

Entergy Services, LLC 639 Loyola Avenue P. O. Box 61000 New Orleans, LA 70161-1000 Tel 504 576 2984 Fax 504 576 5579 hbarton@entergy.com

Harry M. Barton Senior Counsel Legal Department -- Regulatory

August 29, 2019

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

## Re: Rulemaking Proceeding to Establish Rules for Community Solar Projects CNO Docket No. UD-18-03

Dear Ms. Johnson:

Enclosed for your further handling please find an original and three copies of Entergy New Orleans, LLC's ("ENO") Implementation Plan for the Council of the City of New Orleans' Community Solar Rules and Exhibits attached thereto, in connection with the above-referenced matter. Please file an original and two copies into the record and return a date-stamped copy to our courier.

Should you have any questions, please do not hesitate to contact me. Thank you in advance for your usual courtesy and assistance with this matter.

Sincerel Harry M. Sarton

HMB/bkd Enclosures cc: Official Service List (via e-mail)



#### **BEFORE THE**

## **COUNCIL OF THE CITY OF NEW ORLEANS**

IN RE: A RULEMAKING	)	
PROCEEDING TO ESTABLISH	)	
RULES FOR COMMUNITY SOLAR	)	DOCKET NO.
PROJECTS	)	

## ENTERGY NEW ORLEANS, LLC'S IMPLEMENTATION PLAN FOR THE COUNCIL OF THE CITY OF NEW ORLEANS' COMMUNITY SOLAR RULES

**UD-18-03** 

Pursuant to Council Resolution No. R-19-111, Entergy New Orleans, LLC ("ENO" or the "Company") hereby submits its Implementation Plan for implementing the Council of the City of New Orleans' ("Council") Community Solar Rules.

## 1. Overview

The Company submits the following Community Solar Program ("CSP") Implementation Plan ("Plan") and supporting attachments as required by Council Resolution No. R-19-111 (the "Resolution"). The Company has reviewed the Council's Community Solar Rules ("Rules") attached to the Resolution and has developed this Plan for administering the various parts of the CSP and Rules for which it is identified as having responsibility. This Plan does not address the responsibilities assigned to the Council's Utility Regulatory Office ("CURO") or Subscriber Organizations ("SOs") under the Rules except where such responsibility requires action on the part of ENO.<sup>1</sup>

The Plan includes a discussion of the incremental resources that the Company currently estimates will be required to support the administration of the CSP, as well as the proposed recovery of the associated costs. Next, the Company has organized its responsibilities under the

<sup>&</sup>lt;sup>1</sup> References to Section numbers throughout this Plan refer to sections of the Rules unless otherwise specified.

Rules into four Process Areas: 1) SO Application and Interconnection; 2) Subscription Administration; 3) Customer Billing and Accounting; and 4) Regulatory, Reporting, and Communications. Each section will identify the requirements in the Rules and describe the Company's plan for meeting and administering them.

## 2. Incremental Resources and Proposed Cost Recovery

Implementing the Council's Rules and supporting the Council's CSP will require significant resources and processes that ENO does not employ today. This section of ENO's Plan details those necessary incremental resources identified to date, along with proposed mechanisms for cost recovery that ENO believes to be consistent with the Rules.

#### a. Community Solar Program Manager ("CSPM")

Section VII(E)(1) of the Rules provides, "The Utility shall designate a contact person, and provide contact information on its website for submission of all project application requests, and from whom information on the project application request process and the Utility's electric distribution system can be obtained." As is clear from the Rules, the CSPM is a vitally important role that will be integrally involved in many aspects of the Community Solar implementation detailed herein from the initial application process to ongoing subscription administration and program reporting. This will be a newly-created role at ENO that the Company will need to staff and train following Council approval of this Plan.

#### b. Back Office Support

Administering the CSP will require support from numerous back office functions related to meter data collection, deposit collection, billing of Subscriber credits, accounting, issuing payments for Unsubscribed Energy, maintaining external webpages, providing required reports, records retention, and other areas. These types of back office services are typically provided by Entergy Services, LLC ("ESL") and would be direct-billed to an appropriate ENO CSP-related project code. Until such time as Community Solar Generating ("CSG") Facilities are established under the CSP, it is unclear how many full-time equivalents ("FTEs") will be required to support administration of the CSP. The Company currently estimates it will require up to an additional two FTEs, in addition to the CSPM, to support the CSP. Currently, there are no back-office employees supporting the CSP. As such, any time billed by ESL back-office employees will be incremental to ENO.

## c. Information Technology—CCS Coding

Administration of the Council's CSP will require modifications to the Company's Customer Care System ("CCS") to enable tagging of customers as Subscribers to particular CSG Facilities and the calculation and rendering of monthly bill credits. Final cost amounts will not be known until the necessary IT projects are completed.

## d. Proposed Cost Recovery

Per Section VII(G) of the Rules, the incremental expenses discussed above, as well as any other reasonable, associated costs incurred, would be costs recoverable from all customers. The Company proposes to recover these costs dollar for dollar through a Formula Rate Plan ("FRP") suitable to the Company and the Council (if approved as part of Council Docket No. UD-18-07, the "2018 Rate Case").

Alternatively, if a FRP suitable to the Company and the Council is not approved, it will be necessary that a mechanism be established to fully recover on a timely basis any and all incremental costs associated with the upfront and ongoing costs of administering the CSP.<sup>2</sup> ENO

<sup>&</sup>lt;sup>2</sup> It should be noted that the cost of service study under the 2018 Rate Case does not include any costs associated with implementation and administration of the CSP. As such, aside from those employees whose time is allocated 100 % percent to ENO, all upfront and ongoing ESL costs incurred to implement and administer the Community Solar Program would be incremental to the rates established in the 2018 Rate Case.

proposes that recovery of such upfront and ongoing administrative costs associated with obtaining the capacity produced in connection with the CSP, which costs are anticipated to fall into the category of operation and maintenance ("O&M") expense, be accomplished through the Purchased Power Capacity and Acquisition Cost Recovery Rider or its replacement. Such recovery shall be based on ENO's submission of an annual compliance filing to the Council, setting forth the amount of incremental costs incurred by ENO in administering the CSP in accordance with the requirements of the Resolution. The submission of ENO's compliance filing shall be followed by a 90-day review period after which 1/12<sup>th</sup> of the amount of the incremental costs presented in the compliance filing shall be recovered monthly commencing the first billing cycle of the billing month following the 90-day review period.

## e. Proposed Timelines

The CSPM role must be in place to set up the initial program infrastructure and begin receiving and processing program Applications from potential SOs. The Company estimates it will require a minimum of four months from the date of a Council Resolution approving the Company's Plan to recruit, hire, and train a person to fill this role; therefore, the Company requests that any deadline for beginning to accept program Applications from SOs be set at least four months after issuance of the approving Resolution.

While the Company seeks to fill the CSPM, parallel efforts will be focused on the work necessary to be able to verify customer eligibility to participate as a Subscriber and ultimately to render credits on Subscribers' ENO bills and perform other functions. The Company must complete the necessary coding work in CCS, implement numerous back office processes, document processes for external distribution to SOs, and complete other tasks. The Company estimates that a minimum of six months from the date of a Council Resolution approving the Company's Plan will be required to complete these tasks; therefore, the Company requests that the Council delay the allowed commercial operation start date for CSG Facilities until at least six months after issuance of a Resolution.

The Company proposes to make the first compliance filing referenced in Section 2.d., above, within 120 days after the commercial operations start date, with all subsequent related compliance filings submitted annually thereafter.

## **3.** SO Application and Interconnection

#### a. <u>Community Solar Program Application</u>

A SO wishing to participate shall submit **Form CSG-1**, Program Application (attached hereto as **Exhibit A**), which requires proof of fulfilment of the conditions enumerated in Section VII(C)(2)(a-c). The Form and supporting documentation shall be submitted to the CSPM at <u>NewOrleansCouncilCommunitySolar@Entergy.com</u>, who will then process the Application in accordance with the requirements in Section VII(D)(1-8).

Each CSG Facility for which a SO successfully completes the Program Application process will be issued an ENO account number through the CCS to facilitate billing for electricity served by the Company and consumed at the CSG Facility site (defined as "House Power" in the Standard Offer Power Purchase Agreement, Form CSG-4).

#### b. Program Capacity Limits

The CSPM will confirm with the Company's Resource Planning and Market Operations organization that projects submitted through the Application process will not exceed the Program Capacity Limit set forth in Section V(A)(1). The CSPM shall also monitor the overall mix of CSG Facility projects submitted to ensure the category limits set forth in Section V(B) are not exceeded.

5

#### c. <u>CSG Facility Interconnection Application</u>

At the time a SO submits a Program Application Form, it shall also submit **Form CSG-2**, Interconnection Application (attached hereto as **Exhibit B**), which will include the information required in Section VII(C)(3), and any supporting documentation. After confirming that the SO's Program Application is complete, the CSPM will forward the Interconnection Application and supporting documentation to ENO Distribution Engineering (for systems 300 kW or less) or Distribution Planning (for systems >300kW) for handling.

CSG Facility projects must comply with the applicable Distribution Standard, either Standard DR07-01 for systems 300kVA to 20 MVA (attached hereto as **Exhibit C**) or Standard DR07-02 for systems less than 300kVA (attached hereto as **Exhibit D**) as contemplated by Section VII(B)(2). A representative from the distribution organization handling the Interconnection Application will contact the SO regarding collection of deposits for any necessary interconnection studies. The required deposits are described in the Distribution Standards. Once the studies are complete, the Company and SO will execute **Form CSG-3**, Interconnection and Parallel Operation of Community Solar Generating Facility Agreement ("Interconnection Agreement") (attached hereto as **Exhibit E**), that will describe any required facilities upgrades and expenses as contemplated by Section VII(B)(3).

#### d. <u>Community Solar Power Purchase Agreement</u>

Once the Interconnection Agreement has been executed, but prior to the commencement of commercial operation of the CSG Facility, the Company and SO will execute **Form CSG-4**, Standard Offer Community Solar Power Purchase Agreement ("PPA"), attached hereto as **Exhibit F**. As described in Section IV(A)(6) of the Rules, the PPA will govern the purchase of, and payments for, Subscribed and Unsubscribed Energy by the Company from the SO and the rights and obligations of each party. Form CSG-4 was modeled after the Solar Rewards Community Producer Agreement used by Xcel Energy for the Solar Rewards Community Solar program in Colorado.

## e. <u>Construction Deposits</u>

As required by Section VII(D)(11-13), if a CSG Facility fails to begin operating within 12 months of approval of an application submitted by the Subscriber Organization, a construction deposit will be collected from the SO. The deposit will be returned to the SO if the CSG Facility commences operation within 18 months of approval of its Program Application. If the Facility does not commence operation within 18 months, the deposit shall be forfeited by the SO and credited to customers through the Fuel Adjustment Clause ("FAC").

## 4. Subscription Administration

#### a. <u>Release of Customer Information</u>

Any SO requesting release of customer account information for a potential Subscriber shall provide an executed **Form CSG-8**, Subscriber Agency Agreement (attached hereto as **Exhibit G**), to the Company.

#### b. Initial Subscriber Report

In order to facilitate the initial determination of potential Subscriber eligibility contemplated in Section III(B), the SO shall submit **Form CSG-5**, Initial CSG Facility Subscription Report (attached hereto as **Exhibit H**), to the CSPM at least <u>60 days</u> prior to the date the CSG Facility is expected to commence operation. Should the CSPM determine that any of the customer information provided is either incorrect or incomplete, the SO shall correct the deficiency within five days of notification.

#### c. <u>Verification of Eligibility</u>

Following receipt of Form CSG-5 and confirmation that the required information has been provided correctly, the CSPM will verify that each customer listed is within the limitations of Section III(B)(1-3), including the determination of the Baseline Annual Usage ("BAU") at each proposed Subscriber's location. To determine the BAU when an account has no history available for the first month, the Company proposes to estimate based on historic usage for the same class type (*i.e.*, Residential, Commercial, *etc.*) and rate group (*i.e.*, RES, SE, *etc.*) in New Orleans. The CSPM will notify the SO of any customers that fail to meet the limitations so the deficiency can be corrected or the customer removed from the Subscriber list.

#### d. Low-Income Status—Written Certification

As required by Section X(B), each SO shall certify in writing to the Company that the SO has verified Low-Income status of any potential Subscribers it submits to the Company for verification of eligibility to participate. Form CSG-5 includes a column where the SO can make the appropriate certification. By May 1 of each year, the SO shall re-certify in writing to the Company the Low-Income Subscriber status of all Subscribers to its CSG Facilities that are designated as such.

