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Timothy S. Cragin
Assistant General Counsel
Legal Services - Regulatory

March 14, 2019

Via Hand Delivery

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

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

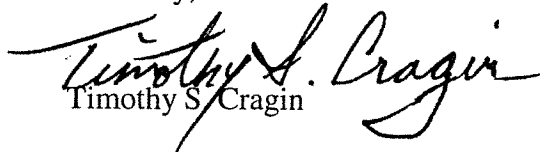
Dear Ms. Johnson:

Please find enclosed for your further handling an original and three copies of the public version of the Supplemental and Amending Application of Entergy New Orleans, LLC for approval of Renewables Portfolio and Request for Cost Recovery and Related Relief. This filing includes the Supplemental and Amending Direct Testimonies and Exhibits of Seth E. Cureington and Michael J. Goin. Please file an original and two copies into the record in the above referenced matter, and return a date stamped copy to our courier.

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

Thank you for your assistance with this matter.

Sincerely,


Timothy S. Cragin

TSC\rdm

Enclosures

cc: Official Service List (UD-18-06 via *electronic mail*)

MAR 14 3 15

CERTIFICATE OF SERVICE

Docket No. UD-18-06

I hereby certify that I have served the required number of copies of the foregoing report upon all other known parties of this proceeding, by the following: electronic mail, facsimile, overnight mail, hand delivery, and/or United States Postal Service, postage prepaid.

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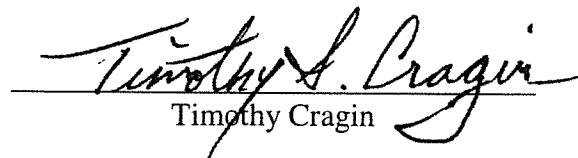
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Brubaker and Associates
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Chesterfield, MO 63141-2000

New Orleans, Louisiana, this 14th day of March 2019.


Timothy Cragin

**BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS**

APPLICATION OF ENTERGY NEW)	
ORLEANS, LLC FOR APPROVAL OF)	
RENEWABLES PORTFOLIO AND)	DOCKET NO. UD-18-06
REQUEST FOR COST RECOVERY)	
AND RELATED RELIEF)	

**SUPPLEMENTAL AND AMENDING 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 Supplemental and Amending 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:

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.

In July 2018, the Company filed an Application and supporting testimony, seeking approval of its proposed renewable energy resources portfolio consisting of a 20 megawatt (“MW”) self-build solar project located in New Orleans East (“New Orleans Solar Station” or

¹ The Company incorporates herein by reference its original Renewables Application, including the Direct Testimonies and Exhibits of Jonathan Long, Michael Goin, Seth Cureington and Orlando Todd (filed July 31, 2018), as well as the Supplemental Direct Testimonies of Seth Cureington and Michael Goin (filed November 9, 2018). This Supplemental and Amending Application is only intended to address the conversion of the Iris BOT to a PPA deal structure and does not affect the New Orleans Solar Station or the St. James PPA. This Supplemental and Amending Application and the accompanying Supplemental and Amending Direct Testimonies of Seth Cureington and Michael Goin are intended to supersede and replace the original Application and preceding testimonies with respect to the Iris Solar Facility, to the extent that there is a conflict between the filings.

“NOSS”), a 50 MW build-own-transfer (“BOT”) of a solar project located outside of Orleans Parish (“Iris BOT”), and a 20 MW purchase power agreement (“PPA”) from a solar project that is also located outside of Orleans Parish (“St. James PPA”) (collectively, the “Renewables Portfolio”). Through this Supplemental and Amending Application and supporting testimony, the Company seeks to withdraw its request for approval of the previously-proposed Iris BOT and substitute in its place a proposed Iris purchased power agreement (“Iris PPA”).

III.

ENO seeks a Council finding that the Renewables Portfolio, including the conversion of the Iris BOT to the Iris PPA, is in the public interest. The Company also requests that the Council approve its cost recovery requests. Along with this Supplemental and Amending Application, the Company is submitting the Supplemental and Amending Direct Testimonies of Seth E. Cureington and Michael J. Goin. 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 the Company’s economic analysis regarding the Iris PPA;
- **Michael J. Goin**: Mr. Goin is the Director of Planning Analysis for Entergy Services, LLC’s System Planning and Operations organization (“SPO”). He provides an overview of the Iris Solar Facility and describes the commercial details and the contract terms for the Iris PPA.

