Capital Projects. In that capacity, I am responsible for preparing the New Orleans Solar Station project ("NOSS" or the "Project"), which includes coordinating the Project Team's activities and securing all contracts and approvals necessary to construct the Project.

Q3. PLEASE DESCRIBE YOUR EDUCATION AND BUSINESS EXPERIENCE.

A. I earned a Bachelor of Science degree in Electrical Engineering from Mississippi State University in 1982 and a Master of Business Administration degree from Pepperdine University in 1991.

I have worked in the energy industry since 1982. All but two years of that experience has been focused on the development, construction, and operation of power generation facilities. Earlier in my career (1987-1989), I was the plant engineer for the construction, start-up, and initial operation of two coal-fired,

[1] ESI is an affiliate of the Entergy Operating Companies ("EOCs") and provides engineering, planning, accounting, technical, and regulatory-support services to each of the EOCs. The five current EOCs are Entergy Arkansas, Inc. ("EAI"), Entergy Louisiana, LLC ("ELL"), Entergy Mississippi, Inc. ("EMI"), Entergy New Orleans, LLC ("ENO"), and Entergy Texas, Inc. ("ETI").

circulating fluidized bed power generation facilities in central California. From 1995 to 2006, I was employed by Entergy Enterprises, Inc., and participated in the development, construction, and operation of power generation facilities for the unregulated subsidiaries of Entergy Corporation. I was a key contributor to the development, construction, and operation of the 1,200 megawatt ("MW") Saltend Cogeneration Facility in East Riding of Yorkshire, England, and the 800 MW Damhead Creek Generating Facility in County Kent, England.

In 2006, I accepted a position at ESI and began participating in the development and planning of power generation facilities for the regulated subsidiaries of Entergy Corporation, including projects such as the development of the Ninemile 6 self-build option that was market tested in the Summer 2009 Request for Proposals for Long-Term Supply-Side Resources, and the implementation of that project after it was selected. I was responsible for negotiating the engineering, procurement, and construction ("EPC") agreement for Ninemile 6 and recruiting and hiring the project-management staff, and I retained a leadership position in that project through its completion. I also have led the development of the following ongoing self-build generation projects: St. Charles Power Station, Montgomery County Power Station, Lake Charles Power Station, and New Orleans Power Station. In my current position, I also am responsible for the development of large transmission projects.

My history in developing and constructing electric-generation facilities provides me with significant experience with the development of cost estimates for power plant projects, the siting of proposed projects, the negotiation and administration of large contracts for the construction of power plants, the

procurement of services of major equipment vendors, and the successful completion of self-build projects.

Q4. ON WHOSE BEHALF ARE YOU FILING THIS DIRECT TESTIMONY?

A. I am testifying before the Council of the City of New Orleans ("CNO" or the "Council") on behalf of ENO.

B. Purpose of Testimony

Q5. WHAT IS THE PURPOSE OF YOUR 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 first provide an overview of the proposed Project. I next explain how the self-build commercial team developed the cost estimate associated with the Project and present the current cost estimate and schedule associated with NOSS. I then describe the management approach that the Company intends to employ and the process that will be used to select a contractor to provide EPC services. I also discuss the risk mitigation measures put in place to control Project risks. Finally, I discuss the status of permits/approvals for NOSS.

Q6. HAVE YOU PREVIOUSLY TESTIFIED BEFORE A REGULATORY BODY?

A. Yes. I have attached as Exhibit JEL-1 a listing of my prior testimony.

II. PROJECT OVERVIEW

Q7. PLEASE PROVIDE A BRIEF OVERVIEW OF THE NOSS PROJECT.

A. 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 Project will be constructed by EPC contractors using fixed price, date certain forms of EPC contracts; there will be separate contracts for the solar facility and the transmission interconnection. The Project, including an allowance for funds used during construction ("AFUDC"), will cost an estimated $[redacted], or roughly $[redacted] per kilowatt ("kW"), including the costs to interconnect to the transmission system. 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 second quarter of 2020.

Q8. DOES THE ENTERGY SYSTEM HAVE ANY RECENT EXPERIENCE WITH SELF-BUILD GENERATION PROJECTS?

A. Yes. Another EOC, ELL, completed Ninemile 6, a self-build combined-cycle gas turbine unit, roughly 10% under-budget and months ahead of its projected in-service date, successfully producing savings for customers.[2] Furthermore, my organization is currently developing or constructing the following self-build projects that have received regulatory approval: St. Charles Power Station, Montgomery County Power Station, Lake Charles Power Station, and New Orleans Power Station.

Q9. DOES YOUR ORGANIZATION HAVE THE KNOWLEDGE AND EXPERIENCE NECESSARY TO COMPLETE A SELF-BUILD SOLAR PROJECT?

A. Yes. ESI has previously completed a self-build, 1 MW solar plant for ENO at the A.B. Paterson facility. We will apply lessons learned through that solar PV project and our recent experiences with managing large, natural-gas-fired generating projects for other EOCs. In addition, my organization is in the process of adding staff with relevant solar experience that will assist in the development and construction of NOSS. The Project will also rely on experienced consultants and engineers to provide solar-specific knowledge about contracting and managing risks to help deliver a safe, reliable project.

[2] It should be noted that ENO purchases 20% of the capacity and energy of Ninemile 6 through a purchase power agreement ("PPA") with ELL.

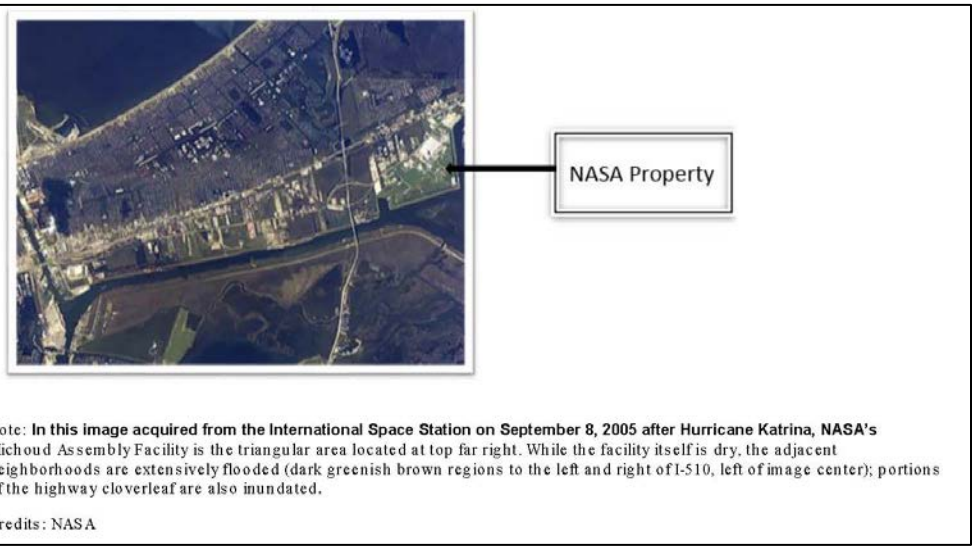
Q10. PLEASE DESCRIBE FURTHER THE SITE ON WHICH THE PROJECT IS PROPOSED TO BE LOCATED.

A. As I mentioned previously, the Project is proposed to be located within the property boundaries of NASA's Michoud Assembly Facility, which generally consists of 832 acres of manufacturing space, tenant buildings, undeveloped land, and a deep-water port. Ample space is available for construction and laydown of NOSS at the site. No buildings are expected to be used for the project. For reference, I have attached as Exhibit JEL-2 an illustration of NOSS's proposed location.

Q11. DID THE SITE OF THE PROPOSED PROJECT FLOOD DURING HURRICANE KATRINA?

A. No. Indeed, the NASA property became a critical staging area for search-and-rescue and other federal operations after the storm. Figure 1 below shows the facility as of September 8, 2005:

Figure 1



Note: **In this image acquired from the International Space Station on September 8, 2005 after Hurricane Katrina, NASA's** Michoud Assembly Facility is the triangular area located at top far right. While the facility itself is dry, the adjacent neighborhoods are extensively flooded (dark greenish brown regions to the left and right of I-510, left of image center); portions of the highway cloverleaf are also inundated.

Credits: NASA

Q12. ARE THERE PROTECTIONS CURRENTLY IN PLACE AT THE SITE TO PROTECT AGAINST FLOODING?

A. Yes. The facility is protected by levees and has two pumping stations, one of which was added after Hurricane Katrina. And the levee along the GIWW that protects the site was raised to 19.5 feet above sea level after Hurricane Katrina.

Furthermore, as has been well documented, the storm surge that impacted the majority of New Orleans East during Hurricane Katrina resulted from the storm coming through the Gulf of Mexico, creating a record storm surge from the east off of

Lake Borgne, and pushing water up the Mississippi River Gulf Outlet ("MRGO") and into the GIWW. A storm surge from Lake Pontchartrain also caused water to enter the GIWW from the north, via the Inner Harbor Navigational Canal ("IHNC"). The NASA Michoud site is located along the GIWW, just east of where the now-closed MRGO meets the GIWW.

Since Hurricane Katrina, the United States Army Corps of Engineers ("USACE") has undertaken many projects throughout greater New Orleans as part of the Hurricane and Storm Damage Risk Reduction System ("HSDRRS"). As part of the HSDRRS, the MRGO has been decommissioned and was closed off with a rock dam near the mouth of the Mississippi River. USACE has also since completed the world's largest surge barrier of its kind, the IHNC-Lake Borgne Surge Barrier, which did not exist during Hurricane Katrina and was designed to block off a surge similar to the record-setting surge experienced during that storm. The USACE has also constructed the St. Bernard Parish levee floodwalls, which cover approximately 23 miles along both sides of the Lake Borgne Surge Barrier and range from 26.5 to 30.5 feet in height. On Lake Pontchartrain, the USACE completed the Seabrook Floodgate, which is designed to keep storm surges from the Lake from entering the IHNC from the north.

As is the case with the entire HSDRRS, the measures described above were designed and constructed to withstand a 100-year storm. Part of the criteria used to achieve this level of risk reduction for the HSDRRS included factoring "expected sea level rise, settlement and subsidence of structures, and possible increases in storm

severity or frequencies" into the "final design of the HSDRRS structures."[3] I attach to my testimony documents from the USACE discussing and depicting these improvements as Exhibit JEL-3 (HSDRRS Map) and JEL-4 (New Orleans East HSDRRS Fact Sheet).

Q13. BASED ON YOUR KNOWLEDGE OF THE PROJECT AND THE MATTERS DISCUSSED IN YOUR TESTIMONY ABOVE, IS IT YOUR OPINION THAT LOCATING NOSS AT THE PROPOSED SITE WOULD NOT RESULT IN ANY UNDUE RISK OF DAMAGE DUE TO FLOODING?

A Yes. The proposed site has proved to be hurricane protected, and I do not believe that locating NOSS at the site will result in any undue risk of flooding for the Project. However, the Council should be aware that it is not possible to entirely exclude or prevent the possibility of flooding at the proposed NOSS site, or at any site within Orleans Parish.

Q14. IS THE PROPOSED SITE APPROPRIATE FOR A SOLAR FACILITY?

A. Yes. In fact, I doubt that there is a more appropriate location for a utility-scale solar project within Orleans Parish. The NASA property is only twelve miles northeast of downtown New Orleans, it has available, under-utilized land that is relatively flat and dry, and the site is protected by 24/7 professional security provided by NASA. As I discussed previously, the site fared well during Hurricane Katrina and now has the

[3] *See* http://www.mvn.usace.army.mil/Missions/HSDRRS/Risk-Reduction-Plan/100-Year-Level-Protection/.

benefit of significant additional protections against hurricanes, storm surge, and flooding. The Project will not remove any productive land from commerce or impact neighbors outside of the facility. In short, the NASA facility is a unique and ideal location for the Project within the City of New Orleans.