#### e. Notice of Enrollment

Once eligibility has been confirmed for a new Subscriber, the CSPM will issue a **Form CSG-6**, Notice of Enrollment (attached hereto as **Exhibit I**), to the Subscriber that conforms to the requirements of Section XIII(I)(2)(b-c).

#### f. Net Metering Applications for Community Solar Subscribers

As recommended by the Advisors on p. 61 of the Resolution, the Company will add a step to its Net Metering interconnection process to check whether the new NEM applicant is also a CSG Facility Subscriber and to ensure that the new NEM installation, when combined with the Subscription, does not exceed 100% of the annual baseline usage. If it is determined that the NEM installation would exceed 100%, the NEM applicant will be notified that the NEM system application will not be processed until the system is reduced in size.

## 5. Customer Billing and Accounting

## a. <u>Proposed Rate Schedule</u>

As required by Section VII(A), attached as **Exhibit J** is the Company's proposed CSG Facilities Subscription Service rate schedule ("Schedule CSGF") which will be used for calculating and rendering bill credits to Subscribers.

#### b. Customer Bill Credit Formulas

As described in Section VIII(E), the credit rate for non-Low Income Subscribers will be calculated based on the weighted average of the previous calendar year's hourly LMPs at the ENO load zone (which are available in February for the prior year), and the MISO Cost of New Entry for the upcoming MISO Planning Year (which is available in April before the start of the upcoming Planning Year). Using these inputs, the Company proposes to calculate the non-Low-Income dollar per kilowatt hour customer credit rate once per year in May, with that credit rate to be used for the first billing cycle in June through the last billing cycle of the following May coinciding with the MISO Planning Year.

As contemplated by Section VIII(I), the credit rate for Low-Income Subscribers will be based on the full retail rate, including all applicable rider schedules. The Company proposes to base the Low-Income credit rate calculation on the source data for the "Revenue per kWh Sold" shown for the applicable rate schedule on page 304 of the prior year's FERC Form 1. The rate calculation would be based on the components of revenue included in FERC Form 1 which are specific to energy. These energy-related revenues would include those associated with base rate schedule energy charges, applicable riders that apply to kWh such as fuel adjustment, and the portion of percentage-based riders associated with these energy revenues except for nonbypassable riders. This method is consistent with the treatment of those components under Schedule NEM, Net Metering. In order to provide greater transparency, minimize administrative burden, and enhance stability of the credit rate similar to that available for non-Low-Income Subscribers, this credit rate would also be calculated once per year in May based on the prior year's FERC Form 1 data and would be used for the first billing cycle in June through the last billing cycle of the following May coinciding with the MISO Planning Year. Each year by May 15, the Company will file an updated Attachment A to Schedule CSGF reflecting the credit rates for non-Low-Income Subscribers rates calculated for use starting with the first June billing cycle of that year.

## c. Application of Subscriber Bill Credits

Pursuant to Section VIII(B), the SO must email **Form CSG-7**, Monthly CSG Facility Subscription Update (attached hereto as **Exhibit K**), to the CSPM in order to provide the current view of participating Subscribers and their proportionate shares of each CSG Facility. This form will reflect new Subscribers the SO wishes to add to a CSG Facility and existing Subscribers to be removed. This Form must be received by close of business on <u>the 10<sup>th</sup> calendar day of the month</u> to allow time for the CSPM to confirm the new Subscribers' eligibility to participate in the CSG Facility as described in Process Area #3, below, and to allow updates to be made in the CCS billing system and credits to be calculated for inclusion on the next month's bill. Updates received after the 10<sup>th</sup> calendar day would take effect on the first billing cycle of the month following the next month. The Company will read the meter for each CSG Facility on or about the 2<sup>nd</sup> calendar day of the month in order to determine the prior month's generation output, which will be used to calculate and render bill credits on a two-month lag as provided in Section VIII(C). As required by Section VIII(D), the Company shall determine the amount of CSG Facility monthly kWh Output to be credited to each Subscriber by multiplying the Subscriber's most recent generation proportion of the CSG Facility by the company-metered Output of the CSG Facility and the formula applicable to the Subscriber.

**Example #1**: On August 2, the Company takes a meter reading of the generation output of CSG Facility #1 for the month of July. The SO for CSG Facility #1 submits the monthly update Form CSG-7 <u>before the monthly deadline</u>, on August 5, indicating that three new subscribers were added to the previous total of 27 for an updated total of 30 subscribers. The CSPM would validate the new Subscribers' eligibility, and, assuming they were within the stated limitations of Section III(B), credits would be calculated for the September billing cycle for the 30 Subscribers based on their pro-rata shares of the July generation output of CSG Facility #1.

**Example #2**: Same as above, except the SO submits the monthly update <u>after the monthly</u> <u>deadline</u>, on August 20. For the September billing cycle, credits would be calculated for the 27 existing Subscribers based on their pro-rata shares of the July generation output of CSG Facility #1. For the October billing cycle, the CSPM would validate the new Subscribers' eligibility, and, assuming they were within the stated limitations of Section III(B), credits would be calculated for the updated total of 30 Subscribers based on their pro-rata shares of the August generation output of CSG Facility #1.

#### d. <u>Unsubscribed Energy</u>

In accordance with Section IX(A) and (B), and as provided in the Standard Offer PPA, Form CSG-4, the Company will pay the SO for up to 20% of any monthly unsubscribed energy at the estimated avoided cost in the Company's most recent biennial PURPA 210 filing (attached hereto as **Exhibit L**). Payments will be rendered via check to the SO. No payment will be required for any Unsubscribed Energy delivered to the Company in excess of the 20% limit.

### e. Subscription Transfers

There are three types of transfers contemplated under Section XI of the Rules:

- Under Section XI(A-B), a Subscriber sells or otherwise vacates the premises where he/she is living and the new owner/tenant wishes to assume the Subscription at the same or lower amount of capacity. The SO would note on the next Form CSG-7 the addition of the new Subscriber at the location with the required information and the removal of the old Subscriber at the location. The CSPM would then verify eligibility of the new Subscriber under the requirements of Section III(B)(1-3);
- 2) Under Section XI(D-E), a Subscriber moves to a new location in the Company's service area and wishes to transfer his/her Subscription to the new location. The SO would note on the next Form CSG-7 the transfer of the Subscription and provide the required information for the new location so the CSPM can determine eligibility under the requirements of Section III(B)(1-3);
- 3) Under Section XI(C), a Subscriber leaves the program and releases his/her capacity back to the SO. When the SO has a new Subscriber who wants to take the capacity, it will include the new Subscriber's information on the next Form CSG-7 so the CSPM can verify eligibility under the requirements of Section III(B)(1-3).

#### f. CSG Program Accounting

As required under Section VII(G)(4), the Company's revenue and expenses associated with the Subscriber Organizations and the Community Solar Program Plan shall be identified separately in general ledger records and maintained in separate revenue and expense sub-accounts. Billing credits issued to Subscribers and payments issued to SOs for purchase of Unsubscribed Energy will be recorded in FERC Account 555, Purchased Fuel, and recovered through the FAC.

## 6. Regulatory, Reporting, and Communications

## a. External Website

The Company will maintain an updated public webpage with the information required in Section VII(E)(2) of the Rules. The webpage will include links to the forms and distribution standards described herein to assist potential SOs in understanding the feasibility of interconnecting a CSG Facility to the distribution system as required by Section VII(E)(4). The webpage will also include the current and previous two years' billing credit amounts as contemplated by Section VII(F)(4).

#### b. <u>Reporting</u>

As required by Section VII(F)(2), the Company shall file an annual report by May 1 covering program activities for the prior calendar year and providing the specified information. As required by Section VII(F)(3), the Company will file semi-annual reports on June 30 and December 31 providing point-in-time snapshots of active CSG Facility projects and total program capacity in kilowatts-AC. The Company will provide ad hoc reports when requested as required under Section VII(F)(1).

## c. <u>Records Retention</u>

The Company will create/identify the necessary Records Series and/or Business Warehouse archives to comply with the requirements of Section VII(E)(7) for data pertaining to CSG Facilities that have commenced operations, and of Section VIII(L) for data pertaining to kWh applied to each Subscriber's account.

## 7. Conclusion

ENO looks forward to continuing to work with the Council, Advisors, and other stakeholders to further develop the processes and procedures necessary for the implementation of the Council's Community Solar Program.

By:

Timothy S. Cragin, Bar No. 22313 Harry M. Barton, Bar No. 29751 Alyssa Maurice-Anderson, Bar No. 28388 639 Loyola Avenue, Mail Unit L-ENT-26E New Orleans, Louisiana 70113 Telephone: (504) 576-2984 Facsimile: (504) 576-5579

ATTORNEYS FOR ENTERGY NEW ORLEANS, LLC

## Appendix A: List of Exhibits

- Exhibit A—Form CSG-1, Program Application
- Exhibit B—Form CSG-2, Interconnection Application
- Exhibit C—Distribution Standard DR07-01, Connecting Large Electric Generators to the Entergy Distribution System (300kVA to 20 MVA)
- Exhibit D—Distribution Standard DR07-02, Connecting Small Electric Generators to the Entergy Distribution System (Less than 300kVA)
- Exhibit E—Form CSG-3, Interconnection Agreement
- Exhibit F-Form CSG-4, Standard Offer Community Solar Power Purchase Agreement
- Exhibit G—Form CSG-8, Subscriber Agency Agreement
- Exhibit H—Form CSG-5, Initial CSG Facility Subscription Report
- Exhibit I—Form CSG-6, Notice of Enrollment
- Exhibit J—Proposed Rate Schedule: Community Solar Generating Facilities Subscription Service (Schedule CSGF)
- Exhibit K—Form CSG-7, Monthly CSG Facility Subscription Update
- Exhibit L-ENO PURPA 210 Bi-Annual Avoided Cost Filing

## **Application Instructions**

All required information and supporting documentation must be submitted in order for this Application to be considered complete. Submit the completed Form CSG-1 and all supporting documentation to Entergy New Orleans via email: <u>NewOrleansCouncilCommunitySolar@Entergy.com</u>. Any questions related to this form should also be sent to <u>NewOrleansCouncilCommunitySolar@Entergy.com</u>.

The following documentation must be submitted with this Application:

- Proof of Subscriber Organization registration with New Orleans City Council via the Council's Utility Regulatory Office;
- Proof of application for all applicable permits to construct and operate the CSG Facility; and
- Proof of Site Control (evidence of property ownership or executed lease agreement)

## **Subscriber Organization:**

Subscriber Organization Name:				
Subscriber Organization Identification number (provided by Council):				
Mailing Address:				
City:	State:		Zip Code:	
Contact Person:				
Telephone Number:		Email:		
Entergy Account Number:				
Proposed location of Community Solar Generating Facility				

Address:

City:	State:	Zip Code:
Proposed Generating capacity of Commu	unity Solar Generating Facility:	
Kilowatts-DC: Kilo	owatts-AC:	

Expected Annual Energy Production of Community Solar Generating Facility:

MWh per year: \_\_\_\_\_

Application must contain signature of Subscriber Organization representative to be processed. A Company representative will execute and date below once all required information has been submitted and the Application has been approved. That approval date shall represent the start of the time period contemplated under Section VII(D)(11-12) of the Council's Community Solar Rules.

Subscriber Organization:					
Company Name:					
Signature:	_				
Name:	Title:				
Date:					
Company:					
Company Name: Entergy New Orleans, LLC					
Signature:					
Name:	Title:				
Date:					

## Application Instructions

All required information and supporting documentation must be submitted by Subscriber Organization for Application to be considered complete. Submit this completed Form CSG-2 and all supporting documentation to Entergy New Orleans, LLC ("ENO" or "the Company") via email: <u>NewOrleansCouncilCommunitySolar@Entergy.com</u>. Any questions related to this form should also be sent to <u>NewOrleansCouncilCommunitySolar@Entergy.com</u>.