IRIS Solar PPA

IV.

The resource that underlies the Iris PPA is a 50 MW to-be-constructed solar photovoltaic (“PV”) plant (“Iris Solar Facility” or the “Project”) located on a remote approximately 500 acre “greenfield” site in Washington Parish, Louisiana.

V.

The Project was originally proposed as a BOT asset acquisition. Under the originally-proposed BOT structure, the seller would design and build the Iris Solar Facility, subject to ENO obtaining the required regulatory approvals and other conditions necessary for the issuance of a notice to proceed being met. The original Iris BOT was selected by ENO 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.

VI.

While these factors remain important considerations, after taking into consideration comments from the Council’s Advisors that ENO should reach out to the counterparty for the Iris Solar Facility to determine whether the costs can be reduced in any way (including potentially by converting the BOT arrangement to a PPA), the Company, with this Supplemental and Amending Application, is withdrawing its request for regulatory approval of the Iris BOT and instead seeking approval of the Iris PPA.

VII.

As Mr. Goin describes, the Iris PPA is a long-term (20-year) agreement for the purchase of 50 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. Goin provides a summary of the Iris PPA’s contract terms.

COST RECOVERY REQUESTS

VIII.

ENO requests a Council decision, supported by the evidence and sound regulatory principles, that the Renewables Portfolio, including the update to the Iris Solar Facility’s deal structure, 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 that was proposed in the Direct Testimony of Mr. Orlando Todd in the original filing, except that, with respect to the costs associated with the Iris 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.

SERVICE OF NOTICES AND PLEADINGS

IX.

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

Brian L. Guillot
Vice President, Regulatory and
Governmental Affairs
Entergy New Orleans, LLC
1600 Perdido Street
Mail Code: L-MAG-505B
New Orleans, Louisiana 70112

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

REQUEST FOR CONFIDENTIAL TREATMENT

X.

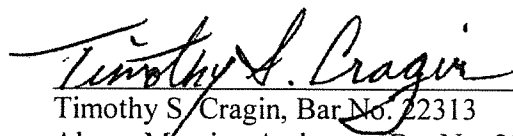
Certain information included in this Supplemental and Amending Application and in the Supplemental and Amending Direct Testimonies and/or Exhibits of Seth E. Cureington and Michael J. Goin is considered by ENO to be proprietary and confidential. Public disclosure of certain of this information may expose ENO and its customers to an unreasonable risk of harm, particularly with respect to commercially sensitive terms and pricing information. Therefore, in light of the commercially sensitive nature of such information, the portions of this Supplemental and Amending Application and the supporting testimonies and exhibits of Messrs. Cureington and Goin containing such information have been designated as “Highly Sensitive Protected Materials.” 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.

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, as presented in its original Application and as supplemented and amended by the instant Supplemental and Amending Application, serves the public convenience and necessity and is in the public interest, and is, therefore, prudent;
2. Find that the costs associated with the St. James PPA, NOSS, and the Iris PPA 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 the Iris PPA, approve recovery, through the FAC, of the energy costs and expenses incurred under the PPA;
4. 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
5. Order such other general and equitable relief as to which the Company may show itself entitled.

Respectfully submitted,



Timothy S. Cragin, Bar No. 22313
Alyssa Maurice-Anderson, Bar No. 28388
Harry M. Barton, Bar No. 29751
639 Loyola Avenue, Mail Unit L-ENT-26E
New Orleans, Louisiana 70113
Telephone: (504) 576-2603
Facsimile: (504) 576-5579

ATTORNEYS FOR
ENTERGY NEW ORLEANS, LLC

BEFORE THE
COUNCIL OF THE CITY OF NEW ORLEANS

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

DOCKET NO. UD-18-06

SUPPLEMENTAL AND AMENDING
DIRECT TESTIMONY
OF
SETH E. CUREINGTON
ON BEHALF OF
ENTERGY NEW ORLEANS, LLC

PUBLIC VERSION

MARCH 2019

1

I. INTRODUCTION AND PURPOSE

2

Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

3

A. My name is Seth E. Cureington. My business address is 1600 Perdido Street,
4 New Orleans, Louisiana 70112. I am the same Seth Cureington that filed Direct
5 Testimony and Supplemental Testimony in this docket.