Q15. COULD THE NASA SITE SUPPORT EXPANDING THE PROJECT TO ADD ADDITIONAL SOLAR CAPACITY BEYOND THE 20 MW AT ISSUE?

A. It appears that the NASA site is of sufficient size to expand the project, and the Project Team is actively exploring an option to add an additional 5 MW of solar capacity at the NASA facility. Once the Company's evaluation is completed, it will inform the Council of its options to expand and any corresponding cost implications.

III. ESTIMATED PROJECT COST AND SCHEDULE

Q16. WHAT HAS BEEN YOUR ROLE IN THE DEVELOPMENT OF THE NOSS PROJECT?

A. Company witness Seth E. Cureington discusses in his testimony ENO's decision to pursue NOSS as a self-build project. Since that decision was made, I and the members of my organization who make up the Project Team have been primarily responsible for the development of the Project and will be responsible for the negotiations of the terms of the contracts under which NOSS ultimately will be constructed.

Q17. WHAT RESOURCES WERE UTILIZED TO DEVELOP THE OVERALL COST ESTIMATE?

A. The following are the Project's three major cost components, along with the resources used to develop the estimates:

1) Solar EPC agreement costs ("EPC Costs"): The Project Team conducted a competitive procurement process following Entergy's Procurement Policy, soliciting seven EPC contractors to participate. This process provided the EPC pricing indicators that were used to develop the cost estimate. A final EPC agreement has not been negotiated, and the pricing is not considered firm at this time.

2) Transmission Interconnection costs ("Transmission Interconnection"): The Project Team consisted of members of our transmission organization that developed the scope and cost estimate for the transmission interconnection per Entergy transmission standards and requirements.

3) Costs outside of the EPC agreement ("Non-EPC Costs"): The Project Team developed these costs using internal subject matter experts and third-party providers (engineering and other technical consulting firms). Later in this testimony, I will expand upon the components of these Non-EPC Costs.

Q18. DOES THE COST ESTIMATE FOR NOSS INCLUDE A REASONABLE LEVEL OF DESIGN INFORMATION?

A. Yes. The solar contractors that participated in the EPC solicitation process were provided site information and performed a site visit to support their development of the work scope and cost estimate. The solicitation period and level of site access are typical to support the initial design, including job-specific general arrangement drawings and the estimated costs included in their proposals. Similarly, the transmission project team developed the scope of work and cost estimate using their normal practices and standards. There were no unusual, apparent risks identified during the inspection of the site.

Q19. WHAT IS THE CURRENT ESTIMATE OF THE COSTS TO COMPLETE NOSS?

A. The current estimate of NOSS's costs is approximately $[redacted], inclusive of, among other things, expenses related to seeking Council certification, costs related to transmission interconnection, contingency, and AFUDC. A summary of the components of the current cost estimate is shown below:

NOSS Capital Cost Estimate (Millions)

[redacted]

Q20. HOW WERE THESE COST ESTIMATES PREPARED?

A. The total project cost estimate is currently a Class 4 estimate that is largely derived from the largest single cost component, the solar EPC agreement. The EPC cost estimate is a product of the Company's ongoing evaluation of proposals from three solar EPC contractors. Again, a final EPC agreement has not been negotiated. The second largest cost component, transmission interconnection, was developed by the transmission project team in accordance with normal Entergy standards and requirements, although the Company is exploring ways to reduce transmission costs based on final design standards. Finally, as noted above, the Project Team estimated the Non-EPC Costs, consulting with internal subject matter experts and third-party providers.

Q21. WHAT KINDS OF COSTS ARE INCLUDED IN THE EPC COST ITEM LISTED ABOVE?

A. EPC Costs include costs that will be incurred by the solar EPC contractor and billed to the Company in the performance of the EPC agreement, including the following:

1. Engineered equipment, including the solar PV panels, inverters, racking, and transformers;

2. Home office engineering and construction management services, including procurement, project controls, scheduling, and progress tracking;

3. Supervisory and administrative staffs at the construction site;

4. Craft laborers;

5. Construction materials (steel, concrete, *etc.*);

6. Subcontractors;

7. The indirect construction costs that support the construction project (such as scaffolding, administrative offices, or safety equipment);

8. Sales taxes borne by the contractor on consumables; and

9. Labor and materials associated with the dedicated start-up and commissioning teams.

Q22. WHAT COSTS ARE INCLUDED IN THE ESTIMATES OF NON-EPC COSTS?

A. Costs included in the estimated Non-EPC Costs will be incurred by the Company directly and include:

Other Vendors and Expenses: There is a wide range of services captured in the Other Vendors category, including expenses such as rental of temporary office trailers, construction power, environmental permitting services, the cost of permit applications, site inspections and surveys, transmission studies, miscellaneous consumables related to safety and office supplies used during project execution, consultant fees, etc. This category also includes certain estimated sales taxes.

Development Assets: This category reflects the negotiated purchase price of the rights to the long-term land lease with NASA and the MISO Interconnection position from the third-party developer that submitted the project into the 2016 ENO Renewables Request for Proposals.[4] The lease and

[4] As Mr. Cureington discusses in his testimony, that developer elected not to move forward with the project.

MISO position are fundamental to ENO's ability to propose and complete this Project.

Entergy Project Management: Project management costs include internal labor and third-party costs for activities such as project oversight and environmental permitting. Construction management includes internal and third-party personnel to manage any agreements to engineer, procure, and construct the Project.

Indirect Loaders: This category includes capital suspense, estimated at two percent of all capital costs, and a variable benefits loader. All other payroll loaders are included in the direct costs of the other categories.

Regulatory: This category includes an estimate of the internal and external costs associated with obtaining Council certification of the Project.

Project Contingency: This is a general contingency estimate of approximately ten percent of the total Project cost estimate to allow for circumstances that could affect the cost of the Project. Those circumstances are currently unidentified or uncertain and could include:

- The discovery of facts currently unknown that affect the Project and that are the responsibility of the Company;
- Circumstances beyond the control of either the Company or contractors that affect the cost of the Project, such as damages and delays from significant weather events;
- Changes in laws or regulation that affect the cost of the Project; and
- Delays in obtaining regulatory approval, transmission access, or permits and that result in higher costs.

Q23. PLEASE ELABORATE FURTHER ON WHY THE COMPANY HAS INCLUDED A TEN PERCENT PROJECT CONTINGENCY IN ITS TOTAL COST ESTIMATE.

A. The Company included a contingency estimate that addresses the fact that construction projects of the cost magnitude and time duration of NOSS have cost elements that are beyond the reasonable control of the Company and its management. Even once a fixed-price EPC agreement with a well-defined scope is in place, experience demonstrates that unpredictable events, such as discovery of unknown site conditions (here, particularly, soil conditions) or changes in laws or regulations, can require change orders that affect project costs. Thus, contingency must be included in the estimate in order to provide a realistic estimate of the ultimate cost to complete the Project. The current Project estimate contains a contingency line item of approximately ten 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 ten percent contingency may not be required; only contingency that is actually used will be included in the final Project cost. I describe the Company's plans to manage and mitigate risks to the Project later in my testimony.

Q24. CAN YOU PROVIDE AN EXAMPLE OF A DEVELOPMENT THAT COULD REQUIRE A CHANGE IN SCOPE OF WORK AND CHANGE THE PROJECT'S COST ESTIMATE?

A. One example of a development that could change the Project's scope of work is a discovery event. For example, it would not be unusual that over the long history of the NASA facility, a cable for temporary power supply was buried. If that cable is

uncovered during excavation, work must stop until it is investigated and ensured to be safe. Any work that a contractor has to perform related to that discovered cable would be added to the scope of the Project through a change order. Another possibility is that the soil conditions at the NASA site require changes to the proposed arrangement of the solar facility, which changes could impact cost estimates.

Q25. PLEASE EXPLAIN THE WORK NECESSARY FOR THE TRANSMISSION COMPONENT OF THE PROJECT.

A. The transmission work scope includes a new 115 kV to 34.5 kV substation and a one-half mile 115 kV transmission line. The transmission line will cut into the existing 115 kV line routed along Old Gentilly Road, as shown on Exhibit JEL-2. The new substation will be located on leased land adjacent to the solar facility. Again, the Company is presently exploring options to reduce transmission costs in the final design stage.

Q26. DO YOU BELIEVE THAT THE PROJECT COST ESTIMATE IS A REASONABLE ESTIMATE OF THE COSTS OF NOSS?

A. Yes. The estimate represents the costs for which ENO is reasonably sure that the costs of construction will not exceed, though this cannot be guaranteed. Thus, the cost estimate presented in this testimony provides a reasonable basis to commence both the Council's regulatory-approval process and Entergy's own internal approval process. This self-build Project has come together quickly because, as Mr. Cureington explains, the third-party developer that submitted the project into the 2016

ENO Renewables Request for Proposals was not prepared to move forward with the project, and the Company wanted to preserve the opportunity to complete the project.[5] Although the cost estimates will change as the solar EPC agreement is negotiated and finalized, the current cost estimate is based on competitive pricing received from the three qualified bidders that submitted a proposal. This competitive procurement process will ensure that EPC Costs (the major component of the overall cost estimate) are competitive.

Q27. SHOULD THE COUNCIL BE AWARE OF ANY ADDITIONAL COSTS THAT WERE NOT INCLUDED IN THE PROJECT'S TOTAL COST ESTIMATE?

A. Yes. The overall cost estimate is subject to the results of the MISO Definitive Planning Phase ("DPP") study process for potential transmission upgrades, which are expected to be supplied by Midcontinent Independent System Operations, Inc. ("MISO"), in part, in September 2018. But such upgrades, which would be in addition to the costs for the new substation and transmission line discussed above, are not expected to be material.

Q28. WHAT ARE SOME OF THE KEY MILESTONES IN THE ESTIMATED PROJECT SCHEDULE?

A. Assuming timely approvals, the Company expects the Project to be in-service in June 2020. The solar EPC contractor would be required to pay liquidated damages for

[5] Because of the site characteristics, as Mr. Cureington further discusses, NOSS represents perhaps the only opportunity to build a significant utility-scale solar project in Orleans Parish.

delayed completion. Some of the key milestones in the schedule (assuming certification by February 1, 2019) are:

Milestone	Date
EPC Contract Execution	November 2018
Regulatory approval – with New Orleans City Council	February 2019
Notice to Proceed	February 2019
In-service	June 2020

Q29. WHY IS IT IMPORTANT TO OBTAIN TIMELY REGULATORY APPROVALS?

A. The Company needs reasonable assurance from the Council that construction of NOSS is in the public interest prior to spending millions of dollars to construct a plant to serve its customers. Accordingly, the Company does not intend to issue full notice to proceed ("NTP") under an EPC agreement without certification from the Council that undertaking NOSS at the estimated cost serves the public interest. The timing of NOSS's approval is important. If Council approval is not obtained prior to February 1, 2019, price escalations may occur and result in a day-for-day slip of the in-service date.

IV. PROJECT MANAGEMENT AND CONTRACTING APPROACH

Q30. HOW WILL THE COMPANY MANAGE THE NOSS PROJECT?

A. Given the magnitude of this Project and the Company's existing infrastructure for construction and project management, it is appropriate to follow a similar structure used for the construction of Ninemile 6 and other ongoing self-build generation

projects that are employing the use of an EPC contractor in conjunction with the Company's management team.

The project management approach will follow Entergy's Project Delivery System ("PDS") Policy, Standards and Guidelines in support of driving consistency and certainty in project delivery outcomes. The PDS provides a framework to ensure Entergy's business units consistently and effectively develop and implement capital Projects. The PDS establishes a Stage Gate Process ("SGP") approach as a single and comprehensive framework for project development, planning, and execution. The SGP provides a roadmap of key deliverables and decisions that need to be sequentially completed to promote consistent, reliable, and high-quality project outcomes. Additionally, the SGP also prescribes a continuous systematic evaluation of the project organization, scope, and maturity of project management deliverables that helps ensure projects are successfully executed. This occurs through a series of independent Gate Reviews/Assessment and Approvals.