The following documentation must be submitted with this Application:

- One-line Diagram with location of accessible disconnect clearly shown; and
- Manufacturer literature describing the specific system to be installed

## Section 1. <u>Subscriber Organization Information</u>

Subscriber Organization Name:			
Subscriber Organization Identification number (provided by Council):			
Mailing Address:			
City:	State:		Zip Code:
Contact Person:			
Telephone Number:		Email:	
Entergy Account Number:			

## **Community Solar Generating Facility:**

Facility Address:		
City:	State:	Zip Code:
Contact Person:		
Telephone Number:	E	mail:

## Section 2. <u>Generator/Facility Information</u>

Provide the following	Solar Generator	Inverter
Manufacturer:		
Model Number:		
Number of Units:		
Kilowatt Rating(s) (95° at location)		
Ampere Rating:	N/A	
Short Circuit Current:	N/A	
Tilt Angle (°):		N/A
Azimuth Angle (°):		N/A
Number of phases at Interconnection point:		N/A
Voltage at Interconnection point:		N/A
Proposed output at this site (kW-AC):		N/A

## Does the unit:

- Disconnect intertie within 10 cycles of a service interruption or fault?
   Yes No
- Block Generator from energizing dead circuits for five minutes after most recent fault?
   Yes No

## Codes, Standards, and Rules

The system shall be installed in compliance with the Building/Electrical Code of the City of New Orleans, Orleans Parish and Form CSG-3, Interconnection and Parallel Operation of Community Solar Generating Facility Agreement ("Interconnection Agreement"), executed by and between Subscriber Organization and ENO. This system meets the most current version of the applicable Entergy Standard, either the Entergy Standard DR07-02, "Connecting Small Electric Generators to the Entergy Distribution System (less than 300kVA)," or Entergy Standard DR07-01, "Connecting Large Electric Generators to the Entergy Distribution System (300kVA to 20MVA)." The interconnection protection system is tested and listed for compliance with the latest published edition of Underwriters Laboratories (UL) 1741 including the antiislanding test. The system will be installed in compliance with IEEE 929 and/or IEEE 1547 as applicable, all manufacturer specifications, the National Electric Code, and all local codes. No protection settings affecting anti-islanding have been or will be adjusted or modified. The system shall be installed in accordance with the attached one-line diagram.

The Community Solar Generating ("CSG") Facility shall meet the requirements of the New Orleans Community Solar Rules ("Rules") promulgated by the Council in Resolution No. R-19-111, in Docket No. UD-18-03.

The parties shall be subject to the provisions of the Rules, the terms and conditions set forth in this Application, the Company's applicable rate tariff schedules, and the executed Interconnection Agreement.

## Permits and Authorizations

The Subscriber Organization shall obtain and maintain any governmental authorizations and permits required for the construction and operation of the Facility and interconnection facilities before the facility is interconnected. The Subscriber Organization shall maintain the Facility and interconnection facilities in a safe and reliable manner and in conformance with all applicable laws and regulations.

## Interconnection Agreement

Interconnection of the CSG Facility shall be subject to the terms and conditions of the Interconnection Agreement, executed by and between Subscriber Organization and ENO. The CSG Facility shall not commence commercial operation until it has been inspected and approved by the Company and the Form CSG-3 Interconnection Agreement has been executed between the parties.

I hereby certify that the information provided on this Interconnection Application is true and correct and that the CSG Facility will comply with the conditions stated above.

Signature of Subscriber Organization:		
Printed Name:		
Title:		
Date:		
Mailing Address:		
City:	State:	Zip Code:
Telephone:	Projected Installation Date:	



Page 1 of 24

Title: Connecting Large Electric Gene the Entergy Distribution System (300 20MVA)		Effective Date: August 20, 2018
Prepared By: Michael R. Gray	Approved By: Larry W. Phillips	
Distribution Design Basis / Standards	Manager of Distribution Design Basis / Standards	

# **Table of Contents**

1	INTRODUCTION			
	1.1 Pu	IRPOSE	3	
	1.1.1	Operating Agreement Requirements	4	
	1.1.2	Explicit Criteria for Parallel Operations	4	
	1.2 Sc	OPE	5	
2	DEFI	NITIONS	6	
3	DETA	ILS	10	
	3.1 Av	/AILABLE VOLTAGE SYSTEMS	10	
		ANABLE VOLTAGE STATEMESTICATION DELIVERY SYNCH / REASONS FOR DISCONNECT FROM THE DISTRIBUTION DELIVERY SYNC		
		E-INTERCONNECTION STUDIES FOR INTERCONNECTION OF DISTRIBUTED GENERATION.		
		STEM CHANGES		
	3.4.1			
	3.4.2			
	3.5 AL	LOWABLE TIE POINTS		
		IERGY FLOW DURING EMERGENCIES		
3.7 Types of Allowed Generators				
	3.7.1	Limits on Three Phase Generators	12	
	3.7.2			
	3.8 Ge	NERAL INTERCONNECTION REQUIREMENTS	12	
	3.8.1	Customer's Equipment and Interconnection Standards	12	
	3.8.2	Rating of Customer's Equipment	13	
	3.8.3	Protection of Customer's Equipment	13	
	3.8.4	Required Drawings	13	
	3.8.5	Changes to Company Facilities	13	
	3.8.6	Communications Facilities	13	
	3.8.7	Power Factor	13	
	3.8.8	Reactive Power Requirements	13	
	3.8.9			
	3.8.1			
	3.8.1			
	3.8.1			
	3.8.1	3 Central Business District Network	15	
	3.9 IN	SPECTION PRIOR TO OPERATIONS AND ADDITIONAL REQUIREMENTS		
	3.10	RESPONSIBILITY FOR CUSTOMER'S OPERATIONS		
	3.11	RESPONSIBILITY FOR CUSTOMER'S MAINTENANCE		
	3.12	LOAD SHED RESPONSIBILITIES	-	
	3.13	PROTECTION/INTERFACE REQUIREMENTS	16	

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Effective Date:



# Title: Connecting Large Electric Generators to the

 Entergy Distribution System (300kVA to 20MVA)
 August 20, 2018

 Prepared By Michael R Gray Distribution Design Basis / Standards
 Approved By: James R. Hickman
 Manager of Distribution Design Basis / Standards

	3.1	13.1	Changes to Company Fault Interruption Equipment	
	3.1	13.2	Tests of the Customer's Equipment	
	3.1	13.3	Specifying Protective Equipment	
	3.1	13.4	Service Interruption Equipment	
	3.1	13.5	Exception to Automatic Disconnect Equipment Requirements	
	3.1	13.6	Fault Interrupting Device	
	3.1	13.7	Equipment to Block Energizing Dead Circuits	
	3.14	CONTR	ROL, PROTECTION AND SAFETY EQUIPMENT REQUIREMENTS FOR SPECIFIC TECHNOLOGIES	17
	3.1	14.1	Synchronous Generators	
	3.1	14.2	Induction Generators and Inverter Systems	
	3.15	SUSCE	ptibility to Transmission Faults	
	3.16	SYNCH	IRONIZING REQUIREMENTS	
	3.17	Summ	IARY OF PROTECTIVE FUNCTION REQUIREMENTS	
	3.1	17.1	All Facilities	
3.17.2 Facilities Rated More th		17.2	Facilities Rated More than 2MVA	
	3.1	17.3	Facilities Rated More than 10MVA	
	3.18	METE	RING REQUIREMENTS	19
	3.19	Соми	IUNICATION CRITERIA FOR REQUIRING TELEMETERING	19
	3.20	TRANS	FORMATION REQUIREMENTS	20
4	DE		S	21
4	NL	FERENCE	5	
5	RE	SPONSIB	ILITIES	
	5.1		TATION	22
	5.2		N	
	0			
6	AT	ТАСНМЕ	INTS - METERING ARRANGEMENTS	23
7	RE	VISIONS		

Title: Connecting Large Electric Generators to the Entergy Distribution System(300kVA to 20MVA)

#### 1 Introduction

## 1.1 Purpose

A Customer may operate 60 Hertz (Hz), three-phase or single-phase generating equipment in parallel with the distribution delivery system pursuant to an interconnection agreement, provided that the equipment meets or exceeds the Company standards. FERC Qualifying facilities or small power producers also have rates in each jurisdiction allowing them to sell power to the Company. Customers who do not meet the above conditions shall not inject Electric Power onto the Company Distribution System without agreement from the Company.

The purpose of this standard is to describe the requirements and procedures for safe and effective connection and operation of electric generators 300kVA to 20MVA on the Entergy Distribution electric system. Customers who are smaller than 300kVA (including QF-12 Mississippi Customers and Net Metering Customers) should refer to Connecting Small Electric Generators to the Entergy Distribution System (less than 300kVA). Customers larger than 20 MVA or who would interconnect at Transmission level voltages (69kV and above) should contact Entergy Transmission. Customers are encouraged to contact the Company early in the process, and learn about Customer requirement and specific requirements due to their location on the electric grid. Customers may call 1 800 ENTERGY to get a local engineer assigned.

The Distributed Generation Technical Requirements Compliance Checklist at the end of this Standard is a summary of the requirements. The process of Connection is started by a Customer submitting a completed **Application** and a completed Distributed Generation Technical Requirements Compliance Checklist (both are at the end of this Standard).

This standard describes typical interconnection requirements. Certain specific interconnection locations and conditions may require more information from the Customer or the installation and use of more sophisticated protective devices and operating schemes, especially when the facility is exporting power through the distribution delivery system. Interconnection in Central Business District Networks is discussed in Section 3.8.13.

If the Company concludes that an Application to Connect Electric Generators to the Entergy Distribution System describes facilities that may require additional devices and operating schemes, the Company shall make those additional requirements known to the Customer at the time the interconnection studies are completed.

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16	I age -
Title: Connecting Large Electric Generators to the	Effective Date:	
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018	

# **1.1.1Operating Agreement Requirements**

A written agreement will be required between the Company and the Customer outlining the liability provisions, indemnities, payment of cost to modify distribution system (if not paid in advance), and other items affecting service under this document. This agreement will explain in detail the authority or responsibilities of the parties involved. An interconnection between the Company and a Customer will not be allowed prior to the execution of a written Operating Agreement covering parallel operation.

# **1.1.2Explicit Criteria for Parallel Operations**

Two objectives must be met to arrive at compliance by the proposed installation:

# 1.1.2.1 Safety

The Customer's Electric Generators will be held to the same Standard of Care, as the Company is required to maintain. In addition, the safety of the general public and the personnel and equipment of the Company shall in no way be reduced or impaired as a result of the Interconnection.

The Customer's Electrical Generator shall be equipped with Protective Functions designed to prevent the Generator from being connected to a de-energized circuit owned by the Company.

The Customer's Electrical Generation Facility shall be equipped with the necessary Protective Functions designed to prevent connection or Parallel Operation of the Customer's facility with the Distribution Delivery System unless the Distribution Delivery System service voltage and frequency are of normal magnitude. The design of some systems provides these functions without adding equipment at the Point of Common Coupling. Each system not providing additional devices at the Point of Common Coupling must be shown to be capable of these functions.

# 1.1.2.2 Customer Impact

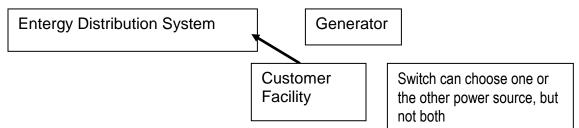
The quality, reliability and the availability of service to the Company's other Customers shall not be diminished or impaired as a result of the Interconnection. This standard describes typical connection requirements. Some installations, however, may require more extensive Interconnection Facilities, and will be addressed on a case by case basis. This is most likely to be required when several Customers desire to connect Electric Generators to the same transformer or on the same distribution feeder.

Title: Connecting Large Electric Generators to the	Effective Date:
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018

# 1.2 Scope

Distribution generation installed within Entergy's service area will fall into one of seven scenarios:

Case	The Customer may build facilities that are NEVER connected to the Entergy
1.	distribution system some examples are:
	An emergency generator. Where electric cords are run directly to this
	generator for essential lights and appliances.
	A house with a switch, rated for the customers generator size that does not
	allow electricity to flow from the generator into the facility when the facility is
	connected to the electric utility system.



# Refer to your local inspectors in this case.

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Case 2.	The Customer may build facilities that are connected to their building or
	internal electrical system and are not intended to be connected to the
	distribution system. The Customer shall supply an open and visible break
	verifiable by Company personnel. The location shall be on the outside of the
	facility accessible to Company personnel at all hours. A main disconnect in
	the off position qualifies as an open break. It is recommended that the
	customer tag the disconnect to help prevent accidental closing.
	Failure to have a visible break is reason for being disconnected, and
	subjects Customer to liability for resulting injury to people or property.
Case 3.	The Customer may build facilities that are NOT NORMALLY connected to the
	distribution system. Total connection time is 10 CYCLES OR LESS (@60
	cycles/second). All loads become displaced. Stand-by facilities may or may
	not be requested. No energy is sold or sent to the Company.
Case 4.	The Customer may build facilities that are connected to the distribution
	system more than 10 cycles (may be hours, days, months, etc.). Some or
	the entire load becomes displaced. Stand-by facilities may or may not be
	requested. No energy is sold or sent to the Company.
Case 5.	The Customer may build facilities that are normally connected to the
	distribution system. Some or the entire load becomes displaced. Stand-by
	facilities are requested. A contract is signed for selling energy to the
	Company.
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# Title: Connecting Large Electric Generators to the<br/>Entergy Distribution System(300kVA to 20MVA)Effective Date:<br/>August 20, 2018

Case 6	The Customer may build facilities that are normally connected to the distribution system. The Customer has no on-site load. A contract is signed for selling energy output to the Company.
Case 7.	The Customer may build facilities that are normally connected to the distribution system. A contract is signed with the Company for wheeling or wholesaling energy output. <b>Transmission Company involvement required.</b> Also see Section 3.17.2& 3.17.3

These provisions are the minimum requirements of non-Entergy Corporation distributed generation units for operation of the units in parallel with the Company's distribution system for voltages up to and including 34.5kV. (Refer to Entergy Transmission Standard PM3901, Generator Interconnection Customer Requirements Standard and Section 3.17.2 & 3.17.3 for provisions to connect to the Company's transmission system for voltages above 34.5kV.)