6

7

Q2. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY AND SUPPLEMENTAL
8 TESTIMONY IN THIS PROCEEDING?

8

9

A. Yes.

10

11

Q3. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL AND AMENDING
12 DIRECT TESTIMONY?

12

13

A. I am testifying on behalf of Entergy New Orleans, LLC (“ENO” or the “Company”)
14 in support of the Company’s Supplemental and Amending Application, which seeks
15 approval of its proposed renewable energy resources portfolio consisting of a 20
16 megawatt (“MW”) self-build solar project located in New Orleans East (“New
17 Orleans Solar Station” or “NOSS”), a 50 MW purchase power agreement from a solar
18 project located outside of Orleans Parish (“Iris PPA”), and a 20 MW purchase power
19 agreement from a solar project that is also located outside of Orleans Parish (“St.
20 James PPA”) (collectively the “Renewables Portfolio”).

21

On July 31, 2018, I filed Direct Testimony in this Docket in which, among
22 other things, I explained the 2016 RFP evaluation process and provided a general

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

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

6 I now file this Supplemental and Amending Direct Testimony to provide the
 7 economics associated with the conversion of the 50 MW Iris build-own-transfer
 8 ("BOT") to a 50 MW PPA.

9
 10 Q4. PLEASE SUMMARIZE THE ECONOMIC ANALYSIS OF THE IRIS PPA.

11 A. Using the same assumptions and scenarios for capacity values used in the updated
 12 analysis presented in my November 2018 Supplemental Direct Testimony, the results
 13 of the economic analysis for the Iris PPA are as follows:

Iris Solar PPA Economic Results ()			
Proposal	Reference Case Net Benefit [2017\$ - \$M]	Net Benefit with Property Tax Sensitivity <i>Property Tax modeled as both a cost and a benefit to ENO Customers (NOSS only)</i> [2017\$ - \$M]	Net Benefit with Fuel Diversity Value and Property Tax Benefit [2017\$ - M]
BP 19 Price Forecast Capacity Value	██████	██████	██████
Levelized CT Capacity Value	██████	██████	██████
Levelized Wärtsila Capacity Value	██████	██████	██████

14

1 Q5. PLEASE EXPLAIN WHY USING THE LEVELIZED COST OF A LONG-TERM
2 RESOURCE IS AN APPROPRIATE INPUT FOR ESTIMATING THE TRUE
3 CAPACITY VALUE OF THE PROPOSED RESOURCES FOR PURPOSES OF
4 THE ECONOMIC ANALYSIS.

5 A. As the MISO Independent Market Monitor (“IMM”) stated in its 2017 Report, short-
6 term “capacity market design issues...have contributed to understated price signals.”¹
7 The IMM recognized that the capacity market is undervaluing incremental capacity
8 above the minimum MISO requirement, which is “inconsistent with its true reliability
9 value and results in inefficient capacity market outcomes.”² In other words, from a
10 MISO market perspective, the IMM recognized that there is value to adding
11 incremental capacity above the minimum MISO requirement because such
12 incremental capacity is valuable in maintaining the system reliability given the
13 inevitability of unit deactivations associated with an aging generation fleet. The
14 Company’s original economic analysis valued the capacity of these solar resources
15 based on the expected revenues generated in the short-term MISO market, which as
16 the IMM has stated, does not represent the true value of capacity when MISO is in a
17 surplus environment. The IMM stated that the market is currently sending inefficient
18 price signals and that it therefore cannot “achieve the purpose of any capacity
19 market—to facilitate efficient investment and retirement decisions.”³

¹ See Exhibit SEC-3, page 10 of 117.

² See *Id.*, page 11 of 117.

³ See *Id.*, page 23 of 117.