Q31. WHAT IS AN EPC CONTRACTOR?

A. EPC is an acronym for Engineer, Procure and Construct and is used to refer to the single-source engineering, procurement, and construction of large projects, and often is used to describe a contractor that performs that function for the ultimate project owner.

Q32. WHY IS THE COMPANY USING EPC CONTRACTORS?

A. A construction project like NOSS is a substantial undertaking, and the Company does not have the in-house capability necessary to execute the engineering, procurement, and construction for such a project. The use of EPC contractors who can perform all of these functions under a single contract is cost effective and common within the power industry for such generation and transmission projects.

Q33. IS THERE A SINGLE COMMON FORM OF EPC CONTRACT?

A. No, there are several types of EPC contracting approaches, and the suitability or desirability of each depends largely on the type of project. From an owner's perspective, fixed-price contracts are preferred because of the certainty they provide to a project's overall cost. When a project's scope is uncertain and likely to vary, however, EPC providers will either refuse to contract on a fixed-price basis or perhaps agree to do so in exchange for a significant risk premium added to the fixed price. By contrast, when a project entails a well-defined scope of work and presents an acceptable risk of material changes in scope, EPC providers are more willing to contract on a fixed price basis without charging a significant risk premium.

Q34. WHAT EPC CONTRACTING STRATEGY WILL BE UTILIZED FOR NOSS?

A. The Company plans to negotiate a fixed-price, fixed-schedule form of contract that reflects a detailed scope of work.

Q35. WHY DID THE COMPANY ELECT TO USE A FIXED-PRICE FORM OF EPC CONTRACT?

A. The EPC strategy used by the Company is expected to yield the lowest reasonable cost with an adequate level of risk mitigation.

Q36. HAS THE COMPANY AGREED UPON THE TERMS OF AN EPC AGREEMENT?

A. No. While several proposals have been received from potential solar EPC contractors, a final EPC contractor has not been selected, and no contract negotiations have begun. The execution of the EPC agreement is expected to occur by the fourth quarter of this year, and the Company will supply the final version of the agreement once executed. Construction under the EPC agreement will not commence until the contractor receives NTP from the Company, as discussed above.

V. CONSTRUCTION RISK MANAGEMENT AND MITIGATION

Q37. IS IT IMPORTANT TO HAVE PLANS IN PLACE TO MANAGE AND MITIGATE THE POTENTIAL RISKS ASSOCIATED WITH NOSS?

A. Yes. NOSS represents a substantial capital investment, and it needs to be well managed. Good management includes proper consideration of the risks that can be reasonably foreseen and the development of a plan to reasonably manage and mitigate those risks. Good project management should not seek to eliminate all potential risks irrespective of the costs to do so, but instead should reasonably manage those risks

considering the probability of occurrence, potential magnitude of impact, and cost to mitigate.

Q38. HOW DO THE POTENTIAL RISKS AFFECT THE PROJECT'S SCHEDULE AND PROJECTED COSTS?

A. The fixed-price structure and well-defined scope of work are expected to minimize the effect that potential risks may have on project costs. The Company will develop mitigation plans and has included contingency in the project cost estimate that is thought to be reasonably sufficient to mitigate risks typical for this type of project. Delays in receiving regulatory approvals or the required permits beyond the dates assumed in the project schedule will increase total costs and result in a delayed in-service date. The project schedule has been developed by optimizing the sequence of activities to produce the shortest practical schedule at the lowest reasonable cost.

Q39. IS THE CONTINGENCY REFLECTED IN THE PROJECT COST ESTIMATE ADEQUATE TO COVER ALL RISKS THAT COULD INCREASE COST?

A. No, and that is not the purpose of contingency funds in project management. Contingency is used to reasonably mitigate unplanned increases in project cost, whether caused by known risks or unforeseen risks. It recognizes that large construction projects that span years can be adversely affected by events beyond the utility's control. ESI used its experience to determine the level of contingency that would provide a reasonable level of mitigation of known and unknown risks, but it is possible that some of these risks, if realized, could cause cost increases beyond the

contingency included in the cost estimate. Again, the Company does not retain any unused project contingency.

Q40. WHAT TYPE OF INSURANCE IS INCLUDED IN THE COMPANY'S COST ESTIMATE FOR THE PROJECT?

A. The Company intends to procure Builders All Risk ("BAR") insurance prior to the issuance of NTP. BAR is for the benefit of the Company, the contractor, and subcontractors of every tier, and it covers property damage to the project work from non-excluded perils while it is under construction, from the moment of inland shipment from an original equipment manufacturer and/or supplier until the policy lapses. The limit of liability on the BAR policy is expected to be roughly equal to the EPC contract value, subject to various deductibles depending on the insured peril.

Q41. PLEASE DESCRIBE THE PROJECT MANAGEMENT TEAM IN PLACE TO MANAGE THE PROJECT.

A. A strong leadership team has been selected for NOSS from the ESI Capital Projects organization and includes both proven team members from recent and ongoing self-build generation projects and new team members.

Gary Dickens, Vice-President, Project Management will retain overall project execution responsibility for this Project, as he does for all new power generation projects such as the New Orleans Power Station. Reporting to Mr. Dickens as the Project Manager for NOSS project will be Rob Fluth, who joined ESI in early 2012. Mr. Fluth has a 15 year background in power plant engineering, project management,

and power plant construction. NOSS is under the direct oversight of the Project Manager, who has overall responsibility for ensuring that the key objectives of safety, cost, schedule, environmental, and quality are met, and for consulting and communicating with the Project's Governance Committee. The Project Manager will lead a project execution team that will manage the processes concerned with construction safety, project budget, cost and schedule control, engineering design review, overall construction site control, start-up and commissioning, documentation control, and progress review in accordance with the Company policies and practices set forth for project delivery.

Overall oversight for NOSS will be provided by a Governance Committee ("GC"). The GC will provide oversight and strategic direction for the Project, monitor and provide direction relating to Project performance, key risks, and value drivers that may affect the Project risk profile, and provides guidance to the Project Management Committee. The GC acts as liaison between the Project Manager and other executive groups and committees.

Q42. WHAT IS THE COMPANY'S POLICY REGARDING DIVERSE SUBCONTRACTOR PARTICIPATION IN THE CONSTRUCTION OF NOSS?

A. As a part of the EPC Agreement, ENO will require the contractor to provide opportunities to small and disadvantaged businesses for participation in any subcontracts and purchase orders let in the performance of its obligations as the EPC contractor. The Company requires the contractor to develop and maintain a list of Diverse Subcontractors and Suppliers that will be supplied to ENO on a quarterly

basis. Minority-owned businesses, women-owned businesses, veteran-owned businesses, and disabled-veteran-owned businesses, among others, are included within the meaning of "diverse subcontractors and suppliers." The contractor will be required to submit a plan for utilizing diverse subcontractors and suppliers to ensure such participation in the construction of NOSS.

VI. PERMITTING

Q43. HAS THE COMPANY SUBMITTED ANY PERMIT APPLICATIONS FOR THE PROJECT?

A. No. The Company has not reached a final determination of which governmental bodies other than the Council will have regulatory and/or permitting oversight over NOSS. But, considering the nature of the resource and the proposed use of the established NASA Michoud Facility, the Company does not anticipate any difficulties in obtaining necessary permits. The Company will work with NASA's environmental staff and permitting team on further site assessment and to ensure that the Project obtains all permits necessary to construct and operate NOSS.

Q44. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, at this time.

AFFIDAVIT

STATE OF LOUISIANA

PARISH OF ORLEANS

NOW BEFORE ME, the undersigned authority, personally came and appeared, **JONATHAN E. LONG**, 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.

Jonathan E. Long

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 24th DAY OF JULY, 2018

NOTARY PUBLIC

My commission expires: upon death

Sean Damian Moore, Notary ID #40557
Notary Public for the State of Louisiana
My Commission Expires Upon Death

Listing of Previous Testimony Filed by Jonathan E. Long

DATE	TYPE	SUBJECT MATTER	REGULATORY BODY	DOCKET NO.
07/11/2007	Direct	Little Gypsy	LPSC	U-30192
10/04/2007	Rebuttal	Little Gypsy	LPSC	U-30192
06/21/2011	Direct	Ninemile 6 Self Build	LPSC	U-31971
01/10/2012	Rebuttal	Ninemile 6 Self Build	LPSC	U-31971
08/25/2015	Direct	St. Charles Power Station Self Build	LPSC	U-33770
03/11/2016	Rebuttal	St. Charles Power Station Self Build	LPSC	U-33770
06/20/2016	Direct	New Orleans Power Station	CNO	UD-16-02
10/07/2016	Direct	Montgomery County Power Station	PUCT	46416
11/02/2016	Direct	Lake Charles Power Station	LPSC	U-34283
11/18/2016	Supplemental	New Orleans Power Station	CNO	UD-16-02
07/06/2017	Supplemental Direct	New Orleans Power Station	CNO	UD-16-02

Exhibit JEL-2
CNO Docket No. UD-18-__
Page 1 of 1

GREATER NEW ORLEANS HURRICANE AND STORM DAMAGE RISK REDUCTION SYSTEM (HSDRRS)

Lake Pontchartrain and Vicinity (LPV)/Westbank and Vicinity (WBV) Construction Status: 12 March 2013

Exhibit JEL-3
CNO Docket No. UD-18-__
Page 1 of 1

0 1 2
111 Miles

LPV-02.2 (Awarded 07/2009: $3.56M)
Reach 3 Lakefront Levee Phase 2
Bring levee/floodwall to authorized level of protection.

LPV-01.1 (Awarded 07/2009: $3.55M)
Reach 2 Lakefront Levee Phase 1
Bring levee to authorized level of protection.

LPV-18.2 (Awarded 09/2009: $3.33M)
Floodwall/Gate at Williams Blvd. Boat Launch Phase 2
Construct to 100 year level of protection.

LPV-12a.2 (Awarded 08/2009: $7.99M)
Pumping Station #4 (Duncan) Breakwater Phase 2
Construct concrete breakwater to elevation 14 feet.

LPV-00.2 (Awarded 08/2009: $3.16M)
Reach 1 Lakefront Levee Phase 2
Bring levee to 100 year level of protection.

LPV-03.2B (Awarded 07/2010: $82.64M)
West Return Floodwall (Northern Segment) Phase 2
Construct to 100 year level of protection.

LPV-03.2A (Awarded 07/2010: $36.87M)
West Return Floodwall (Southern Segment) Phase 2
Construct to 100 year level of protection.

LPV-03d.2 (Awarded 09/2010: $1.85M)
Airport Runway 10 Levee Phase 2
Bring levee to 100 year level of protection.

LPV-20.1 (Awarded 10/2008: $2.91M)
Reach 5 Lakefront Levee Phase 1
Bring levee to 100 year level of protection.

LPV-16.2 (Awarded 12/2009: $3.02M)
Floodwall/Gate at Bonnabel Boat Launch Phase 2
Bring to 100 year level of protection.

LPV-09a.2 (Awarded 05/2009: $9.15M)
Pumping Station #1 (Bonnabel) Breakwater Phase 2
Construct concrete breakwater to elevation 14 feet.

LPV-17.2 (Awarded 08/2010: $43.19M)
Bridge Abutment/FW Tie-ins at Causeway Phase 2
Bring levee to 100 year level of protection.

LPV-19.2 (Awarded 09/2009: $2.62M)
Reach 4 Lakefront Levee - Phase 2
Bring levee to 100 year level of protection.

PCCP-01 (Awarded 09/2012: $629.50M)
Permanent 17th Street, Orleans Avenue, and London Avenue Canal Closures

LPV-101.02 (Awarded 07/2009: $33.25M)
17th Street Canal to Topaz Street
Replace I-Walls with T-Walls.