Generation systems of significant size on radial distribution systems can cause relaying and voltage control problems. The Company therefore retains the option to connect any generation facilities at either the transmission or the distribution voltage level.

# 2 Definitions

<u>Abnormal operating conditions</u> – When the Company is operating the distribution delivery system in other than normal configuration or under conditions that do not normally exist. Examples of abnormal operating conditions are: (1) high usage days when Customers are requested to conserve energy or, (2) switching feeders out of use for repairs and switching in alternate feeders to deliver energy to Customers.

<u>Application to Connect Electric Generators to the Entergy Distribution System</u> - The standard form of application attached the end to of this document.

<u>Central Business District Networks, Spot Networks and Downtown Underground</u> <u>Radially Fed Installations (CBD)</u> are typically located in downtown areas in New Orleans, Baton Rouge, Lake Charles, West Monroe, Beaumont, Jackson, Little Rock, Pine Bluff, and Hot Springs. The common CBD setup is to have two or more transformers, each connected to a separate feeder and paralleled on the low voltage side through network protectors associated with each transformer. These protectors are commonly configured so that a small amount of fault current (usually in the range of one Amp) will cause the protector to trip. Injecting electric power (with a generator) will have a negative effect on reliability. Also see Network Service

<u>Company</u> - Entergy operating subsidiaries within the United States boundaries.

<u>Customer</u> - Any entity interconnected to the Company's distribution delivery system for the purpose of receiving or exporting electric power through the Company's distribution delivery system.

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16
Title: Connecting Large Electric Generators to the	Effective Date:
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018

<u>Displaced load</u> - The Customer's entire electrical requirement or a portion of it that, except for the output of the Customer's Energy Facilities, would have been served by the Company.

Distributed generation (DG) – See On-site distributed generation.

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<u>Distribution delivery system</u> – The Company's wires, equipment, and facilities with a voltage below 69kV to which the generation equipment is interconnected.

<u>Facility</u> - An electrical generating installation consisting of one or more on-site distributed generation units. The total capacity of a facility's individual on-site distributed generation units may exceed twenty megawatts (MW). Units greater than 20MVA will require consultation with Transmission.

<u>Interconnection</u> - The physical connection of distributed generation to the distribution delivery system in accordance with the requirements of this standard so that parallel operation can occur.

<u>Interconnection agreement</u> – The document that sets forth the contractual conditions under which the Company and a Customer agree that one or more facilities may be interconnected with the Company's distribution delivery system.

Interconnection facilities - All facilities installed solely to interconnect and deliver/receive power from/to the Customer's generation facility to/from the Company's system including, but not limited to, connection, transmission, distribution, engineering, administration, transformation, switching, metering, and safety equipment. Interconnection Facilities shall include any additions and/or modifications to the Company's system deemed by the Company to be necessary.

<u>Net Metering</u> - To encourage Customers to generate electric power using solar, wind, hydropower, geothermal, or qualified biomass resources, these Customers may be entitled to sell electricity to their electric utility at more favorable rates. This varies by Jurisdiction. These Customers are all covered by **Connecting Small Electric Generators to the Entergy Distribution System (<300kVA)** 

<u>Network service</u> - Two or more primary distribution feeder sources electrically tied together on the secondary (or low voltage) side to form one power source for one or more Customers. This configuration is designed to maintain service to the Customers even after the loss of one of these primary distribution feeder sources.

<u>On-site distributed generation (distributed generation or DG)</u> - An electrical generating facility located at a Customer's point of delivery (point of common coupling) of twenty Mega Volt-Amps called "apparent power" (MVA) or less and connected at a voltage less

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16	8
Title: Connecting Large Electric Generators to the	Effective Date:	
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018	

than or equal to 35 kilovolts (kV) which may be connected in parallel operation to the distribution delivery system.

<u>Parallel operation</u> - The operation of on-site distributed generation by a Customer while the Customer's facilities are electrically connected to the Company's distribution delivery system.

<u>Point of common coupling</u> - The point where transfer of any electric power between the Customer's facilities and the distribution delivery system takes place, normally at the point of attachment.

<u>Pre-interconnection study</u> - A study or studies that may be undertaken by the Company in response to its receipt of a completed application for interconnection and parallel operation with the distribution delivery system. Pre-interconnection studies may include, but are not limited to:

Scoping meetings/Studies *includes* 

A fact finding meeting/telecom with Customer and discussion of Customer responsibilities and requirements and applicable policies. (Customer Relations and Asset Planning)

Asset Planning to determine if interference with the system protective equipment may occur, electricity may flow back to the substation and impact transmission, available fault current, capacitor bank impact, frequency, and voltage may be effected under normal and worst case situations. Conductors / Lines or other devices and elements that may be undersized or otherwise need settings changes as a result of the proposed generation

Discussion/Meeting with Customer to either

If no impacts on Distribution or the Transmission grid are identified, accept the project and Customer Relations presents a contract, or

Share potential impacts and future studies necessary, advise estimated costs of chosen study(s) and may provide order of magnitude estimates on facilities costs.

If transmission is to be involved to discuss this with Customer and get Transmission to contact Customer and discuss *Entergy Small Generator Interconnection Procedures* and other policies or procedures involved.

Product is the minimum information for attaching a small distributed generation unit at a particular location on the distribution system or results in identifying the necessity of further engineering studies or if transmission involvement is necessary.

Feasibility Study – A formal study identifying

Any system protection equipment short circuit capacity limits exceeded,

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16	1 age 7 01
Title: Connecting Large Electric Generators to the	Effective Date:	
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018	

Thermal overload, frequency or voltage limit violations resulting from the interconnection,

Initial review of grounding requirements and coordination. Product is initial and non-binding estimates of facilities, cost to interconnect and identification of further studies needed and their cost. Entergy requires a \$1,000 deposit for the Feasibility Study. Study is done at Customer cost.

## System Impact Study – shall

Identify and detail the electric system impacts that would result if the proposed Small Generating Facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the feasibility study,

Study potential impacts, including but not limited to those identified in the scoping meeting.

Product is an evaluation of the impact of the proposed interconnection on the reliability of the electric system.

Transfer trip analysis as necessary based on load size and impact.

Entergy requires a \$50,000 deposit for the System Impact Study. Study is done at Customer cost.

Facilities study –

Shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the system impact study(s).

Entergy requires a deposit of the good faith estimated costs for the facilities study from the Customer. Study is done at Customer cost.

<u>Protective function</u> - A system that uses hardware (including switching devices), relay protection schemes and software that prevents unsafe operating conditions from occurring before, during, and after the interconnection of the generating unit with the distribution delivery system. This system will include isolating the Customer's Generation or decoupling it from the distribution delivery system.

<u>Quality of service</u> – An operating state of the distribution delivery system that provides usable power to a Customer. This state of usable power includes the parameters specified for voltage flicker (Section 3.8.10), voltage surges and sags (Section 3.8.9), power factor (Section 3.8.7 & 3.8.8), frequency (Section 3.8.11) and harmonics (Section 3.8.10).

<u>Stabilized</u> - The distribution delivery system is considered stabilized when, following a disturbance, the system returns to the normal range of voltage and frequency for a duration of five minutes or a shorter time as mutually agreed to by the Company and Customer.

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16	Page 10 of
Title: Connecting Large Electric Generators to the	Effective Date:	
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018	

<u>Standard of care</u> - A term defining the level of awareness to maintain workplace and public safety in the design, installation and operation of a DG facility.

<u>System protection facilities</u> - The equipment required to protect the Company's system and its other Customers from unsafe operating conditions occurring at the Customer's generation facility. This includes inverter systems and any other devices provided with the on-site distributed generating unit for providing the system protection functions.

<u>Unsafe operating conditions</u> – A situation that if left uncorrected would result in: (1) harm to any personnel, damage to any equipment, (2) unacceptable system instability or, (3) operating outside legally established parameters affecting the quality of service to other Customers connected to the distribution delivery system.

# 3 Details

# 3.1 Available Voltage Systems

The Company's distribution systems available for parallel generation operations are grounded wye configuration of various existing voltage levels from secondary voltage levels to 34.5kV (phase to phase). The voltage level available for connecting the DG in parallel with the system depends on the location and the size of the generation.

## 3.2 Manually Operated Load Break Switch / Reasons for Disconnect from the Distribution Delivery System

The Customer's generation facilities shall have a lockable, manually operated, visiblebreak isolation load break switch that shall be in a location accessible to the Company's personnel at all hours with no notice. (Pull out type switches are not accepted) For a three phase generator, this disconnect must be a group operated device that through one operation will open/close all three phases simultaneously. Customer shall label meter can with type and size of generator with arrow pointing to it stating distance to disconnect. (Example 300kVA Gas engine generator, 3 ft. $\Rightarrow$ ) Permanently attached tags are required. The lettering on each tag shall be 3/16 inch or larger and be either raised or incised on each tag. Each tag shall be riveted or glued to the meter can. (If the circuit breaker is accessible to Company personnel, this requirement may be waived.) The Company reserves the right, but has no responsibility either actual or implied, to open the disconnect switch without prior notice to the Customer for any of the following reasons:

- A. Distribution system emergency,
- B. Routine maintenance, repairs, and modifications,
- C. Elimination of a safety hazard, protection of the public or on-site personnel, or if instructed to do so by public safety personnel (law enforcement, fire department or other governmental personnel),
- D. Inspection of Customer's generating equipment and protective equipment reveals a hazardous condition, a lack of scheduled maintenance or maintenance records,

E. The operation of the Customer's generating equipment results in a deteriorated quality of service or safety issue with other Customers or with the operation of the Company's system, or

The Company may disconnect a distributed generation unit from the distribution system under the following conditions:

- F. Expiration or termination of interconnection agreement
- G. Non-compliance with the technical requirements
- H. Lack of approved application and interconnection agreement
- I. Unauthorized modifications to the Customer's interface equipment

When possible, the Company shall provide the Customer with reasonable notice and reconnect the Customer as quickly as reasonably practical.

# 3.3 **Pre-Interconnection Studies for Interconnection of Distributed Generation.**

The Company shall, at the Customer's expense, conduct one or more pre-interconnect studies prior to interconnection of a distributed generation facility.

Certain aspects of secondary network systems create technical difficulties that may make interconnection more costly to implement. In instances where Customers request interconnection to a secondary network system, the ability of the distributed generator owner to have access to the distribution delivery system and/or the transmission grid may be limited. The Company shall conduct pre-interconnection and network studies to determine to what amount additional distributed generation facilities can be safely added to the network or accommodated in some other fashion.

In Entergy Office of Records Series 1274– Planning Studies, the Company shall retain its documentation (of its evaluation of the reliability impact of the new facilities and their connections on the interconnected transmission systems) for three years and shall provide the documentation to the Regional Reliability Organization(s) and NERC on request (within 30 calendar days).

# 3.4 System Changes

# 3.4.1 Company Changes to Distribution System

The distribution system is a dynamic and changing system. If the Company changes the distribution voltage, the Customer will be responsible for paying for all modifications required for reconnecting to the Company's reconfigured distribution system.

# 3.4.2Customer Changes to Interconnection

The Customer shall notify the Company to obtain prior approval for any proposed modifications to the interconnecting scheme.

# 3.5 Allowable Tie Points

Normally, only one tie point between the Customer and the Company will be allowed at the Customer's site.

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16
Title: Connecting Large Electric Generators to the	Effective Date:
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018

# 3.6 Energy Flow during Emergencies

Purchases from or sales to a Customer during periods of system emergencies may be discontinued according to the regulatory body's rules, and the Company's rates, riders or contract with the Customer.

# 3.7 Types of Allowed Generators

Single phase or three-phase alternating current generating units can be operated in parallel with the distribution system. They may be synchronous generators, induction generators, or inverter controlled systems. When the total connected capacity exceeds 10MW or when current will flow onto the Transmission grid application will be also sent to Transmission as per sections 3.17.2 & 3.17.3. Direct-current generation shall not be directly connected to the Company's alternating-current Distribution Delivery System.