1 Accordingly, since the true value of capacity may not be fully captured by
2 using short-term MISO capacity auction revenues, it stands to reason that relying
3 solely on projections of short-term capacity market revenues to estimate the true
4 value of long-term capacity may result in these solar resources being undervalued in
5 the economic analysis. Thus, in order to better assist the Council in making its
6 certification decision, through this Supplemental testimony, the Company is
7 providing two additional sensitivities that value capacity at: (1) the levelized cost of a
8 RICE engine; and (2) the levelized cost of a CT.

9
10 Q6. DO THESE SENSITIVITIES CONSTITUTE COMPARISONS BETWEEN
11 TRADITIONAL GAS-FIRED RESOURCES AND THE RENEWABLE
12 RESOURCES BEING PROPOSED?

13 A. No. These sensitivities should not be interpreted as an attempt to compare the solar
14 resources at issue to any traditional resource, as this would not be an apples-to-apples
15 comparison. The two sensitivities simply show variations on one economic input in
16 the solar resources' economic analysis—their capacity value. To be clear, the solar
17 resources at issue and gas-fired peaking generation serve very different supply roles
18 and have different impacts on reliability, and thus are not directly comparable. Gas-
19 fired peaking resources are dispatchable and support the reliability of the grid,
20 whereas solar resources are non-dispatchable and require other resources to support
21 their integration with reliable operation of the grid. Attempting such a comparison
22 would require a fundamentally different analysis involving many different factors that
23 were not considered here and would be irrelevant to the instant docket.

1

2 Q7. DOES THIS CONCLUDE YOUR SUPPLEMENTAL AND AMENDING DIRECT
3 TESTIMONY?

4 A. Yes, at this time.

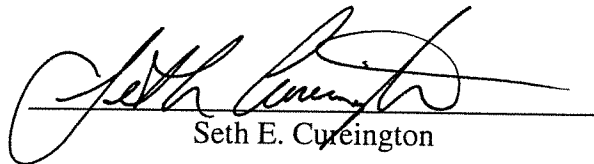
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STATE OF LOUISIANA

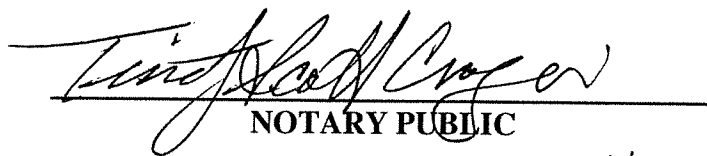
PARISH OF ORLEANS

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 13th DAY OF MARCH, 2019.


NOTARY PUBLIC

My commission expires: at death

**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-18-06

SUPPLEMENTAL AND AMENDING

DIRECT TESTIMONY

OF

MICHAEL J. GOIN

ON BEHALF OF

ENTERGY NEW ORLEANS, LLC

PUBLIC VERSION

MARCH 2019

TABLE OF CONTENTS

SUPPLEMENTAL AND AMENDING DIRECT TESTIMONY 1

EXHIBITS

Exhibit MJG-4 Iris PPA (HSPM) (CD-ROM)

1 **SUPPLEMENTAL AND AMENDING DIRECT TESTIMONY**

2 Q1. PLEASE STATE YOUR NAME AND CURRENT BUSINESS ADDRESS.

3 A. My name is Michael J. Goin. My business address is Parkwood II Building, Suite
4 300, 10055 Grogan’s Mill Road, The Woodlands, Texas 77380. I am the same
5 Michael J. Goin that filed Direct Testimony and Supplemental Testimony in this
6 docket.

7
8 Q2. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY AND SUPPLEMENTAL
9 TESTIMONY IN THIS DOCKET?

10 A. Yes.

11
12 Q3. PLEASE PROVIDE A DESCRIPTION OF THE IRIS SOLAR FACILITY.

13 A. The resource that underlies the Iris purchase power agreement (“PPA”) is a 50 MW
14 to-be-constructed solar photovoltaic (“PV”) plant located on a remote, approximately
15 500 acre “greenfield” site in Washington Parish, Louisiana. The facility will be
16 owned by Iris Solar, LLC (“Iris”), which has secured a lease from the [REDACTED]

17 [REDACTED].

18 Iris’s lease agreement provides for a [REDACTED]-year base term, with [REDACTED] possible
19 [REDACTED] extensions by Iris.