LPV-102.01 (Awarded 10/2007: 1.09M)
Topaz Street to Orleans Avenue Canal
Raise levees.

LPV-103.01 (Awarded 12/2007: $5.20M)
Orleans Avenue Canal to London Avenue Canal
Raise levees.

LPV-103.01A1 (Awarded 08/2009: $10.17M)
17th Street Canal to London Avenue Canal
Marconi Gate, Orleans Canal, and Bayou St. John work.

LPV-103.01A2 (Awarded 07/2010: $5.42M)
Orleans Canal to London Avenue Canal
Replace ramps at Rail Street and Lake Terrace.

LPV-104.01 (Awarded 07/2007: $1.29M)
London Avenue Canal to IHNC
Raise levees.

LPV-104.01a (Awarded 10/2009: $14.07M)
London Avenue Canal to IHNC
Phase 1A--Raise ramps.

LPV-104.02 (Awarded 01/2010: $5.13M)
London Avenue Canal to IHNC
Replace I-Walls with T-Walls.

LPV-108 (Awarded 11/2008: $15.49M)
Paris Road to Southpoint
Raise levees.

LPV-107 (Awarded 05/2010: $7.33M)
Lincoln Beach
Reconstruct Floodwall/Gate.

IHNC-01 (Awarded 02/2010: $154.16M)
Seabrook Gate
Build structure.

LPV-105.01 (Awarded 04/2010: $12.49M)
Lakefront Airport Floodwalls West
Reconstruct floodwalls.

LPV-105.02 (Awarded 05/2010: $19.47M)
Lakefront Airport Floodwalls East
Reconstruct floodwalls.

LPV-106 (Awarded 05/2010: $15.99M)
Citrus Lakefront Levee
Raise to 100-year level of protection.

LPV-109.02b (Awarded 04/2010: $16.99M)
I-10 Floodwall and Crossing
Earthem I-10 ramp.

LPV-109.02a (Awarded 03/2010: $112.25M)
Southpoint to CSX Railroad
Raise levees.

LPV-110 (Awarded 04/2010: $3.38M)
CSX Railroad Crossing
Replace gate.

LPV-111.01 (Awarded 06/2009: $403.08M)
CSX Railroad to Michoud Canal
Raise levees.

IHNC-02 (Awarded 04/2008: $1,119.47M)
IHNC/GIWW/MRGO Lake Borgne Closure
Build closure structure.

LPV-145 (Awarded 07/2009: $488.00M)
Bayou Bienvenue to Bayou Dupre
Construct floodwall on top of levee.

LPV-144 (Awarded 01/2010: $36.37M)
Bayou Dupre Floodgate
Replace floodgate.

LPV-147 (Awarded 03/2010: $5.32M)
Bayou Road and LA 46 Floodgates
Replace floodgates.

LPV-146 (Awarded 08/2009: $452.00M)
Bayou Dupre to LA 46
Construct floodwall on top of levee.

LPV-06f.2 (Awarded 06/2010: $4.29M)
Canadian National Railroad Gate Phase 2
Provide 100 year level of protection.

LPV-07d.2 (Awarded 08/2009: $2.63M)
Almedia/Walker Drainage Structures Phase 2
Provide 100 year level of protection.

LPV-04.2B (Awarded 12/2009: $7.97M)
Reach 1B I-310 to Walker Drainage Structure Phase 2
Raise and construct levees/floodwalls to 100 year levels.

LPV-04.1 (Awarded 06/2007: $12.93M)
Reach 1A, 1B and 2A Phase 1
Bring levees to design elevations.

LPV-06a.2 (Awarded 12/2009: $5.90M)
Bayou Trepagnier Complex Floodwall Phase 2
Construct floodwall tie-ins to 100-year level of protection.

LPV-05.2A (Awarded 12/2009: $6.64M)
Reach 2A Shell Pipeline to Goodhope/
Shell Pipeline Levee/Floodwall Replacement Phase 2
Bring levee to design elevations.

LPV-04.1 (Awarded 06/2007: $12.93M)
Reach 1A, 1B and 2A Phase 1
Bring levees to design elevations.

LPV-06b.2 (Awarded 12/2010: $1.62M)
Shell Pipeline Floodwall Phase 2
Retrofit floodwall to 100-year level of protection.

LPV-06c.2 (Awarded 12/2009: $2.40M)
Good Hope Floodwall Phase 2
Construct floodwall tie-ins to 100-year level of protection.

LPV-05.2B (Awarded 11/2009: $12.19M)
Reach 2B Good Hope to Cross Bayou Phase 2
Raise and construct levees/floodwalls to 100 year levels.

LPV-07b.2 (Awarded 03/2010: $9.51M)
Cross Bayou Drainage Structure Phase 2
Provide 100 year level of protection.

LPV-04.2A (Awarded 09/2009: $9.05M)
Reach 1A Cross Bayou to St. Rose/GS FW Phase 2
Raise and construct levees/floodwalls to 100 year levels.

LPV-04.1 (Awarded 06/2007: $12.93M)
Reach 1A, 1B and 2A Phase 1
Bring levees to design elevations.

LPV-07c.2 (Awarded 12/2009: $6.42M)
St. Rose Drainage Structure and Levee Phase 2
Construct floodwall to 100 year level of protection.

LPV-06e.2 (Awarded 04/2010: $11.18M)
Floodwall Under I-310 - Phase 2
Construct floodwall to 100 year level of protection.

WBV-77 (Awarded 07/2011: $8.37M)
Western Tie-In Union Pacific Railroad Crossing
Construct FW/structure for 100 year level at railroad crossings.

WBV-75 (Awarded 06/2011: $4.42M)
Western Tie-In BNSF Railroad Crossing
Construct FW/structure for 100 year level at railroad crossings.

WBV-71 (Awarded 09/2009: $5.33M)
Western Tie-In Levees (North-South)
Raise levees to 100-year level of protection.

WBV-73 (Awarded 07/2010: $38.48M)
Western Tie-In Highway Crossing
Construct FW/structures to 100-yr level of protection at US 90.

WBV-72 (Awarded 03/2010: $30.22M)
Western Tie-In Levees (East-West)
Construct levees to 100-year level of protection.

WBV-74 (Awarded 04/2010: $28.95M)
Western Tie-In Closure Structure
Construct closure structure for 100-yr level of protection.

WBV-76 (Awarded 01/2011: $6.99M)
Western Tie-in Highway 90 Pump Station
Relocating the PS at US 90.

WBV-17b.2 (Awarded 11/2010: $5.30M)
Station 160+00 to Hwy 90- Phase 2
Build to 100 year level of protection.

WBV-18.2 (Awarded 08/2009: $12.31M)
Hwy 90 to Lake Catauoatche PS - Phase 2
Raise levees to 100 year flood level of protection.

WBV-15a.2a (Awarded 06/2012: $2.61M)
Lake Catauoatche PS to Segnette SP-Chevron Crossing
Raise and construct levees to 100 year level of protection at Chevron Pipeline Crossing.

WBV-15b.2 (Awarded 04/2009: $23.74M)
Lake Catauoatche PS Fronting Protection, Modifications
PS fronting protection, modifications, floodwall tie-ins to the 100 year level of protection.

WBV-15a.2 (Awarded 02/2010: $41.31M)
Lake Catauoatche PS to Segnette SP-Phase 2
Raise and construct levees to 100 year level of protection.

WBV-24 (Awarded 12/2009: $20.87M)
Bayou Segnette State Park Floodwall
Already built to authorized level of protection. This contract to meet 100 year level of protection.

WBV-30 (Awarded 09/2009: $13.69M)
Westminster PS Fronting Protection and Modifications
Already built to authorized level of protection. PS fronting protection, modifications, FW tie-ins to 100 year level of protection.

WBV-14c.2 (Awarded 06/2010: $26.54M)
New Westwego PS to Orleans Village Phase 2
Build to 100 year level of protection.

WBV-37 (Awarded 06/2010: $22.50M)
Ames I Mount Kennedy Pump Stations
Already built to authorized level of protection. PS fronting protection, modifications, FW tie-ins to 100 year level of protection.

WBV-14b.2 (Awarded 09/2009: $11.06M)
Orleans Village to LA 45 Levee Phase 2
Build to 100 year level of protection.

WBV-14f.2 (Awarded 09/2009: $4.94M)
LA 45 Levee Phase 2
Contract goes to 100 year flood level of protection.

WBV-14d (Awarded 07/2009: $17.15M)
V-line Floodwall
LA 45 to Lafitte Larose Hwy; 100 year level of protection.

WBV-14l (Awarded 03/2010: $13.08M)
V-line Levee/LA 3134 Crossing
Earth ramp crossing/culvert replacement.

WBV-14e.2a (Awarded 01/2011: $13.85M)
V-line levee, East of Vertex Phase 2
Build to 100 year level of protection.

WBV-33 (Awarded 09/2009: $22.57M)
Old Estelle PS Fronting Protection and Modifications
Already built to authorized level of protection. PS fronting protection, modifications, FW tie-ins to 100 year level of protection.

WBV-90 (Awarded 04/2010: $834.01M)
GIWW-West Closure Complex
Construction of 225-foot navigable structure; 19,140 cfs PS; T-wall on the edge of the 404c area; levee; excavation/dredging for a gated closure south of the confluence of Harvey and Algiers Canals.

WBV-12 (Awarded 04/2010: $11.75M)
Hero Canal Reach 1, 2nd Enlargement
Improve approx 2.2 miles of levee to the 100-year level of risk protection.

WBV-09b (Awarded 05/2010: $28.14M)
Hero Canal to Oakville Structures
Raise and construct stop-log closure, pump station, and tie-ins on Hero Canal to 100 Year level of protection.

WBV-09a (Awarded 06/2010: $33.41M)
Hero Canal to Oakville Levees
Raise and construct levee and a small pump station to 100-Year level of protection.

WBV-09c (Awarded 07/2010: $7.03M)
Hero Canal to Oakville - Highway Structures
Raise and construct vehicle and RR floodgates on Belle Chasse Hwy. to 100-Year level of protection.

WBV-13 (Awarded 09/2009: $21.40M)
SWB PS #11 Fronting Protection/Modifications
PS fronting protection, modifications, floodwall tie-ins to the detention-basin elevation.

WBV-47.1 (Awarded 11/2010: $5.84M)
Algiers Lock to Belle Chasse Hwy (West) Phase 1
Raise levees.

WBV-48.2 (Awarded 11/2010: $1.58M)
Belle Chasse Hwy to Algiers Lock (East) Phase 2
Already built to authorized level of protection. Stability analysis of levee and constr. improvements as required.

WBV-08 (Awarded 09/2009: $29.98M)
SWB PS #13 Fronting Protection and Modifications
PS fronting protection, modifications, floodwall tie-ins to the detention-basin elevation.

WBV-11 (Awarded 01/2010: $14.51M)
Belle Chasse PS #2 Fronting Protection/Modifications
PS fronting protection, modifications, floodwall tie-ins to the detention-basin elevation.

WBV-07 (Awarded 09/2009: $33.07M)
Planters PS Fronting Protection and Modifications
PS fronting protection, modifications, floodwall tie-ins to the detention-basin elevation.

WBV-06.2 (Awarded 12/2010: $21.73M)
Belle Chasse Hwy to Hero Cutoff Reach 3 / 4-Phase 2
Construct floodgates, levee, floodwalls, and tie-ins near Belle Chasse Tunnel to the detention-basin elevation.

WBV-04.2 (Awarded 09/2010: $4.21M)
Belle Chasse Hwy to Hero Cutoff Reach 1-Phase 2
Construct floodgates and tie-ins to the detention-basin elevation.

WBV-10 (Awarded 09/2009: $31.71M)
Belle Chasse PS #1 Fronting Protection/Mods. Phase 1
PS fronting protection, modifications, floodwall tie-ins to the detention-basin elevation.