## **3.7.1Limits on Three Phase Generators**

If three-phase service is not available in the area or if Company facilities must be upgraded or increased in order to enable the Customer to connect to these facilities, the Customer must bear the additional cost for such service or improvements as determined by the Company. The Company reserves the right to refuse three-phase service under certain circumstances.

# 3.7.2 Limits on Single Phase Generators

Where necessary to avoid the potential for a generating facility to cause problems with the service of other Customers, the Company may limit the capacity and operating characteristics of single-phase generators in a manner consistent with its existing limitations for single-phase motors and local line equipment and configuration.

## 3.8 General Interconnection Requirements

The Customer's distributed generation facilities shall meet the technical requirements as prescribed in this section and in IEEE 1547 latest version along with the Distributed Generation Standards for Inter-Connection as specified within DR07-05.

## 3.8.1Customer's Equipment and Interconnection Standards

The Customer's generation and interconnection installation must meet all applicable national, state, and local construction and safety codes.

The Customer shall be responsible for the design, installation, operation, testing and maintenance of all equipment and facilities installed or that will be installed on the Customer's side of the Point of Common Coupling. Such design shall meet the latest standards of IEEE, NEMA, ANSI, NEC, FERC other national codes and any local codes pertaining to the design and construction of electrical facilities. The facility shall be subject to the requirements of all authorities having jurisdiction and shall comply with all applicable codes and ordinances.

litle: Connecting Large Electric Generators to the	Effective Date:
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018

# 3.8.2 Rating of Customer's Equipment

The equipment selected by the Customer shall be rated for continuous parallel operation with the Company's system.

# **3.8.3Protection of Customer's Equipment**

The Customer will be responsible for protecting its generating equipment in such a manner that distribution delivery system outages, short circuits or other disturbances including zero sequence currents and Ferro resonant over-voltages do not damage the Customer's generating equipment. The Customer's protective equipment shall also prevent unnecessary tripping of the distribution delivery system breakers that would affect the distribution delivery system's capability of providing reliable service to other Customers.

# 3.8.4 Required Drawings

Adequate drawings of the proposed Customer's generation facility, which will include a one line diagram and proposed relay systems, must be submitted to the Company for review during the planning stage. Additional drawings may be required which will be determined on a case by case basis.

# 3.8.5Changes to Company Facilities

The total cost of any additional equipment that must be installed by the Company on its distribution system to allow parallel operation must be borne by the Customer, including the transformers and any facilities which must be added due to increased fault current or special operating conditions.

# **3.8.6Communications Facilities**

For generating facilities greater than one megawatt (MW), the Company may require that a communication channel be supplied by the Customer to provide communication between the Company and the Customer's facility.

# 3.8.7 Power Factor

The power factor of the Customer's generation facilities at the interconnection point with the Company shall be according to the appropriate rate schedule for this installation.

# **3.8.8Reactive Power Requirements**

The Customer's generation facility shall normally be responsible for supplying its own reactive power as required by the load supplied from its own generation. Should the Customer be unable or unwilling to supply the reactive power, a separate rate schedule shall apply and the installation shall be metered for VAr flow.

_Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16	0
Title: Connecting Large Electric Generators to the	Effective Date:	
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018	

## 3.8.9Voltage Surges or Sags

The Customer will operate its generating equipment in such a manner that the voltages levels on the distribution delivery system are in the same range as if the generating equipment were not connected to the Company's system. The Customer shall be liable for any damages done to their own facilities, the Company's facilities, or the facilities of other Customers due to any under voltage or over voltage contribution from the DG unit.

The Customer shall provide an automatic method of disconnecting the generating equipment from the distribution delivery system if:

Voltage Range	Time from beginning of event
(% of base voltage)	(seconds)
Less than 50%	0.16
50 to 89%	2.00
110% to 120%	1.00
Greater than 120%	0.16

## 3.8.10 Voltage Flicker, Harmonic Distortion, Transients and other Power Quality Issues

The Customer Energy Facility shall not create objectionable flicker, Harmonic Distortion, Transients, etc. for the Company's other Customers. Also consult Entergy's Power Quality Standards for Electric Service, latest edition which is available on The Entergy web site at www.entergy.com. Go to your state, "Your Business", Builder Standards.

## 3.8.11 Frequency

When the operating frequency of the Customer's generating equipment deviates from the 60 Hz base. The Customer shall automatically disconnect the generating equipment from the distribution delivery system based upon the table below:

Frequency range (Hz)	Time from beginning of event (seconds)
Greater than 60.5	0.16
Less than 57	0.16

Interconnection System Response to Abnormal Frequencies

## **3.8.12** Reconnection to distribution delivery system

The Company may require the Customer to wait up to five minutes to reconnect after the distribution delivery system voltage and frequency return to normal range and the system is stabilized. Consult the Company for details. (IEEE 1547 4.2.6)

Entergy Distribution Design Basis / Standards

# Title: Connecting Large Electric Generators to the<br/>Entergy Distribution System(300kVA to 20MVA)Effective Date:<br/>August 20, 2018

# 3.8.13 Central Business District Network

The Company will not allow interconnection in Central Business District Underground Secondary Networks, Spot Networks and Downtown Underground Radially Fed Installations. In Central Business District Networks, Spot Networks, and Downtown Underground Radially Fed Installations a generator will have a negative effect on reliability and the safety of employees that maintain these systems. This policy will affect Spot Networks, CBD Networks and Downtown Underground Radially Fed Installations including those in New Orleans, Baton Rouge, Lake Charles, West Monroe, Beaumont, Jackson, Little Rock, Pine Bluff, and Hot Springs.

# 3.9 Inspection Prior to Operations and Additional Requirements

The Company reserves the right, but has no responsibility either actual or implied; to impose any additional requirements necessary and to make final inspection before the system operates to verify that all requirements have been satisfied. The Customer shall be responsible for making necessary changes, at the Customer's expense; to the equipment should such changes be required.

# 3.10 Responsibility for Customer's Operations

The Company is not responsible for proper operations of the Customer's generation facilities upon connection to the distribution system.

# 3.11 Responsibility for Customer's Maintenance

The maintenance of the Customer's electrical equipment is their sole responsibility. The Customer will maintain records of such maintenance activities, which the Company may review at reasonable times. For generation systems greater than 50 kW, a log of generator operations shall be kept. At a minimum, the log shall include the date, generator time on, and generator time off, and megawatt and megaVAR output. Maintenance records should be made available for the Company's inspection upon request. The Company reserves the right to inspect the records, but has no responsibilities for maintenance either actual or implied.

# 3.12 Load Shed Responsibilities

If the DG drops off line, an automatic load shed scheme shall be used to shed the Customer's load should this additional load exceed the available capacity of or causes excessive voltage sag on the distribution circuit. The load shall be shed within 10 cycles of the generator dropping off line. Such requirements shall be noted in the contract and communicated to the appropriate Operations Information Center.

For Customers whose DG operations are described by Case 2, Case 3, or Case 4, and who also have a contract for stand-by or maintenance power, arrangements should be made in the design of the Customer's system to allow for load shed under emergency conditions on the distribution delivery system.

Standard Number: DR07-01 Rev. 16 <sup>r a</sup>

# Title: Connecting Large Electric Generators to theEffective Date:Entergy Distribution System(300kVA to 20MVA)August 20, 2018

#### 3.13 Protection/Interface Requirements

Protecting both the Customer's facilities and the Company's facilities are of great importance. Proper protective systems shall be established in the design phase and confirmed prior to start-up of the Customer's generation facilities. An interconnection between the Company and the Customer will not be allowed prior to the proper coordination of protective devices. The Customer shall be responsible for providing to the Company the necessary documentation certifying that maintenance and testing have been satisfactorily performed.

### 3.13.1 Changes to Company Fault Interruption Equipment

A generator source on the distribution system will provide an additional source of fault current to the distribution system. It is possible that the Customer's contribution will require the existing coordination of fault interrupting devices on the distribution feeder be changed. The Customer will be responsible for cost of these changes to the Company's system. It is also possible that the Customer's contribution will increase the available fault current on the distribution system beyond the interrupting capability of the existing devices on the distribution system. The Customer may be required to limit their fault current. Should the Company also be required to make changes, the Customer shall pay the cost of the required changes. The issues will be examined on a case by case basis.

#### 3.13.2 Tests of the Customer's Equipment

The Company reserves the right, but has no responsibility either actual or implied, to observe the Customer's tests and/or inspection of any of the Customer's protective equipment that is essential to the interconnection, including relays, circuit breakers, protective devices and related equipment. Inspection may include simulated test tripping of the Customer's interconnection breakers by the protective relays to verify all protective set points and relay/breaker trip timing prior to connection to the Company system.

The Customer shall provide the Company with notice at least two weeks before the initial energizing and start-up testing of the Customer's generating equipment so that the Company may witness the testing of any equipment and protective systems associated with the interconnection.

### 3.13.3 Specifying Protective Equipment

The Company will have the right to specify certain protective devices, including relays and circuit breakers that the Customer must install. The Company will specify all relay settings on the intertie. Settings of interconnection protective devices on the Customer's system will be specified by the Customer, but will be checked, coordinated with, and reviewed by the Company before application and subsequent modification.

Title: Connecting Large Electric Generators to the	Effective Date:
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018

# 3.13.4 Service Interruption Equipment

**Entergy Distribution Design Basis / Standards** 

Circuit breakers or other interrupting devices at the Point of Common Coupling must be capable of interrupting maximum available fault current. If facilities are larger than 1MVA and an inverter or similar system is used, consult Company for additional requirements.

### 3.13.5 Exception to Automatic Disconnect Equipment Requirements

Generator systems which require an AC source to operate, such as an induction generator, are not required to have an automatic fast disconnect means if the VAr support is provided by the Company. Also, a study must be conducted to determine if the capacitors on the distribution system could continue to energize the generator when the distribution feeder is not energized. Unless supported by capacitor banks when the distribution feeder is not energized, these systems will not produce output on loss of the AC source and will generally function as an induction motor. They will be allowed to coast down. The Customer is still required to provide a manual means for isolating the generator from the system so that re-energizing the distribution system will not energize the generator.

### 3.13.6 Fault Interrupting Device

A fault-interrupting device must be installed at the point of intertie between the Company and the Customer. The device could be single-phase fuses with a group operated load break switch or a three phase breaker. The choice will be the Company's and will be made on a case by case basis depending on location, available fault current, and size of the facility.

# 3.13.7 Equipment to Block Energizing Dead Circuits

<u>Under no condition will the Customer be permitted to energize a non-energized</u> **Company distribution circuit.** Equipment to effectively block the Customer from

energizing a non-energized Company circuit shall be installed.

# 3.14 Control, Protection and Safety Equipment Requirements for Specific Technologies

Different technologies have some unique requirements. The specifications in this section list those requirements unique to the technologies.

# 3.14.1 Synchronous Generators

For a Customer's synchronous generator, circuit breakers shall be three-phase devices with electronic or electromechanical control. The Customer is solely responsible for properly synchronizing its generator with the distribution delivery system. The excitation system response ratio shall be 0.5 or greater. The generator's excitation system(s) shall conform, as near as reasonably achievable, to the field voltage versus time criteria specified in American National Standards Institute Standard C50.13latest version in order to permit adequate field forcing during transient conditions. For generating systems greater than one MW the Customer shall maintain the automatic voltage regulator (AVR) of each generating unit in service and operable at all times. If the AVR

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16	Tage To c
Title: Connecting Large Electric Generators to the	Effective Date:	
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018	

is removed from service for maintenance or repair, the Company's dispatching office shall be notified.

### 3.14.2 Induction Generators and Inverter Systems

Induction generation may be connected and brought up to synchronous speed (as an induction motor) if it can be demonstrated that the initial voltage drop measured on the distribution delivery system side at the Point of Common Coupling is within the allowable visible flicker standard (see § 3.8.11). Otherwise, the Customer may be required to install hardware or employ other techniques to bring voltage fluctuations to acceptable levels.

Line-commutated inverters do not require synchronizing equipment.

Self-commutated inverters whether of the utility-interactive type or stand-alone type shall be used in parallel with the distribution delivery system only with synchronizing equipment.

#### 3.15 Susceptibility to Transmission Faults

A Customer connected to the distribution system might be affected by faults occurring on the Company's transmission system. A member of the Company's System Protection Department should review the proposed generation facilities to make recommendations concerning the Customer's susceptibility to transmission faults.

### 3.16 Synchronizing Requirements

The Customer shall be solely responsible for synchronizing and properly connecting and disconnecting its electrical system relative to parallel operation with the Company's system. The Customer shall provide an automatic or semi-automatic synchronizing scheme to prevent the closing of its circuit breaker when the two electrical systems are out of synchronism. (See § 3.8.11 Frequency.)