20
21 Q4. PLEASE DESCRIBE THE IRIS PPA IN MORE DETAIL.

22 A. The Iris PPA is a long-term (20-year) agreement for the purchase of 50 MW of must-
23 take, unit-contingent, as-available capacity, capacity-related benefits, environmental

1 attributes, energy and other electric products from the facility. The PPA has an
2 estimated total nominal value of \$ [REDACTED] based on the contractual Annual
3 Guaranteed Energy Quantity (“AGEQ”) and an estimated total nominal value of \$ [REDACTED]
4 [REDACTED] based on the contractual Annual Expected Energy Quantity (“AEEQ”). The
5 delivery term is 20 years, but will be extended to the end of the Midcontinent
6 Independent System Operator, Inc. (“MISO”) planning year if the delivery term and
7 the MISO planning year do not align. The Guaranteed Commercial Operation Date
8 (“GCOD”) is [REDACTED]. In general, the risk profile of the Iris PPA is the same as
9 that of the St. James PPA, which was described and produced in the Company’s
10 original filing. The following represents a high-level overview of the Iris PPA’s
11 terms:

Table 1 (contains HSPM) Descriptions of Iris PPA	
Description	Unit contingent, as-available capacity, capacity-related benefits, environmental attributes, energy and other electric products.
Quantity:	50 MW (subject to reduction).
Capacity Credit Risk:	The resource is initially expected to receive capacity credits equal to 50% of its total capacity (25 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 Iris PPA	
Energy:	<p><u>Annual Guaranteed Energy Quantity (“AGEQ”):</u> The AGEQ represents the P90 annual quantity for the facility and is the amount of energy that Iris 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.</p> <p><u>Annual Expected Energy Quantity (“AEEQ”):</u> 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.</p> <p><u>Quantity Reduction:</u> There are resizing provisions which adjust the maximum energy, AEEQ and AGEQ proportionately with a change in capacity based on a capacity demonstration test. Iris has to demonstrate at least [REDACTED] of capacity to be considered commercially operational.</p>
Price	<p>[REDACTED]</p> <p>[REDACTED]</p>
Delivery Point:	<p>The physical point of interconnection with the Entergy Transmission System will be at a to-be-constructed substation along the Holton to Franklinton 115 kV transmission line.</p> <p>Iris will deliver energy to ENO under the PPA at the commercial</p>

Table 1 (contains HSPM) Descriptions of Iris PPA	
	<p>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.</p>
<p>Premiums/Penalties:</p>	<p><u>Annual Guaranteed Energy Quantity Shortfall/Liquidated Damages</u></p> <p>If, in any contract year, Iris does not meet its AGEQ, Iris would owe ENO liquidated damages for each MWh shortfall. Iris would pay to ENO liquidated damages in the amount equal to the product of [REDACTED]</p> <p>[REDACTED]</p> <p><u>Curtailment Rights/Liquidated Damages</u></p> <p>If ENO exercises (or is deemed to exercise) its curtailment rights, [REDACTED]</p> <p>[REDACTED]</p>
<p>Market Participant:</p>	<p>Under the PPA, Iris 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.</p>
<p>Energy Imbalances:</p>	<p>Generally, Iris 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-time energy prices) to settle under-generated or over-generated energy.</p>

Table 1 (contains HSPM) Descriptions of Iris PPA	
Transmission Risks:	An affiliate of Iris submitted an interconnection request to MISO on March 9, 2018. Transmission upgrades have not yet been identified but will be the responsibility of Iris. At this time, Iris' 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 (<i>e.g.</i> , supply and demand and congestion). Because Iris 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 Iris.
Operation and Maintenance:	<p>Iris will maintain the facility in accordance with accepted industry practices and all relevant equipment manufactures' requirements.</p> <p>Under the PPA, Iris will be permitted to 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 (i) outside of daylight hours or (ii) 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 that cannot reasonably be performed by Iris subject to such restrictions.</p>
Estimated Total Transaction Value (Nominal \$)	\$ [REDACTED] based on AGEQ; and \$ [REDACTED] based on AEEQ.