WBV-44 (Awarded 08/2010: $7.35M)
Whitney Barataria PS Floodwall Modifications
Already built to authorized level of protection. PS floodwall modifications and floodwall tie-ins.

WBV-05.2 (Awarded 09/2010: $3.94M)
Belle Chasse Hwy to Hero Cutoff Reach 2 Phase 2
Construct floodgates and tie-ins to the detention-basin elevation.

WBV-49.1 (Awarded 10/2010: $1.31M)
Hero Levee to Belle Chasse Hwy (East) Phase 1
Raise levees to the detention-basin elevation.

WBV-06a.2 (Awarded 09/2010: $2.91M)
Belle Chasse Hwy to Hero Cutoff (West) Phase 2
Raise levees to detention basin elevation.

WBV-46.2 (Awarded 05/2010: $2.77M)
Cousins Canal Walls - Destrehan Bridge to Sector Gate
Contract goes to 100 year level of protection.

WBV-01 (Awarded 02/2008: $132.13M)
Contract 1, Sectorgate to Boomtown Floodwall
Construct floodwalls to level of protection.

WBV-02a (Awarded 07/2008: $48.45M)
Contract 2a, Boomtown Floodwalls
Construct floodwalls to level of protection.

WBV-02b (Awarded 03/2007: $56.10M)
Contract 2b, Boomtown to Hero PS Floodwalls
Construct floodwalls to level of protection provided by Engineering Division.

WBV-03a (Awarded 07/2008: $62.28M)
Contract 3a, Hero PS to Algiers Canal Floodwall
Construct floodwalls to level of protection.
Includes Hero PS fronting protection, modifications, and floodwall tie-ins.

WBV-03b (Awarded 12/2008: $32.01M)
Contract 3b, Hero PS to Algiers Canal Floodwall
Construct floodwalls to level of protection.
Includes floodwall and levee.

WBV-38.2 (Awarded 10/2010: $11.17M)
Cousins PS and Discharge Channel Floodwalls Phase 2
PS fronting protection, modifications, FW tie-ins to 100-Year level of protection.

WBV-14a.2 (Awarded 11/2010: $13.06M)
Harvey Canal Westbank Levees Phase 2
Build to 100 year level of protection. Includes two areas of sheetpile walls.

WBV-23 (Awarded 04/2010: $8.00M)
New Estelle PS Floodwall Modifications
Already built to 100-Year level of protection. PS floodwall modifications and floodwall tie-ins.

WBV-14g.2 (Awarded 08/2009: $20.57M)
Estelle PS Vicinity Floodwalls
Floodwalls between Lapalco Overpass to New Estelle PS to New Estelle PS for 100-year level of protection.

WBV MRL-01.2A (Planned Award: 10/2013)
Augusta to Oakville
Floodwall construction.

WBV MRL-01.2B (Planned Award: 09/2013)
Augusta to Cedar Grove
Floodwall shift of levee.

WBV MRL-02.2 (Planned Award: 09/2013)
Oakpoint to Augusta
Floodwall construction.

WBV MRL-03.2 (Planned Award: 09/2013)
Belle Chasse to Oakpoint
Floodside shift of levee and 780 feet of floodwall.

WBV MRL-04.2 (Planned Award: 10/2013)
English Turn Bend to Belle Chasse
Floodwall construction.

WBV MRL-05.2 (Planned Award: 09/2013)
English Turn Bend
Floodside shift of levee.

LPV-01.2 (Awarded 09/2010: $22.57M)
Foreshore Protection A Phase 2
Provide wave attention/foreshore protection along the frontside of Lakefront Levee System Reach 1 and 2.

LPV-09.2 (Awarded 04/2010: $174.15M)
PS 1/PS 2/PS 3/PS 4: Modifications, Fronting Protection; *Positive Cutoff/Floodwall Tie-ins - Phase 2*
Bring to 100 year level of protection.

LPV-20.2 (Awarded 08/2010: $18.32M)
Foreshore Protection B Phase 2
Provide wave attention/foreshore protection along the frontside of Lakefront Levee System Reach 3 and 4.

WBV-14j (Awarded 12/2010: $8.40M)
Westwego to Harvey Utility Crossings/
Harvey Sector Gate Retro Fit
Sleeve through four floodwalls and sector gate retro fit.

12 MARCH 2013 CONSTRUCTION STATUS

- 0 - 49% Complete
- 50 - 94% Complete
- 95 - 100% Complete

Map compiled for USACE Task Force Hope by:
John DeFrailes (john.m.defrailes@usace.army.mil)

INSET 1: BAYOU SEGNETTE AREA

SCALE 1:40,000

INSET 2: HARVEY CANAL AREA

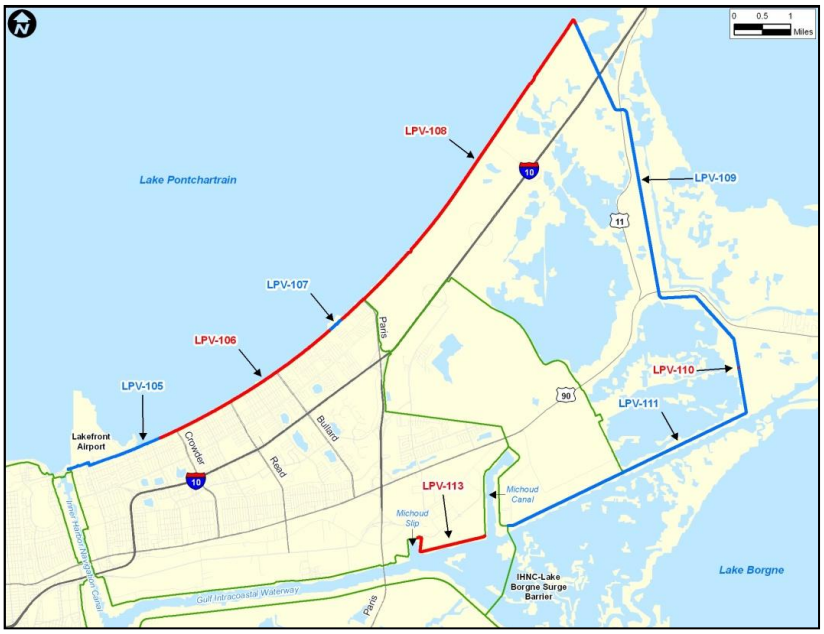
SCALE 1:40,000

NEW ORLEANS EAST

Updated May 2015

U.S. ARMY CORPS OF ENGINEERS **BUILDING STRONG®**

Public safety is the Corps of Engineers' top priority. Congress has fully authorized and funded the Hurricane and Storm Damage Risk Reduction System (HSDRRS) for southeast Louisiana. The $14.45 billion HSDRRS includes five parishes and consists of 350 miles of levees and floodwalls; 73 non-Federal pumping stations; 3 canal closure structures with pumps; and 4 gated outlets.



Project Summary

The perimeter system in New Orleans East stretches from the eastern end of the Inner Harbor Navigation Canal (IHNC) along Lake Pontchartrain to the northeast, continues southeast to the Gulf Intracoastal Waterway, southwest to the Michoud Slip and then ties in to the IHNC Surge Barrier. The structural features reduce the risk associated with a storm surge event that has a one percent chance of occurring in any given year, or a 100-year storm surge. The total construction value for the New Orleans East perimeter system is an estimated $1 billion.

Project Features

Approximately 25 miles of levee have been raised and approximately 2 miles of floodwall have been constructed around the perimeter of New Orleans East. Along the New Orleans East lakefront near the Lakefront Airport, a new concrete T-wall and a vehicle gate at Downman Road (LPV 105) were constructed. Between the Lakefront Airport and Paris Road, the existing embankment was raised with a 2 to 4 foot high floodwall (LPV 106) and a new T-wall and access gate were constructed at Lincoln Beach (LPV 107). Between Paris Road and Southpoint, the existing levee was raised and T-walls were constructed at the Collins Pipeline Crossing. All features along the New Orleans East lakefront are at an elevation of between 15 and 18 feet above sea level.

On the eastern edge of New Orleans East between Southpoint and the CSX Railroad, the existing levee was raised and vehicle gates (LPV 109.02a&c) were constructed. In order to raise the levee expeditiously, innovative construction techniques - wick drains and a sand drainage blanket - were used to strengthen and consolidate the underlying soil. Vehicle gates were also built at Highway 90 and Highway 11, and Interstate 10 was raised where it crosses the levee (LPV 109.02b). The entire LPV 109 stretch was raised to an elevation between 16.5 and 25 feet above sea level.

At the CSX Railroad crossing, a 27.5 foot high gate (LPV 110) was constructed. Between the CSX Railroad and the Michoud Canal, the existing levee and T-wall around Drainage Pump Station 15 were raised and a floodwall to tie into the Inner Harbor Navigation Canal-Lake Borgne Surge Barrier (LPV 111) was constructed. In order to strengthen the underlying soil, deep soil mixing (a process that involves injecting a cement-water mixture deep into the native soil and mixing it with the soil) was used to strengthen the levee's foundation. The levee and floodwalls in this location were raised to an elevation of between 25 and 32 feet above sea level. Further west, between the Michoud Canal and the Michoud Slip, the existing levee was raised to 19.5 feet above sea level (LPV 113).

-Over-

U.S. ARMY CORPS OF ENGINEERS – TEAM NEW ORLEANS
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NEW ORLEANS EAST

Updated May 2015

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Project Status

All 100-year level risk reduction features in the New Orleans East perimeter system were completed in June 2011.

Interstate 10 Crossing at LPV 109

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BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

APPLICATION OF ENTERGY NEW ORLEANS, LLC FOR APPROVAL OF RENEWABLE PORTFOLIO AND REQUEST FOR COST RECOVERY AND RELATED RELIEF	**)** **)** **)** **)** **)**	**DOCKET NO. UD-18-__**

DIRECT TESTIMONY

OF

MICHAEL J. GOIN

ON BEHALF OF

ENTERGY NEW ORLEANS, LLC

PUBLIC VERSION

HIGHLY SENSITIVE PROTECTED MATERIALS HAVE BEEN REDACTED PURSUANT TO RESOLUTION R-07-432

JULY 2018

TABLE OF CONTENTS

EXHIBITS

INTRODUCTION AND PURPOSE

Q1. PLEASE STATE YOUR NAME AND CURRENT BUSINESS ADDRESS.

A. My name is Michael J. Goin. My business address is Parkwood II Building, Suite 300, 10055 Grogan's Mill Road, The Woodlands, Texas 77380.

Q2. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by Entergy Services, Inc. ("ESI"),[1] as Director, Planning Analysis for System Planning and Operations ("SPO"). Prior to assuming my current position in April 2018, I was employed by ESI as Director, Energy Management Organization ("EMO"). Prior to that, I was Director Regulatory and Strategic Initiatives for SPO.

Q3. PLEASE DESCRIBE YOUR EDUCATION AND BUSINESS EXPERIENCE.

A. I earned a Bachelor of Electrical Engineering degree and a Master of Science in Management degree from the Georgia Institute of Technology.