#### 3.17 Summary of Protective Function Requirements

The size of the DG facility dictates many of the functional requirements. These sections summarize the required functions by the installed capacity of the facilities.

### 3.17.1 All Facilities

All facilities must have function summarized in the Distributed Generation Technical Requirements Compliance Checklist and

an over-voltage trip,

an under-voltage trip,

an over/under frequency trip,

Either a ground over-voltage or over-current trip relay scheme depending on the grounding system as specified by the Company.

Will be investigated based under minimum feeder load circumstances. This investigation may alter the requirements.

For generating facilities not exporting power, a reverse power-sensing scheme is also required. (This requirement may be waived if the generator is rated at less than the minimum load of the Customer.)

### 3.17.2 Facilities Rated More than 2MVA

The facilities must have everything discussed in section 3.17.1. The facility shall have an automatic voltage regulator. A telemetry/transfer trip will be investigated and may also be required by the Company as part of a transfer tripping or blocking protective scheme. If Company is called upon to wheel or move power across its transmission system Entergy's OATT (Open Access Transmission Tariff), FERC orders 2006, 2006A and 2006B, NERC Reliability Standard FAC-002 (latest version),Entergy Transmission Standard PM3901, Generator Interconnection Customer Requirements, and Entergy Transmission Standard AM3901 (Latest Edition) Affected System New Facilities Coordination will apply. Consult the Company.

# 3.17.3 Facilities Rated More than 10MVA

The facilities must have everything discussed in section 3.17.2. Facilities in this range may be covered under Entergy Transmission Standard PM3901, *Generator Interconnection Customer Requirements* for provisions to connect to the Company's transmission system for voltages above 34.5 kV.

### 3.18 Metering Requirements

The Attachments (6.0) outlines the three metering arrangements approved by the Company. The Customer has the right to choose the metering option that best fits a particular situation. The Customer will pay any additional metering costs if the requested metering setup exceeds the configurations approved in Attachments.

The generator step-up transformer losses will be the Customer's responsibility, therefore the metering shall be at the distribution voltage level. Rate considerations will reflect these requirements.

### 3.19 Communication Criteria for Requiring Telemetering

Telemetering requirements will be based on the cases described under **Section 1.2**, **Scope**:

- 1. Cases 1 through 4, no telemetering will be required.
- 2. Cases 5 and 6 may or may not require telemetering depending on the output of the Customer's generating facility.
  - A. For Customers' installations generating less than 1MVA:

The Customer shall furnish a telephone number that is manned during all hours of operation where the Company dispatcher can contact the Customer in the event of trouble on the distribution circuit serving the Customer.

The Company **may** require a dedicated telephone circuit at the site of the Customer's intertie to provide communication with the Company's dispatcher.

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16	rage 20 01
Title: Connecting Large Electric Generators to the	Effective Date:	
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018	

B. For Customer's installation generating 1MVA or greater:

The Company and the Customer shall maintain operating communications at the Customer's expense with the Company's system dispatcher or the designated representative. The operating communications shall include, but not be limited to, system paralleling or separation, scheduled and unscheduled shutdowns, equipment clearances and hourly and daily load schedules and reports.

An RTU (Remote Terminal Unit) shall be installed by the Customer to gather accumulated and instantaneous data to be telemetered to a specified Company control center. The Company shall approve the RTU and its configuration. Instantaneous analog Watt flow and VAr flow information and breaker/switch status must be telemetered directly to the center. These signals will display the current status of the generation facility. Additionally, these signals will be used as input to the Company's control center computer system. These inputs will assist in providing decisions on economic dispatch for optimum system operation. Additional programs within the control center computer system operation, such as load forecasting, generation scheduling and maintenance, contingency analysis, and training.

These interconnected facilities must be properly integrated into the Company communication and control systems.

Case 7 will always require the Customer to install telemetering as described in 2B above regardless of the size of the generating facilities.

### 3.20 Transformation Requirements

Customers are encouraged to contact the Company early in the process, and learn about Customer requirement and specific requirements due to their location on the electric grid. Customers may call 1 800 ENTERGY to get a local engineer assigned.

If Customers' existing generation facilities need additional transformation, a different grounding system or other upgrades, the Customer shall be required to design, pay for and maintain all upgrades necessary to comply with Company's Connection Standards.

The Customer's grounding, transformer, relaying and generator system shall be designed to handle the normal imbalance on the distribution system.

Customer's additional generation related transformation and other facilities should be owned, operated and maintained by the Customer. At Entergy's option, a standard Entergy transformer/ transformer bank may be provided at Customer expense. **For Cases 3-7**, the Customer shall monitor the Company's distribution system and react based upon specifications in this Standard. Grounded Wye to Grounded Wye transformers are preferred with no impedance or resistance grounds. (see next page) Feasibility studies are required to design/ specify a monitoring method (transfer trip or another method of reading the Entergy feeder) if:

- Zero sequence path isolation occurs, some examples
  - Impedance/resistance grounds limit fault current and fault signal.
  - Ungrounded connections/ configurations between the Customers generators and Entergy may not consistently detect faults on the Company's distribution system.
- Delta configurations exist because they:
  - balance the Company's distribution system load per phase, making the feeder difficult to monitor
  - may be ungrounded.

#### 4 References

IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems

FERC Orders 2006, 2006A, 2006B

IEEE Guide for Protective Relaying of Utility-Consumer Interconnection

C37.95 (Latest revision)

IEEE 519 Recommended Practices and Requirements for Harmonic Control in Electric Power Systems, (Latest Edition)

IEEE 141 *Recommended Practice for Electric Power Distribution for Industrial Plants*, (Latest Edition)

ANSI C84.1 (Latest Edition)

Connecting Small Electric Generators to the Entergy Distribution System (less than 300kVA) (Latest Edition), Entergy Standard Number DR0702

Entergy Customer Installation Standards for Electric Service (Latest edition)

Entergy Power Quality Standards for Electric Service, latest edition

Entergy Transmission Standard AM3901 (Latest Edition) Affected System New Facilities Coordination

Entergy Transmission Generator Interconnection Customer Requirements Standard PM3901 (Latest Edition)

NERC Reliability Standard FAC-002 (latest version)

Entergy's OATT (Open Access Transmission Tariff), latest version

Operating Company Agreements

#### 5 **Responsibilities**

#### 5.1 Interpretation

Interpretation of this document is the responsibility of the Manager of Standards & Engineering Services or his designee with concurrence of the Asset Planning Department and the Distribution Business Department.

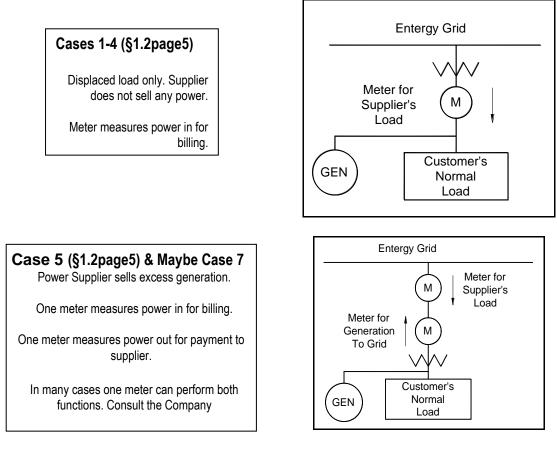
#### 5.2 Deviation

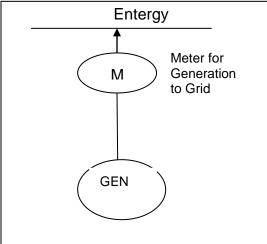
The Manager of Standards & Engineering Services is responsible for ensuring that this document is written in accordance with federal, state, and national code requirements. Any deviations must be reported to the Manager of Standards & Engineering Services for consideration for inclusion in this document.

In the event that standards for a specific unit or facility are not set out in this document, the Customer may interconnect a facility using mutually agreed upon technical standards, as authorized by the Manager of Standards & Engineering Services. Deviation from this document may be made only with the consent of the Manager of Standards & Engineering Services or his designee. No other employee is granted independent authority to grant deviations.

Entergy Distribution Design Basis / Standards	Standard Number: DR07-01 Rev. 16	r age 2.
Title: Connecting Large Electric Generators to the	Effective Date:	
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018	

# 6 Attachments - Metering Arrangements





Case 6 & Sometimes Case 7(§1.2page5) Power Supplier sells all generation

One meter measures power out for payment to supplier.

Title: Connecting Large Electric Generators to the	Effective Date:
Entergy Distribution System(300kVA to 20MVA)	August 20 , 2018

# Revisions

Rev 12	Classified as M reading	anual & reviewed/ ı	reorganized for easier	4/30/12
Rev 13	§1. 2 Scope Cas involvement rec §3.20 Transforn Zero sequence §3.8.11 Frequen	nation Requirements	s rewritten to explain	8/7/13
	Generator size	Frequency range (Hz)	Time from beginning of event (seconds)	
	Greater than	Greater than 60.5	0.16	
	30 kVA	Less than 59.8	0.16	
	300 sec (Consult Added to Applica Manufacturer cer Put in more notic Customer's Gene Layout sketch sh for hot circuits? _ <b>§8 Attachments</b> Metering associa	ation rtified relay response ceable place in Applic eration Case (§1.2-pa lowing lockable, "visit - Metering Arrangem ated with Cases in §1	curves submitted cation age ) ole" disconnect device nents .2	E/4/16
Rev 14	Entergy Distribut 300 kVA to align Metering Inquiry	cting Large Electric G ion System lower ran with the less than 30 and Application Proc on the Distribution S	ge from 500 kVA to 0kVA limit for Net esses Standard due to	5/4/16
Rev 15	Impact Study rec Removed "Applic	fer trip analysis requinguirements. Aution" section for one Aution price on the section for one	e stand-alone	
Rev 16	Added reference	to new Distributed G tion with Section 3.8		8/20/18



Title: Connecting Small Electric Generators to the Entergy Distribution System (less than 300kVA)		Effective Date: August 20, 2018
Prepared By: Michael R. Gray Approved By: Larry W. Phillips		Larry W. Phillips
Distribution Design Basis / Standards	Manager of Distribution Design Basis / Standards	

# **Table of Contents**

1	INTRO	DUCTION	. 3
1.1	Puri	POSE	. 3
	1.1.1	Operating Agreement Requirements	
	1.1.2	Explicit Criteria for Parallel Operations	
1.2	Scol	РЕ	
2	DEEIN	ITIONS	6
4	DEFIN	1110105	. 0
3	DETA	ILS	. 9
3.1	AVA	ILABLE VOLTAGE SYSTEMS	.9
3.2		IUALLY OPERATED LOAD BREAK SWITCH /LABELING/ REASONS FOR DISCONNECT FROM	
THE	DISTRI	BUTION DELIVERY SYSTEM	.9
	3.2.1	Manually Operated Load Break Switch	. 9
	3.2.2	Labels	. 9
	3.2.3	Reasons for Disconnect from the Distribution Delivery System	
3.3		CTRICAL CURRENT AND VOLTAGE OF EXISTING SERVICE	
3.4	Syst	EM CHANGES	
	3.4.1	Company Changes to Distribution Delivery System	
	3.4.2	Customer Changes to Interconnection	
3.5		OWABLE TIE POINTS	
3.6		RGY FLOW DURING EMERGENCIES	
3.7		ES OF ALLOWED GENERATORS	
3.8		ERAL INTERCONNECTION REQUIREMENTS	
	3.8.1	Customer's Equipment and Interconnection Standards	11
	3.8.2	Rating of Customer's Equipment	
	3.8.3	Protection of Customer's Equipment	
	3.8.4	Required Drawings	
	3.8.5	Changes to Company Facilities	
	3.8.6	Power Factor	
	3.8.7	Reactive Power Requirements	
	3.8.8	Voltage Surges or Sags	
	3.8.9	Voltage Flicker, Harmonic Distortion, Transients and other Power Quality Issues	
	3.8.10	Frequency	
2.0	3.8.11	Interconnected Electric Generators in Central Business District Grids	
3.9		ECTION PRIOR TO OPERATIONS AND ADDITIONAL REQUIREMENTS	
3.10		PONSIBILITY FOR CUSTOMER'S OPERATIONS	
3.11	KESI	PONSIBILITY FOR CUSTOMER'S ANNUAL MAINTENANCE	12

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3.12	PROTE	CTION/INTERFACE REQUIREMENTS	15
	3.12.1	Changes to Company Fault Interruption Equipment	15
	3.12.2	Tests of the Customer's Equipment	16
	3.12.3	Requirements for Specific Technologies	16
3.13	SYNCH	RONIZING REQUIREMENTS	17
3.14	Метер	RING REQUIREMENTS	17
4	REFERE	ENCES	18
5	FLOW C	CHARTS (ONE LINE DIAGRAMS)	19
6	REVISIO	)NS	21

#### 1 Introduction

#### 1.1 Purpose

A Customer may operate an Electric Generator at 60 Hertz (Hz), single- or three-phase at voltages up to and including 34.5 kV in parallel with the Company's Distribution Delivery System provided that the equipment meets or exceeds the requirements of Company standards.