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1 Q5. COULD THERE BE ADDITIONAL COSTS INCURRED BY ENO UNDER THE
2 CONTRACT THAT ARE NOT DETAILED IN THE SUMMARY ABOVE?

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

11
12 Q6. ARE THERE CONDITIONS PRECEDENT TO THE PPA TAKING EFFECT?

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

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

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

19 3) On or before [REDACTED], Iris must obtain any required governmental
20 approvals and consents.

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

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Q7. ARE THERE OTHER PROVISIONS IN THE PPA OF WHICH THE COUNCIL SHOULD BE AWARE?

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

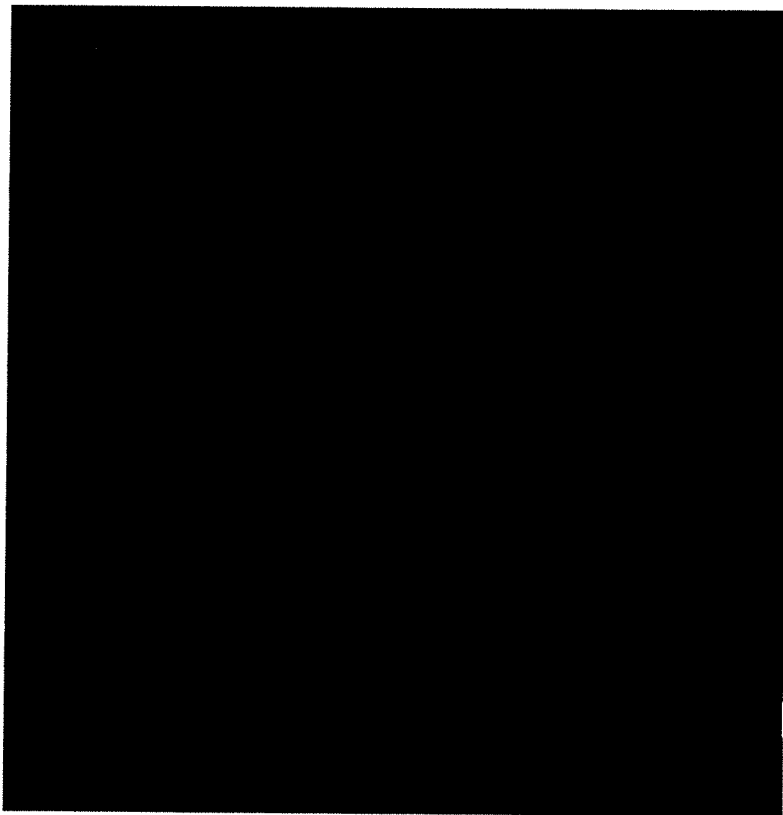
- **Force Majeure**: ENO would be permitted to terminate the PPA if substantially all deliveries of energy to ENO are prevented by force majeure for more than the requisite force majeure period.

- **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**



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

ENO would have the right to terminate the PPA if Iris 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 immediately 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**

Iris has the ability to achieve commercial operation with Energy Resource Interconnection Service ("ERIS") instead of Network Resource Interconnection Service ("NRIS"), provided that Iris 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 Iris had NRIS. If Iris 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.

1 Q8. DOES THE IRIS PPA PROVIDE FOR REIMBURSEMENT TO THE COMPANY
2 FOR LOST REVENUES OR OTHER DAMAGES DUE TO THE INABILITY OF
3 THE UNIT TO OPERATE FOR ANY REASON?

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

8
9 Q9. HAS YOUR TESTIMONY EXPLORED ALL MATERIAL PROVISIONS OF THE
10 AMENDED PPA?

11 A. No. My testimony provides a summary of certain provisions of the Iris PPA and is
12 not intended to fully describe all material provisions. Because it is important that the
13 Council and all stakeholders have an opportunity to consider all terms and conditions
14 of the Iris PPA, I have attached it as HSPM Exhibit MJG-4.

15

16 Q25. DOES THIS CONCLUDE YOUR TESTIMONY?

17 A. Yes, at this time.

18

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-18-06

EXHIBIT MJG-4 (HSPM)

PUBLIC VERSION

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

INTENTIONALLY OMITTED

MARCH 2019