I have been employed by ESI since 1996. During my career, I have held numerous positions in financial planning and analysis, forecasting, accounting, strategic planning, and power marketing. From 1996 to 1997, I was in the Accounting organization. My main responsibilities were to produce financial analysis for the fossil and nuclear functions. From 1997 to 1999, I worked in the

[1] ESI is a service company affiliate of the Entergy Operating Companies ("EOCs") and provides engineering, planning, accounting, technical, and regulatory-support services to each of the EOCs. The five current EOCs are Entergy Arkansas, Inc. ("EAI"), Entergy Louisiana, LLC ("ELL"), Entergy Mississippi, Inc. ("EMI"), ENO, and Entergy Texas, Inc. ("ETI").

financial group responsible for utility planning and produced pro-forma financial statements. From 1999 to 2002, I worked in Strategic Planning on a variety of projects relating to transition to competition and various projects to support senior management. During that time period, I was promoted to Project Manager. In early 2002, I moved to the SPO organization and was promoted to manager in early 2003. As the Manager, Financial Analysis – System Planning, my responsibilities included coordinating analyses regarding the financial implications of generation supply alternatives for the Entergy System. Examples of this include financial forecasts and cost-benefit studies. My role also included developing financial models and analyses that supported decision-making and provided a System Planning interface for other groups. In February 2008, I assumed the position of Manager, Power Marketing in the SPO organization. The Power Marketing Team is responsible for the procurement and sale of short-term power. In February 2010, I assumed the role of Manager, Regulatory Projects. In March 2013, I was promoted to the role of Director, Regulatory and Strategic Initiatives. In February 2017, I assumed the position of Director, EMO. In April 2018, I assumed the position of Director, Planning Analysis. My responsibilities include management of the commercial negotiations associated with asset procurement that are carried out by a project team consisting of various legal, commercial, and operational personnel. I have been responsible for managing existing co-owner and third part power contracts, and negotiating new power purchase agreements and acquisitions of power generation facilities.

Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I am testifying in support of the Company's Application, which seeks approval of, among other things, its proposed Renewables Portfolio consisting of a 20 megawatts ("MW") self-build located in New Orleans East ("New Orleans Solar Station" or "NOSS"), a 50 MW acquisition outside of Orleans Parish ("Iris Solar Facility" or "ISF"), and a 20 MW purchase power agreement ("St. James PPA" or "PPA") (collectively the "Renewable Portfolio"). My Direct Testimony will focus on providing the project details and expected commercial terms related to the St. James PPA and the Iris Solar Facility.

Q5. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE CITY COUNCIL?

A. Yes. Please see attached Exhibit MJG-2 for a list of previous testimony.

OVERVIEW: ST. JAMES PPA

Q6. PLEASE PROVIDE A DESCRIPTION OF THE ST. JAMES FACILITY.

A. The St. James facility is a 20 MW to-be-constructed solar photovoltaic ("PV") plant located in St. James Parish near Vacherie, Louisiana. The facility is a "greenfield" project to be owned by St. James Solar, LLC ("St. James"), which has secured and maintained site control for the facility through a long-term lease agreement with Ten-R Farms for 200 contiguous acres adjacent to Entergy Louisiana, LLC's 230kV Vacherie substation. The lease allows St. James four (4) years to develop the project and provides a thirty (30) year operating term thereafter.

Q7. PLEASE DESCRIBE THE ST. JAMES PPA IN MORE DETAIL.

A. The St. James PPA is a long-term (20-year) agreement for the purchase of 20 MW of must-take, unit-contingent, as-available capacity, capacity-related benefits, environmental attributes, energy and other electric products from the facility. The PPA has an estimated total nominal value of $[redacted] based on the contractual Annual Guaranteed Energy Quantity ("AGEQ") and an estimated total nominal value of [redacted] based on the contractual Annual Expected Energy Quantity ("AEEQ"). The delivery term is 20 years, but will be extended to the end of the Midcontinent Independent System Operator, Inc. ("MISO") planning year if the delivery term and the MISO planning year do not align. The Guaranteed Commercial Operation Date ("GCOD") is [redacted].

Table 1 (contains HSPM)
Descriptions of St. James PPA

Description	Unit contingent, as-available capacity, capacity-related benefits, environmental attributes, energy and other electric products.
Quantity:	20 MW (subject to reduction).
Capacity Credit Risk:	The resource is initially expected to receive capacity credits equal to 50% of its total capacity (10 MW) because it is an intermittent solar resource; however, under current MISO rules, the capacity value of the resource may decrease or increase in the future based on the unit's actual operating characteristics at the MISO peak.
Term	20 years from commercial operation date, subject to an extension to align with the MISO planning year. The GCOD is [redacted].

Table 1 (contains HSPM) **Descriptions of St. James PPA**	
Energy:	Annual Guaranteed Energy Quantity ("AGEQ"): The AGEQ represents the P90 annual quantity for the facility and is the amount of energy that St. James would guarantee that ENO would receive in each contract year. The AGEQ is [redacted] MWh in contract year 1 and is subject to annual degradation of approximately [redacted] The traditional capacity factor associated with the AGEQ is approximately [redacted]. This calculation includes non-daylight hours. Annual Expected Energy Quantity ("AEEQ"): The AEEQ represents the P50 annual quantity for the facility. The AEEQ will be [redacted] MWh in contract year 1 of the contract and is subject to an annual degradation of approximately [redacted], due to degradation of the solar panels over the life of the facility. The traditional capacity factor associated with the AEEQ is approximately [redacted] This calculation includes non-daylight hours. Quantity Reduction: There are resizing provisions which adjust the maximum energy, AEEQ and AGEQ proportionately with a change in capacity based on a capacity demonstration test. St. James has to demonstrate at least [redacted] of capacity to be considered commercially operational.
Price	[redacted]
Delivery Point:	The physical point of interconnection with the Entergy Transmission System will be at the 230 kV Vacherie Substation transmission line.

Table 1 (contains HSPM) **Descriptions of St. James PPA**	
	St. James will deliver energy to ENO under the PPA at the commercial pricing node for ENO's load node (EES.NOPLD) through financial schedules based on physical energy from the facility injected at the facility's interconnection point.
Premiums/Penalties:	Annual Guaranteed Energy Quantity Shortfall/Liquidated Damages If, in any contract year, St. James does not meet its AGEQ, St. James would owe ENO liquidated damages for each MWh shortfall. St. James shall pay to ENO liquidated damages in the amount equal to the product of [redacted] Curtailment Rights/Liquidated Damages If ENO exercises (or is deemed to exercise) its curtailment rights, [redacted]
Market Participant:	Under the PPA, St. James or a designated third party is expected to act as the Market Participant for the facility, but ENO would have the right to become Market Participant at its election over the term of the PPA, subject to a restriction on such election 180 days prior to the expected delivery term commencement date.
Energy Imbalances:	Generally, St. James will be responsible for all imbalance charges, which would include all costs, fees, penalties and other charges of any kind that are assessed or imposed for energy imbalances, and include costs of purchasing or selling imbalance or real-time energy (at real-

Table 1 (contains HSPM) **Descriptions of St. James PPA**	
	time energy prices) to settle under-generated or over-generated energy.
Transmission Risks:	St. James submitted an interconnection request to MISO on March 9, 2018. Transmission upgrades have not yet been identified but will be the responsibility of St. James. At this time, St. James' current estimate for interconnection and network upgrades is $[redacted]
Deliverability Risks:	Participation in MISO exposes ENO to certain LMP risks if the facility is registered as an intermittent capacity resource. In MISO and other regional transmission organizations, LMPs may differ from one node to the next. Changes in LMPs are driven by traditional market forces (*e.g.*, supply and demand and congestion). Because St. James is required to deliver energy under the PPA to ENO at the ENO load and not the facility's interconnection point, all congestion risk lies with St. James.
Operation and Maintenance:	St. James will maintain the facility in accordance with accepted industry practices and all relevant equipment manufactures' requirements. Under the PPA, St. James will be permitted to (i) perform major planned maintenance only during the months of October and November and (ii) perform all planned maintenance (including major planned maintenance) in a manner that optimizes the generation and benefits of the energy and other products under the PPA to ENO and either (A) outside of daylight hours or (B) during daylight hours only in October or November; provided, however, that no restrictions will apply to planned maintenance, including major planned maintenance, that is required to be performed pursuant to any manufacturer warranty.
Estimated Total Transaction Value (Nominal $)	$[redacted] based on AGEQ; and $[redacted] based on AEEQ.

Q8. COULD THERE BE ADDITIONAL COSTS INCURRED BY ENO UNDER THE CONTRACT THAT ARE NOT DETAILED IN THE SUMMARY ABOVE?

A. Yes. In longer-term PPAs, there are risks due to various potential changes in environmental regulation. Sellers in today's market are often unwilling to bear the full change-in-law risk without some *quid pro quo*. For example, a seller might require a buyer to pay a substantial risk premium to mitigate the seller's risk of a potential increase in costs due to a change in law. Instead, ENO, on behalf of its customers, will take some responsibility for change-in-law costs. In the St. James PPA, each party would be responsible for its own additional costs it may incur due to a change in law.

Q9. ARE THERE CONDITIONS PRECEDENT TO THE PPA TAKING EFFECT?

A. Yes. The following conditions, among others, must be satisfied or waived in order for the delivery term under the St. James PPA to commence:

1) On or before [redacted], ENO must obtain regulatory approval from the New Orleans City Council on terms acceptable to ENO in its sole discretion;

2) On or before [redacted], ENO must obtain any necessary consents on terms acceptable to ENO in its sole discretion; and

3) On or before [redacted], St. James must obtain any required governmental approvals and consents.

Either party would be able to terminate the PPA without liability if any of the preceding conditions precedent is not satisfied or waived by the required date, provided the terminating party has discharged its obligation to use the efforts required under the PPA to satisfy the condition.

Q10. ARE THERE OTHER PROVISIONS IN THE PPA OF WHICH THE COUNCIL SHOULD BE AWARE?

A. Yes. The PPA includes the following contractual terms:

- **Force Majeure**: ENO would be permitted to terminate the PPA if substantially all deliveries of energy to ENO are prevented by force majeure for more than the requisite force majeure period.
- **Termination Rights:**
  - **Failure to Satisfy Conditions Precedent**

    In general, neither party would have any liability to the other for a termination due to the failure of a party's condition precedent to be satisfied.
  - **Failure to Achieve Commercial Operation**

[redacted]

[redacted]

- **Failure to Meet Minimum Delivered Energy Requirement**

  ENO would have the right to terminate the PPA if St. James does not deliver to ENO an amount of energy equal

to or exceeding (i) the Minimum Two Consecutive Contract Year Energy Quantity during each of any two consecutive contract-year period or (ii) the Minimum Three Contract Year Energy Quantity during each of any three contract years over the preceding six contract years.

The Minimum Two Consecutive Contract Year Energy Quantity is 80% of the AGEQ (~[redacted] MWh based on the AGEQ in contract year 1). The Minimum Three Contract Year Energy Quantity is 75% of the AGEQ (~[redacted] MWh based on the AGEQ in contract year 1).

- **Events of Default**

In the event of default, the non-defaulting party would have the right to terminate the PPA, subject to certain conditions, and would be due an uncapped (termination payment calculated based on the net present value of the non-defaulting party's losses resulting from termination of the PPA, which will depend on market conditions at the time of any termination.

- **Full Deliverability Obligations**

St. James has the ability to achieve commercial operation with Energy Resource Interconnection Service ("ERIS") instead of Network Resource Interconnection Service

("NRIS"), provided that St. James is unable to achieve commercial operation by the GCOD with NRIS, continues to pursue NRIS, and delivers to ENO the zonal resource credits in MISO that ENO would have received if St. James had NRIS. If St. James so achieves commercial operation but does not obtain NRIS within two (2) years of the commencement of the delivery term, ENO would have the right to terminate the PPA.

Q11. DOES THE ST. JAMES PPA PROVIDE FOR REIMBURSEMENT TO THE COMPANY FOR LOST REVENUES OR OTHER DAMAGES DUE TO THE INABILITY OF THE UNIT TO OPERATE FOR ANY REASON?

A. No. As I mentioned previously, the St. James PPA is a unit contingent PPA, which means that St. James has no obligation to deliver contracted products if the generating unit is unavailable, but would be subject to liquidated damages payable to ENO for failure to deliver the AGEQ.

Q12. HAS YOUR TESTIMONY EXPLORED ALL MATERIAL PROVISIONS OF THE AMENDED PPA?