The purpose of this standard is to describe the **requirements and procedures for safe and effective connection and operation of electric generators smaller than 300kVA** on the Company Distribution electric grid. Customers who have 300kVA to 20MVA generators to connect should refer to *Connecting Large Electric Generators to the Entergy Distribution System*. Customers larger than 20MVA or who would interconnect at Transmission level voltages (69 kV and above) should contact Entergy Transmission. Cost of interconnect, service, payment for electricity and other economic considerations are regulated by the governing Public Service Commission.

Special Rates are allowed by Utility Regulators for consumers who own and interconnect (generally small) renewable energy facilities, such as wind, solar power or home fuel cells. In some areas this is called Net Metering. . Consult the Entergy webpage of your franchise or the appropriate Public utility for details. (These Customers are described by Case 5 in Section 1.2 Scope)

If they do not meet the requirements above or want another option, FERC Qualifying facilities or small power producers also have special rates in each jurisdiction allowing them to sell power to the Company at avoided cost. Agreement from the Company is required to inject Electric Power onto the Company Distribution System.

The process of Connection is started by a Customer submitting a completed Application (Available on the internet. Go to <u>www.entergy.com</u>, select your state or jurisdiction, select residential and select Net Metering or contact 1 800 ENTERGY.) The Customer may request the vendor of the equipment or the electrician help fill out the application. The third step is to contact your local Entergy Representative or call 1-800-ENTERGY to get a representative assigned.

#### 1.1.1Operating Agreement Requirements

A written agreement (which is available from your Company Representative and on the Internet) will be required between the Company and the Customer specifying the liability provisions, indemnities, terms of payment of cost to modify Distribution Delivery System (if not paid in advance), and other items affecting service under this document. This agreement will explain in detail the authority or responsibilities of the parties involved. An Interconnection between the Company's Distribution Delivery System and a Customer's Electric Generator System will not be allowed prior to the execution of a written Standard Interconnection Agreement for the Facilities.

Interconnected Electric Generators in Central Business District Grids is discussed in Section 3.8.11

### 1.1.2Explicit Criteria for Parallel Operations

Two objectives must be met to arrive at compliance by the proposed installation:

#### 1.1.2.1 Safety

Customer's Electric Generators will be held to the same Standard of Care, as the Company is required to maintain. In addition, the safety of the general public and the personnel and equipment of the Company shall in no way be reduced or impaired as a result of the Interconnection.

- a Customer's Electrical Generator shall be equipped with Protective Functions designed to prevent the Generator from being connected to a de-energized circuit owned by the Company.
- b Customer's Electrical Generation Facility shall be equipped with the necessary Protective Functions designed to prevent connection or Parallel Operation of the Customer's facility with the Distribution Delivery System unless the Distribution Delivery System service voltage and frequency are of normal magnitude. The design of some systems provides these functions without adding equipment at the Point of Common Coupling (PCC). Each system not providing additional devices at the PCC must be shown to be capable of these functions.

#### 1.1.2.2 Customer Impact

The quality, reliability and the availability of service to the Company's other Customers shall not be diminished or impaired as a result of the Interconnection.

This standard describes typical connection requirements. Some installations, however, may require more extensive Interconnection Facilities, and will be addressed on a case by case basis. This is most likely to be required when several Customers desire to connect Electric Generators to the same transformer or on the same distribution feeder.

As specified in FERC Order 2006 10 kw and less UL1741 Listed Pre Certified -Inverter based units order will be accepted. Customers should supply that information as part of the application.

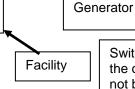
# 1.2 Scope

Distribution generation installed within Company's service area will fall into one of seven scenarios:

Case 1.	The Customer may build facilities that are NEVER connected to the
	Entergy distribution system some examples are:
	• An emergency generator. Where electric cords are run directly to this generator for essential lights and appliances.
	• A house with a switch, rated for the customers generator size that does not allow electricity to flow from the generator into the facility when the facility is connected to the grid.

Entergy Distribution Grid

Refer to your local inspectors in this case.



Switch can choose one or the other power source, but not both

Case 2.	The Customer may build facilities that are connected to their building or internal electrical system and are not intended to be connected to the distribution system. The Customer shall supply a open and visible break verifiable by Company personnel. The location shall be on the outside of the facility accessible to Company personnel at all hours. A main disconnect in the off position qualifies as an open break. It is recommended that the customer tag the disconnect to help prevent accidental closing. <b>Failure to have a visible break is reason for being disconnected,</b> and subjects Customer to liability for resulting injury to people or property.
Case 3.	The Customer may build facilities that are NOT NORMALLY connected to the distribution system. Total connection time is 10 CYCLES OR LESS (@60 cycles/second). All loads become displaced. Stand-by facilities may or may not be requested. No energy is sold or sent to the Company. This Case is covered in <i>Connecting Large Electric Generators to the Entergy Distribution System (300kVA to 20MVA)</i>
Case 4.	The Customer may build facilities that are connected to the distribution system more than 10 cycles (may be hours, days, months, etc.). Some or the entire load becomes displaced. Stand- by facilities may or may not be requested. No energy is sold or sent to the Company.

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Case 5.	The Customer may build facilities that are normally connected to the
	distribution system. Some or the entire load becomes displaced.
	Stand-by facilities are requested. A contract is signed for selling
	energy to the Company. The Company is required to buy electricity
	from FERC Qualified facilities This Case includes Net Metering
	Customers. Consult the Company.
Case 6	The Customer may build facilities that are normally connected to the
	distribution system. The Customer has no on-site load. A contract is
	signed for selling energy output to the Company. The Company is
	required to buy electricity from FERC Qualified facilities. Consult the
	Company.
Case 7.	The Customer may build facilities that are normally connected to the
	distribution system. A contract is signed with the Company for
	wheeling or wholesaling all energy output. This Case is covered in
	Connecting Large Electric Generators to the Entergy Distribution
	0 0
	System (300kVA to 20MVA) and Entergy Transmission Standard
	PM3901.

#### 2 Definitions

<u>Abnormal Operating Conditions</u> – A situation in which the Company is operating the Distribution Delivery System in a manner inconsistent with normal configuration or under conditions that do not normally exist. Examples of abnormal operating conditions are times when the Company must switch distribution feeder circuits out of use for repairs and switch other alternate feeders into use to deliver energy to Customers.

<u>Central Business District Grids, Spot Network Grids and Downtown Underground</u> <u>Radially Fed Installations (CBD)</u> are typically located in downtown areas in New Orleans, Baton Rouge, Lake Charles, West Monroe, Beaumont, Jackson, Little Rock, Pine Bluff, and Hot Springs. The common CBD setup is to have two or more transformers, each connected to a separate feeder and paralleled on the low voltage side through network protectors associated with each transformer. These protectors are commonly configured so that a small amount of fault current (usually in the range of one Amp) will cause the protector to trip. Injecting electric power (with a generator) will have a negative effect on reliability. Also see Network Service

<u>Company</u> - Entergy operating subsidiaries within the United States boundaries.

<u>Customer</u> - Any entity interconnected to the Company's Distribution Delivery System who takes electric service under one of Company's rate schedules.

<u>Displaced load</u> - The Customer's entire electrical requirement or a portion of it that, except for the output of the Customer's Energy Facilities, would have been served by the Company.

<u>Distribution Delivery System</u> - The Company's wires, equipment, and facilities having a voltage of 34.5 kV or below to which the Customer's Facility is interconnected.

<u>Interconnection</u> - The physical connection of facilities to the Distribution Delivery System so that Parallel Operation can occur

Interconnection Agreement - The Standard Interconnection Agreement for Facilities. (Available on the internet. Go to www.entergy.com, select your state or jurisdiction, select residential and select Net Metering or contact 1 800 ENTERGY.)

Interconnection Facilities - Facilities installed solely to interconnect the Customer's system with that of the Company to facilitate the exchange of power between the Customers's Energy Facilities and the Company's power system including, but not limited to, connection, transmission, distribution, engineering, transformation, switching, metering, and safety equipment. Interconnection Facilities shall include any additions and/or modifications to the Company's system deemed by the Company to be necessary.

<u>Network Service</u> - Two or more primary distribution feeder sources electrically connected on the secondary (or low voltage) side to form one power source for one or more Customers. This configuration is designed to maintain service to the Customers even after the loss of one of these primary distribution feeder sources. Also see Central Business District Grids.

<u>Net metering</u> is an electricity policy for consumers who own (generally small) renewable energy facilities, such as wind, solar power or home fuel cells. "Net", in this context, is used in the sense of meaning "what remains after deductions" — in this case, the deduction of any energy outflows from metered energy inflows. Under net metering, a system owner receives retail credit for the electricity they generate using electricity meters accurately recording electric flow in both directions. Consult the Entergy webpage of your franchise or the appropriate Public utility for details.

<u>Small Interconnected Electric Generators Customer's Facility</u> - Hardware and software installed to measure the energy flow both into and out of the Customer's facilities for the purpose of determining the usage for billing, if any.

<u>Parallel Operation</u> - The operation of Energy Facilities by a Customer physically and electrically interconnected to the Company's Distribution Delivery System.

<u>Point of Common Coupling (PCC)</u> - The point where transfer of any electric power between the Customer's facilities and the Company's Distribution Delivery System takes place, normally at the point of attachment.

<u>Protective Function</u> - Unsafe Operating Conditions shall be prevented from occurring before, during, and after the Interconnection of a Customer Electric Generator System with the Distribution Delivery System. This system typically uses hardware (including switching devices), relay protection schemes and software that and shall be designed to isolate the Customer's System or to disconnect it from the Distribution Delivery System under Unsafe Operating Conditions or outages.

<u>Quality of Service</u> - An operating state of the Distribution Delivery System that provides usable power to a Customer. This state of usable power includes the parameters specified for power factor, voltage surges and sags, voltage flicker, frequency and harmonics. For more information on these parameters, refer to the first page of this standard for these sections.

<u>Renewable Electric Generator System -</u> A system of hardware and software by which electric energy is generated using sun, wind, water, or biomass products as the source and as allowed to be interconnected to the Company's Distribution Delivery System.

<u>Stabilized</u> - The Distribution Delivery System is considered stabilized when, following a disturbance, the system returns to the normal range of voltage and frequency for duration of five minutes.

<u>Standard of Care</u> - A term defining the level of awareness to maintain workplace and public safety in the design, installation and operation of facilities which generate power.

<u>System Protection Facilities</u> - The equipment required to protect the Company's system and its other Customers' facilities from Unsafe Operating Conditions occurring at the Customer's Energy Facilities. The protection requirements shall be met at the Point of Common Coupling (PCC), although the devices and functions providing the Protective Functions can be located elsewhere.

<u>Unsafe Operating Conditions</u> - A situation that if left uncorrected would result in: (1) harm to any personnel or damage to any equipment, (2) unacceptable system stability or, (3) operation outside established parameters affecting the Quality of Service to other Customers connected to the Distribution Delivery System.

# 3 Details

#### 3.1 Available Voltage Systems

The Company's primary Distribution Delivery Systems available for parallel generation operations are of grounded wye. Generally, all voltage levels from 120/240 V to 34.5 kV single-phase or three-phase (except delta, open-wye and Central Business District Grids) are available for Interconnection. Delta and open-wye secondary voltage configurations require special evaluation prior to Interconnection. The voltage level available for connecting the Customer Electric Generator System in parallel with the system depends on the desired location on the Company's Distribution Delivery System and the size of the Customer's Electrical Generator Facility. Interconnected Electric Generators in Central Business District Grids is discussed in Section 3.8.11

#### 3.2 Manually Operated Load Break Switch /Labeling/ Reasons for Disconnect from the Distribution Delivery System

### 3.2.1 Manually Operated Load Break Switch

One visible blade opening, lockable, inspect-able disconnect for all the Net Metering generation within sight of service entrance meter preferably adjacent to meter, but within 10 feet of meter which is accessible to and lockable by Company personnel at all hours without notice shall be furnished by the Customer to the Company's specifications. (A pull-out type switch not accepted)

Company will accept one breaker (per customer) in lieu of blade opening type disconnect for non-battery backup solar units 25kVA and below. This breaker could be in a house panel/breaker box which is accessible to Company personnel at all hours without notice, and shall meet all of the other conditions of this section.