A. No. My testimony provides a summary of certain provisions of the St. James PPA and is not intended to fully describe all material provisions. Because it is important that the Council and all stakeholders have an opportunity to consider all

terms and conditions of the St. James PPA, I have attached it as HSPM Exhibit MJG-2.

OVERVIEW: IRIS SOLAR FACILITY ACQUISITION

Q13. PLEASE PROVIDE A DESCRIPTION OF THE IRIS SOLAR FACILITY AND THE PROJECT SITE.

A. The Iris Solar Facility is a 50 MW solar photovoltaic electric generation facility to-be-constructed by [redacted] and acquired by ENO. The facility will be located on a remote approximately 440 acre "greenfield" site in Washington Parish, Louisiana. The site is leased to [redacted] by the [redacted] The lease agreement provides for a [redacted]-year base term, with [redacted] possible [redacted] extensions by [redacted].

Q14. PLEASE DESCRIBE THE IRIS SOLAR FACILITY ACQUISITION IN MORE DETAIL.

A. The acquisition is structured as a build-own-transfer, or "B-O-T", asset acquisition. Under the proposed B-O-T structure, [redacted] would design and build the Iris Solar Facility if ENO obtains the required regulatory approvals and other necessary conditions to issuance of full notice to proceed ("FNTP") are met. After the plant has achieved [redacted] and the other closing conditions have been satisfied, ENO would buy the plant and related assets from [redacted] for the pre-agreed purchase price. Following the closing, [redacted]

would be required to finish the remaining work needed for the construction of the facility to be considered complete.

Q15. WHAT IS THE SIGNIFICANCE OF ENO'S AGREEING TO ACQUIRE THE FACILITY AFTER [redacted]?

A. At [redacted], construction of the plant will be largely complete, but the plant will not be tested or commissioned. ENO structured the timing of the acquisition to ensure that ENO would have the opportunity to obtain the federal investment tax credits ("ITC") available for the project. My understanding of the current tax laws is that ENO could not receive the ITC if the plant is [redacted] prior to the closing.

Q16. WHAT IS THE PURCHASE PRICE FOR THE IRIS SOLAR TRANSACTION?

A. The estimated purchase price for the acquisition is $[redacted]. The purchase price will be subject to adjustments, including adjustments if the [redacted]

Q17. WHEN WOULD THE PURCHASE PRICE BE PAID?

A. ENO would pay [redacted] approximately [redacted] of the purchase price at the closing of the plant purchase. The balance, less a holdback for [redacted], would be paid after [redacted]

[redacted]

Q18. WILL ENO'S TOTAL PROJECTED INVESTMENT BE GREATER THAN THE PURCHASE PRICE OF THE IRIS SOLAR FACILITY?

A. Yes. The estimated total dollar investment for ENO to acquire the Iris Solar Facility and related assets is approximately $[redacted] In addition to the estimated $[redacted] total purchase price (which assumes a purchase price based on a 50MW (ac) acquisition), approximately $[redacted] is estimated for transaction costs (including regulatory costs), construction oversight costs and contingency.

Q19. WHEN IS THE ACQUISITION PROJECTED TO OCCUR?

A. Closing of the Iris Solar transaction is projected to occur in [redacted] Several variables can affect the actual closing date, including the date of receipt of required regulatory approvals, the construction time for the project, and MISO interconnection and transmission studies and required upgrades.

Q20. WHO WILL HAVE RESPONSIBILITY FOR SECURITY AND CARE OF THE PROJECT SITE AFTER THE CLOSING WHILE [redacted] COMPLETES ITS WORK?

A. For the period from the closing through the [redacted] will have responsibility for the security and care of the project site and the project. [redacted].

Q21. WHAT IS THE SIGNIFICANCE OF THE FNTP?

A. At FNTP, ENO would give [redacted] permission to proceed with the construction of the project. At that point, [redacted] will be committed to construct and sell the facility, and ENO will be committed to buy it, subject to certain conditions. As noted earlier, FNTP will occur after the FNTP conditions have been satisfied.

[redacted]

[redacted]

Q22. WHAT TERMS GOVERN THE ACQUISITION?

A. The commercial and technical terms for the transaction will be as set forth in a purchase agreement between [redacted] and ENO (the "Purchase Agreement") and in various other related agreements. At the outset, it should be acknowledged that the Purchase Agreement has not been signed, and the possibility exists that terms in Table 2 below could change, although I believe the likelihood of material changes is relatively low. [redacted] Once the Purchase Agreement has been fully executed by the parties, ENO will file an addendum to my Direct Testimony that includes the Purchase Agreement as an exhibit.

Turning to the expected terms of the Purchase Agreement, which will include detailed terms covering the engineering, procurement, and construction ("EPC") of the facility and other aspects of the work to be performed by [redacted], the following table describes some of the contractual terms [redacted]:

Table 2 (contains HSPM)
Descriptions of Certain Expected Iris Solar Facility Acquisition Terms

Quantity:	50 MW. [redacted]

Table 2 (contains HSPM)

Descriptions of Certain Expected Iris Solar Facility Acquisition Terms

	[redacted]
Capacity Credits:	The capacity value ENO receives for the resource is expected to be a function of the capacity MISO assigns to intermittent resources and other factors, including plant performance and the capacity credit market in MISO. The amount and worth of the capacity credits generated by the Iris Solar Facility are likely to vary over time.
Market Participant:	As part of the transaction, ENO and [redacted] will enter into an agreement focused on MISO matters, including market participant responsibility and the allocation of certain MISO revenues and costs. Under the agreement, [redacted] will be entitled to register in MISO as the market participant for the Iris Solar Facility. In the event the transaction terminates prior to the closing, [redacted].
Electric Interconnection Point:	[redacted]
Liquidated Damages:	[redacted]
Warranties:	[redacted]

Table 2 (contains HSPM) **Descriptions of Certain Expected Iris Solar Facility Acquisition Terms**	
Post-Closing Indemnity:	The Purchase Agreement will include, among other ENO protections, an indemnity obligating [redacted]
Interconnection and Transmission:	[redacted]
Credit Support:	[redacted]

Table 2 (contains HSPM)

Descriptions of Certain Expected Iris Solar Facility Acquisition Terms

	[redacted]
Change Orders:	[redacted]
Termination Rights:	The Purchase Agreement will provide ENO and [redacted] with certain rights to terminate the transaction. [redacted]

Table 2 (contains HSPM)
Descriptions of Certain Expected Iris Solar Facility Acquisition Terms

	[redacted]
Force Majeure:	The Purchase Agreement will include criteria that must be satisfied in order for an occurrence to be considered a force majeure ([redacted] and will identify items expressly agreed not to constitute force majeure [redacted]

Q23. WHO WILL BE RESPONSIBLE FOR REPAIRING DAMAGED OR DEFECTIVE ASSETS PRIOR TO THE CLOSING?

A. As between [redacted] and ENO, in general [redacted] will be obligated to repair or replace, at its cost and risk, damaged or defective project assets prior to the closing.

Q24. PLEASE SUMMARIZE ENO'S REMEDIES IF [redacted] BREACHES ITS OBLIGATIONS?

A. In addition to its termination rights, ENO will have the right to direct damages and indemnity protection against a broad range of potential liabilities arising out of [redacted] breach of the Purchase Agreement, the MISO Agreement, and any other relevant agreement. The remedies may be subject to contractual limitations

set forth in the transaction agreements, including a waiver of consequential damages. [redacted]

[redacted]

[redacted]

Q25. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, at this time.

AFFIDAVIT

STATE OF TEXAS

COUNTY OF MONTGOMERY

NOW BEFORE ME, the undersigned authority, personally came and appeared, **MICHAEL J. GOIN**, 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.

Michael J. Goin

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 26th DAY OF JULY, 2018

NOTARY PUBLIC

My commission expires: 8/05/2019

BONNY DAWSON
Notary Public, State of Texas
My Commission Expires
August 05, 2019

Listing of Previous Testimony Filed by Michael J. Goin

DATE	SUBJECT MATTER	REGULATORY BODY	DOCKET NO.
September 2003	PPA Case (Consolidated)	FERC	ER03-583-000
May 2004			ER03-583-001
			ER03-583-002
			ER03-681-000
			ER03-681-001
			ER03-682-000
			ER03-682-001
			ER03-682-002
			ER03-744-000
			ER03-744-001
August 2006	2006 EAI Rate Case	APSC	06-101-U
December 2009	2009 ETI Rate Case and Fuel Reconciliation	PUCT	37744
January 2013	Join MISO	LPSC	U-32148
September 2013	2013 ETI Rate Case	PUCT	41791
January 2014			
November 2013	ITC Filing	PUCT	41850
September 2014	Combination of ELL and EGSL	LPSC	U-33244
May 2015			
May 2015	Bandwidth 2010-2013	FERC	EL10-65-005 et al
September 2015			
July 2016	2016 Fuel Reconciliation	PUCT	46076
April 2017	Continue MISO RTO Participation	LPSC	U-34447
May 2017	ENO MISO Renewal	CNO	UD-17-02

BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

APPLICATION OF ENTERGY NEW ORLEANS, LLC FOR APPROVAL OF RENEWABLE PORTFOLIO AND REQUEST FOR COST RECOVERY AND RELATED RELIEF	**)**	**DOCKET NO. UD-18-__**

EXHIBIT MJG-2 (HSPM)

PUBLIC VERSION

HIGHLY SENSITIVE PROTECTED MATERIALS PURSUANT TO COUNCIL RESOLUTION R-07-432 HAVE BEEN REDACTED

JULY 2018

BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

APPLICATION OF ENTERGY NEW ORLEANS, LLC FOR APPROVAL OF RENEWABLE PORTFOLIO AND REQUEST FOR COST RECOVERY AND RELATED RELIEF	**)** **)** **)** **)** **)**	**DOCKET NO. UD-18-__**

DIRECT TESTIMONY

OF

ORLANDO TODD

ON BEHALF OF

ENTERGY NEW ORLEANS, LLC

HIGHLY SENSITIVE PROTECTED MATERIALS HAVE BEEN REDACTED PURSUANT TO COUNCIL RESOLUTION R-07-432

JULY 2018

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EXHIBIT LIST

I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME, TITLE AND CURRENT BUSINESS ADDRESS.

A. My name is Orlando Todd. My business address is 1600 Perdido Street, New Orleans, Louisiana 70112.

Q2. WHAT ARE YOUR CURRENT DUTIES?

A. I am employed by Entergy Services, Inc. ("ESI")[1], as Finance Director for Entergy New Orleans, Inc. ("ENO" or the "Company"). In that capacity, I am responsible for financial management, financial planning and monitoring, and assisting in the resolution of regulatory issues for ENO.

Q3. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of ENO.

Q4. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I have a B.B.A. in Accounting from Southern Arkansas University and an M.B.A. from the University of Arkansas - Little Rock. I am a Certified Public Accountant. I began my career with Entergy Corporation and its subsidiaries in 1983. I started in Property Accounting and have worked in other departments, including General Accounting, Finance Operations Center, and Corporate Reporting. Prior to my career

[1] ESI is an affiliate of the Entergy Operating Companies ("EOCs") and provides engineering, planning, accounting, technical, and regulatory-support services to each of the EOCs. The five current EOCs are Entergy Arkansas, Inc. ("EAI"), Entergy Louisiana, LLC ("ELL"), Entergy Mississippi, Inc. ("EMI"), ENO, and Entergy Texas, Inc. ("ETI").

with the Entergy System, I worked for Price Waterhouse (now known as PricewaterhouseCoopers).

Q5. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE CITY COUNCIL?

A. Yes. Please see attached Exhibit OT-1 for a list of previous testimony.

Q6. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My Direct Testimony supports the Application in this proceeding, which seeks, among other things, approval of a 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 acquisition of a solar project located outside of Orleans Parish ("Iris Solar Facility" or "ISF"), 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"). My testimony provides the estimated first-year revenue requirement for NOSS and the ISF, and provides ENO's proposed rate recovery plan for all three projects.

II. ESTIMATED FIRST-YEAR REVENUE REQUIREMENTS

Q7. PLEASE PROVIDE AN OVERVIEW OF THE INCREMENTAL COSTS AND REVENUES ASSOCIATED WITH NOSS AND ISF.

A. For purposes of my testimony, the incremental costs associated with NOSS and ISF fall within two broad categories: (1) capital investment (*i.e.*, the cost to construct the project) and ongoing operations and maintenance expense ("O&M"); and (2) any

revenue or expense resulting from MISO market settlements. The Company proposes that the first category initially be recovered through the Purchased Power and Capacity Acquisition Cost Recovery Rider ("PPCACR Rider"), as modified by the 2018 Combined Rate Case, then realigned to base rates in the next Formula Rate Plan filing. Regarding the second category, MISO costs and revenues, the Company proposes that those market settlements be recognized in the Company's Fuel Adjustment Clause ("FAC"), consistent with the Council-approved treatment of those MISO market settlement revenues and expenses attributable to other ENO resources.

Moreover, as discussed later in my testimony, the costs associated with the St. James PPA will be for energy-only payments that will be unaffected by the capacity provided by the facility. Accordingly, ENO proposes that those costs be recovered through the Company's FAC.

Q8. WHAT ITEMS ARE INCLUDED IN THE ESTIMATED FIRST-YEAR REVENUE REQUIREMENTS FOR NOSS AND ISF?

A. The estimated first-year requirements for NOSS and ISF are presented in HSPM Exhibits OT-2 and OT-3, respectively. The first component of the revenue requirements is the estimated return on the total costs to construct the projects, which requires a calculation of the incremental rate base and the Company's weighted-average cost of capital ("WACC").

For NOSS, but not the other two projects, the total costs to construct include the construction-related carrying costs associated with the project. Construction-related carrying costs consist of the interest requirements associated with debt

financing of the project as well as the return requirement associated with equity financing of the project and are as much a part of the cost of a construction project as is the cost of major equipment, labor and materials. These costs are commonly referred to as the Allowance for Funds Used During Construction ("AFUDC"). The FERC Uniform System of Accounts requires AFUDC to be included in the cost of plant and prescribes the calculation of AFUDC.

Q9. HOW WAS THE ESTIMATED RATE BASE DETERMINED?

A. The first step in this process is the derivation of the rate bases for the projects during the first years of service, which are derived on Page 2 of HSPM Exhibits OT-2 and OT-3. The starting points are the estimated total construction costs including AFUDC of approximately $[redacted] for NOSS, which is discussed by Company witness Jonathan E. Long, and approximately $[redacted] for ISF, which is discussed by Company witness Michael J. Goin. These values constitute the plant in service amount on the first day of operation. During the first year of operation, depreciation expense at the rate of 4% per year will be accrued, giving rise to an accumulated reserve for depreciation in that amount. The final component of rate base is the deduction for accumulated deferred income taxes ("ADIT"), which arises due to timing differences between book straight-line depreciation and accelerated tax depreciation. The end results are total project rate bases of approximately $[redacted] for NOSS and approximately $[redacted] for ISF, at the end of their first years following commercial operation.

Q10. PLEASE DESCRIBE THE CALCULATION OF THE COMPANY'S WACC USED IN THE ESTIMATED FIRST YEAR REVENUE REQUIREMENTS.

A. For purposes of estimating the first-year revenue requirement associated with the projects, the Company developed a WACC that contains some elements that are likely to be reflected in the Company's WACC when the projects commence commercial operation in 2021. The Company assumed that ENO would have a capital structure with no more than 50% equity during the first years of commercial of operation of the projects. For the estimated cost of debt, ENO used its projected cost of debt as of December 31, 2018. For the estimated return on equity, ENO used the 11.1% electric return on equity authorized by the Council in connection with its last rate case and used throughout the term of ENO's most recent formula rate plan, for which the last Evaluation Period was calendar year 2011.

It should be noted, however, that ENO intends to use its WACC, including its actual capital structure, at the time the projects commence commercial operation for interim cost recovery purposes.

Q11. WHAT IS THE OTHER COMPONENT OF THE ESTIMATED FIRST-YEAR REVENUE REQUIREMENTS?

A. The other component of the revenue requirements is the estimated operating expenses during the first year of operation. These estimated expenses include O&M expense (including labor and all labor-related expenses), general plant operation expenses, and routine maintenance expenses. The estimated operating expenses also include any incremental property taxes, insurance expense, and depreciation expense.

Q12. WHAT IS THE BASIS FOR THE ESTIMATED O&M AMOUNTS SHOWN IN HSPM EXHIBITS OT-2 AND OT-3?

A. The Company used an assumption to estimate O&M based on available industry information.

Q13. HOW WERE PROPERTY TAX AND INSURANCE EXPENSE ESTIMATED?

A. For the first-year revenue requirement, property taxes were assumed to be zero because the projects would be subject to a property-tax exemption. The Company expects to incur incremental insurance expense associated with the projects based on information provided by the Company's insurance broker.

Q14. PLEASE SUMMARIZE THE ESTIMATED FIRST-YEAR REVENUE REQUIREMENTS FOR THE PROJECTS.

A. The estimated first-year revenue requirements for the projects are approximately $[redacted] for NOSS, and approximately $[redacted] for IFS.

III. PROPOSED COST RECOVERY PLAN

Q15. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

A. In this section of my testimony, I discuss how the Company proposes to recover the costs associated with the Renewables Portfolio, which includes the St. James PPA, NOSS, and ISF.

Q16. WHAT ARE THE COMPANY'S REGULATORY ASSUMPTIONS FOR WHEN THE PROJECTS WILL BEGIN COMMERCIAL OPERATION?

A. ENO expects all three projects to commence commercial operation from 2020-2021. At that time, the 2018 Combined Rate Case will be completed and all of ENO's customers will be subject to a single set of Council-approved base rates and riders.[2] As a result of that proceeding, the Company further expects that the recovery of the capacity costs associated with the Ninemile 6 Unit and the Union Power Station Power Block 1 will be realigned from the PPCACR Rider to base rates. Finally, the Company expects that ENO will be subject to a formula rate plan ("FRP") following

[2] Currently, the Company serves electric customers in the Fifteenth Ward of the City of New Orleans, that is, Algiers, using base rates approved in Council Docket No. UD-13-01, when ELL served these customers. The Company serves electric customers outside of Algiers using base rates resulting from Council Docket No. UD-08-03 and subsequent formula rate plan proceedings.

the Combined Rate Case. These are the principal regulatory assumptions that are the context for ENO's proposed cost recovery plan.

Q17. HOW DOES THE COMPANY PROPOSE TO RECOVER THE REVENUE REQUIREMENTS ASSOCIATED WITH NOSS AND ISF?

A. ENO proposes that the revenue requirements associated with NOSS and ISF initially be recovered contemporaneous with commercial operation of the projects through the PPCACR Rider, which would be modified for such purpose, or a similar exact cost recovery rider. This rider would use the Company's WACC, including its actual capital structure, at the time NOSS and ISF commence commercial operation to determine the return on the Company's investment, and the return on equity resulting from the Combined Rate Case. The revenue requirements would be recovered from all of the Company's customers, including Algiers customers, which today do not pay charges pursuant to the PPCACR Rider.

In the next FRP proceeding, the projects' non-fuel revenue requirements would be realigned so as to be recovered through the FRP Rate Adjustment.

As discussed below, the Company proposes recovering the energy payments associated with the St. James PPA through its FAC.

Q18. IS IT IMPORTANT TO ENO'S FINANCIAL CONDITION THAT ENO RECEIVE TIMELY RECOVERY OF THE REVENUE REQUIREMENTS ASSOCIATED WITH NOSS AND ISF?

A. Yes. NOSS and ISF together represent a significant capital investment. Once NOSS and ISF commence commercial operation, ENO will begin incurring expenses that are not expected to be reflected in ENO's base rates at the time. If the Council takes no action to address these expenses, then they can have an adverse effect on ENO's financial condition.

Q19. WILL THE ESTIMATED FIRST-YEAR REVENUE REQUIREMENTS BE UPDATED PRIOR TO COMMERCIAL OPERATION?

A. Yes. The Company proposes that the estimated revenue requirements be updated and a revised PPCACR Rider or a similar exact cost recovery rider be filed with the Council on or about sixty days prior to the anticipated start of commercial operation.

Q20. WHAT IF THERE IS NO FRP IN PLACE AFTER THE COMBINED RATE CASE?

A. If there is no FRP or similar recovery mechanism in place, ENO proposes that the revenue requirements be recovered through the PPCACR Rider or a similar exact cost recovery rider until such time that ENO's base rates are reset.

Q21. HOW DOES ENO PROPOSE TO RECOVER THE EXPENSES ASSOCIATED WITH THE ST. JAMES PPA?

A. The St. James PPA provides for energy-only payments that are unaffected by the capacity provided by the facility. Accordingly, the Company proposes to recover the energy payments under the St. James PPA through ENO's FAC.

Q22. WHAT OTHER REVENUES AND EXPENSES ASSOCIATED WITH THE PROJECT SHOULD BE INCLUDED IN THE FAC?

A. The MISO market settlement revenues and expenses associated with the Renewables Portfolio projects should be included in the Company's FAC. Any revenues or expenses falling in the Administration accounting category would be recovered through ENO's MISO Cost Recovery Rider. This treatment is consistent with previous Council approvals regarding MISO market settlement revenues and expenses attributable to other ENO resources.

Q23. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes.

AFFIDAVIT

STATE OF LOUISIANA

PARISH OF ORLEANS

NOW BEFORE ME, the undersigned authority, personally came and appeared, **ORLANDO TODD**, 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.

Orlando Todd

Orlando Todd

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 24th DAY OF JULY, 2018

NOTARY PUBLIC

My commission expires: at death

TIMOTHY S. CRAGIN
NOTARY PUBLIC (La. Bar No. 22313)
Parish of Orleans, State of Louisiana
My Commission is issued for Life

List of Prior Testimony Filed by Orlando Todd

DATE	TYPE	SUBJECT MATTER	REGULATORY BODY	DOCKET NO.
07/31/2008	Direct Testimony	Rate Case	CNO	UD-08-03
09/15/2008	Direct Testimony	Rate Case	CNO	UD-08-03
10/22/2008	Deposition	Rate Case	CNO	UD-08-03
07/08/2011	Direct Testimony	Revenue Requirement for NineMile 6	CNO	UD-11-03
01/31/2013	Direct Testimony	Rate Case	CNO	UD-08-03
06/07/2013	Rebuttal Testimony	Rate Case	CNO	UD-08-03
02/28/2014	Direct Testimony	Algiers Hurricane Isaac Storm Recovery	CNO	UD-14-01
10/30/2014	Direct Testimony	Algiers Asset Transfer	CNO	UD-14-02
02/09/2015	Direct Testimony	Union Power PPA	CNO	UD-15-01
06/22/2016	Direct Testimony	New Orleans Power Station	CNO	UD-16-02
10/18/2016	Direct Testimony	Advance Metering Infrastructure	CNO	UD-16-04
07/06/2017	Supplemental direct testimony	New Orleans Power Station	CNO	UD-16-02
10/06/2017	Direct Testimony	Rooftop Solar Application	CNO	UD-17-05

BEFORE THE

COUNCIL OF THE CITY OF NEW ORLEANS

APPLICATION OF ENTERGY NEW ORLEANS, LLC FOR APPROVAL OF RENEWABLE PORTFOLIO AND REQUEST FOR COST RECOVERY AND RELATED RELIEF	**)**	**DOCKET NO. UD-18-__**

EXHIBITS OT-2 and OT-3

HIGHLY SENSITIVE PROTECTED MATERIALS HAVE BEEN REDACTED PURSUANT TO COUNCIL RESOLUTION R-07-432

JULY 2018