### 3.2.2Labels

Customer shall label

- Meter (or Breaker box if it is within one foot of meter) with type and size of generator with arrow pointing to it stating distance to disconnect. (Example 2.5 kW Solar & batteries, 3 ft → or 2.5 kW Solar & batteries, inside [when using breaker box only])
- If using breaker The outside of the breaker box (that is more than one foot from meter) shall be labeled (example Solar Disconnect inside) and the breaker shall be labeled with arrow (Example solar disconnect ⇒)
- If using blade opening type disconnect it shall be labeled with type of generator (Example Solar disconnect or wind power disconnect)

Label shall be red background with white letters and UV resistant. The lettering on each label/tag shall be 3/16 inch or larger and be either raised or incised on

each tag. Each tag shall be riveted or glued to the meter loop or switch or disconnect. Permanently attached tags are required.

The customer shall get **written approval of any and all variances** preferably in the design and planning stage. Contact the local Entergy Representative (or call 1-800-ENTERGY to get a representative assigned)

# 3.2.3 Reasons for Disconnect from the Distribution Delivery System

The Company reserves the right, but has no responsibility either actual or implied, to open the disconnect switch without prior notice to the Customer for any of the following reasons:

- A. Distribution system emergency,
- B. Routine maintenance, repairs, and modifications,
- C. Elimination of a safety hazard, protection of the public or on-site personnel, or if instructed to do so by public safety personnel (law enforcement, fire department or other governmental personnel),
- D. Inspection of Customer's generating equipment and protective equipment reveals a hazardous condition, a lack of scheduled maintenance or maintenance records,
- E. The operation of the Customer's generating equipment results in a deteriorated quality of service or safety issue with other Customers or with the operation of the Company's system, or

The Company may disconnect a distributed generation unit from the distribution system under the following conditions:

- F. Expiration or termination of interconnection agreement
- G. Non-compliance with the technical requirements
- H. Lack of approved application and interconnection agreement

I. Unauthorized modifications to the Customer's interface equipment When possible, the Company shall provide the Customer with reasonable notice and reconnect the Customer as quickly as reasonably practical.

### 3.3 Electrical Current and Voltage of Existing Service

The Company shall ascertain if the proposed generator output exceeds the current carrying capability and matches the voltage of the existing secondary service wires and transformers. If the Customer supplies his own transformation it should be configured for the Customer to monitor the Company's distribution system and react based upon specifications in this Standard. Grounded Wye to Grounded Wye transformers are preferred and Company approval is required before connection.

#### The Company will advise Customer of any Customer costs which may be incurred if upgrades are required and the voltage, load carrying ability or transformation of the existing service.

### 3.4 System Changes

#### 3.4.1 Company Changes to Distribution Delivery System

The Distribution Delivery System is a dynamic and changing system. If the Company changes the distribution voltage, the Customer will be responsible for paying for all modifications to the Customer's facilities required for reconnecting to the Company's reconfigured Distribution Delivery System. The Company will notify the Customer of reconfiguration programs.

#### 3.4.2 Customer Changes to Interconnection

The Customer shall notify the Company to obtain prior approval for any proposed modifications to the interconnecting scheme.

#### 3.5 Allowable Tie Points

Normally, only one tie point between the Customer's facilities and the Company's Distribution Delivery System will be allowed.

#### 3.6 Energy Flow during Emergencies

Power flow from or to a Customer's facilities during periods of system emergencies may be discontinued. The Company shall pay for kWh actually received, not for Customer potential capacity.

#### 3.7 Types of Allowed Generators

Single- or three-phase alternating current generating units may be operated in parallel with the Distribution Delivery System. They may be synchronous generators, induction generators, or inverter-controlled systems. Direct-current generation shall not be directly connected to the Company's alternating-current Distribution Delivery System.

#### 3.8 General Interconnection Requirements

The Customer's Electrical Generation Facilities shall meet the technical requirements as prescribed in this section, in IEEE 1547 and IEEE 1547.1 latest version along with the Distributed Generation Standards for Inter-Connection as specified within DR07-05.

#### 3.8.1 Customer's Equipment and Interconnection Standards

The Customer's Electrical Generation Facilities and Interconnection installation must meet all applicable national, state, and local construction and safety codes. The Customer shall be responsible for the design, installation, operation and maintenance of all equipment and facilities installed or that will be installed on the Customer's side of the Point of Common Coupling. Such design shall meet the latest standards of Institute of Electrical and Electronic Engineers, National

Electric Manufacturers Association, American National Standards Institute, National Electric Code, other national codes and local codes pertaining to the

design and construction of electrical facilities in effect at the time of installation. The facility shall be subject to the requirements of all authorities having jurisdiction and shall comply with all applicable codes and ordinances.

#### 3.8.2 Rating of Customer's Equipment

The equipment selected by the Customer shall be rated for continuous Parallel Operation with the Company's system.

Customer's Electrical Generation Systems that are intended to provide the Customer with power during periods when the Company's facilities are unavailable shall be equipped with a transfer switch to prevent energizing a non-energized Company circuit consistent with sections 3.2, 3.13.3 and 3.8.1 of this policy.

#### 3.8.3Protection of Customer's Equipment

The Customer will be responsible for protecting its facilities in such a manner that Distribution Delivery System outages, short circuits or other disturbances, including zero sequence currents and Ferro resonant over-voltages, do not damage the Customer's facilities.

The Customer's protective equipment shall be installed to prevent the Customer Electric Generator System from causing unnecessary tripping of the Distribution Delivery System breakers that would affect the Distribution Delivery System's ability to provide reliable service to other Customers.

Faults, single-phasing events, or other Abnormal Operating Conditions occurring on the Company's transmission system could affect a Customer's facilities connected to the Company's Distribution Delivery System. It is the Customer's responsibility to protect the Customer's facilities from these conditions.

#### 3.8.4Required Drawings

Adequate drawings of the Customer's proposed Electric Generator System, which will include a one line diagram and proposed relay systems, must be submitted to the Company for review during the planning stage. Additional drawings may be required on a case by case basis.

#### 3.8.5Changes to Company Facilities

The total cost of any additional equipment that must be installed by the Company on its Distribution Delivery System to allow Parallel Operation must be paid for by the Small Interconnected Electric Generators Customer, including the transformers and any facilities which must be added due to increased fault current or special operating conditions.

#### 3.8.6Power Factor

The power factor of the Customer Electric Generator System at the Point of Common Coupling shall be according to the appropriate rate schedule for this installation. The presence of the Customer Electric Generator System shall not cause the power factor to be lower than it was prior to installation and operation of the Customer Electric Generator System.

#### **3.8.7**Reactive Power Requirements

The Customer's Electric Generator System shall normally be responsible for supplying the facility's own reactive power as required by the load to which it supplies power.

#### 3.8.8Voltage Surges or Sags

The Customer will operate its Electric Generator System in such a manner that the voltage levels on the Distribution Delivery System are in the same range (+5% or -5% from nominal voltage) as if the facilities were not connected to the Company's system. The Customer shall be responsible for any damages to the Customer's facilities, and shall be liable for any damages to the Company's facilities of other Customers due to any under voltage or over voltage contribution from the Customer.

The Customer shall provide an automatic method of disconnecting the generating equipment from the distribution delivery system if:

Voltage Range	Time from beginning of event	
(% of base voltage)	(seconds)	
Less than 50%	0.16	
50 to 89%	2.00	
110% to 120%	1.00	
Greater than 120%	0.16	

#### 3.8.9Voltage Flicker, Harmonic Distortion, Transients and other Power Quality Issues

The Customer shall not create objectionable flicker, Harmonic Distortion, Transients, etc. for the Company's other Customers. Also consult Entergy's Power Quality Standards for Electric Service, latest edition which is available on The Entergy web site at www.entergy.com. Go to your state, "Your Business", Builder Standards.

#### 3.8.10 Frequency

When the operating frequency of the Customer's generating equipment deviates from the 60 Hz base. The Customer shall automatically disconnect the generating equipment from the distribution delivery system based upon the table below:

#### Interconnection System Response to Abnormal Frequencies

Generator size	Frequency range	Time from beginning of event
Generator size	(Hz)	(seconds)
Less than or equal to	Less than or equal to Greater than 60.5	
30kW	Less than 59.3	0.16
	Greater than 60.5	0.16
Greater than 30 kW	Less than 59.8 to	Adjustable 0.16 to 300
Greater than 50 kw	57	(consult Company)
	Less than 57	0.16

The Company may require the Customer to wait up to five minutes to reconnect after the distribution delivery system voltage and frequency return to normal range and the system is stabilized. Consult the Company for details. (IEEE 1547 4.2.6)

#### 3.8.11 Interconnected Electric Generators in Central Business District Grids

The Company will not allow interconnection in Central Business District Underground Secondary Networks, Spot Network Grids and Downtown Underground Radially Fed Installations. In Central Business District Grids, Spot Networks, and Downtown Underground Radially Fed Installations a generator will have a negative effect on reliability and the safety of employees that maintain these systems. This policy will affect Spot Networks, CBD Grids and Downtown Underground Radially Fed Installations including those in New Orleans, Baton Rouge, Lake Charles, West Monroe, Beaumont, Jackson, Little Rock, Pine Bluff, and Hot Springs

#### 3.9 Inspection Prior to Operations and Additional Requirements

The Company reserves the right to impose any herein described but unmet requirements and to make subsequent final inspection before the Customer Electric Generator System operates to verify that all such unmet requirements have been satisfied. However, the Company has no actual or implied responsibility in this regard. The Customer shall be responsible for making necessary changes, at the Customer's expense; to the facility should such changes be required.

Inspection by the Company of the Customer's equipment and Interconnection Facilities shall not constitute a determination by the Company of the continuing suitability of such equipment and Interconnection. An inspection by the Company shall in no way constitute a warranty or representation by the Company against future negligence, misuse, faulty repairs, or subsequently developing defects, and the Company assumes no responsibility or liability therefore.

#### 3.10 Responsibility for Customer's Operations

The Company is not responsible for proper operations of the Customer's Electric Generator System upon and after Interconnection to the Company's Distribution Delivery System.

#### 3.11 Responsibility for Customer's Annual Maintenance

Annual maintenance of the Customer's facility is the Customer's sole responsibility. The Customer shall maintain records of such maintenance activities, which the Company may review at reasonable times. Such maintenance records shall be made available for the Company's inspection upon request. The Company reserves the right to inspect the records, but has no responsibilities for maintenance either actual or implied.

#### 3.12 Protection/Interface Requirements

Protecting both the Small Interconnected Electric Generators Customer's facilities and the Company's system are of great importance. Proper protective systems shall be established in the design phase and confirmed prior to start-up of the Customer's Electrical Generation Facility. An Interconnection between the Company and the Customer will not be allowed prior to the proper coordination of protective devices. The Customer shall be responsible for providing to the Company the necessary documentation certifying that maintenance and testing have been satisfactorily performed.

#### 3.12.1 Changes to Company Fault Interruption Equipment

Customer Energy Facilities that are installed on the Company's Distribution Delivery System will provide additional fault current to the Distribution Delivery System. Thus, in special circumstances it is possible that the added facilities will necessitate the modification of the existing fault interrupting devices on the distribution feeder. The Customer will be responsible for paying the cost of these changes to the Company's system.

It is also possible that the added facilities will increase the available fault current on the Distribution Delivery System beyond the interrupting capability of the existing devices on the Distribution Delivery System. The Customer may be required to limit the fault current contribution from the Customer Electric Generator System. Should the Company also be required to make changes, the Customer shall pay the cost of the required changes. The issues will be examined on a case-by-case basis.

	Exhibit D
	CNO Docket No. UD-18-03
	Page 16 of 23
Entergy Distribution Design Basis /Standards	Page 16 of 23 Standard Number: DR07-02, Rev. 14
Title: Connecting Small Electric Generators to the Entergy	Effective Date:
Distribution System(less than 300kVA)	August 20, 2018

### 3.12.2 Tests of the Customer's Equipment

The Company reserves the right, but has no responsibility either actual or implied, to observe the Customer's tests and/or inspection of any of the Customer's protective equipment that is essential to the Interconnection, including relays, circuit breakers, protective devices and related equipment. Inspection may include simulated test tripping of the Customer's Interconnection breakers by the protective relays to verify all protective set points and relay/breaker trip timing prior to Interconnection to the Company system.

Inspection by the Company of the Customer's equipment and Interconnection Facilities shall not constitute a determination by the Company of the continuing suitability of such equipment and Interconnection. An inspection by the Company shall in no way constitute a warranty or representation by the Company against future negligence, misuse, faulty repairs, or subsequently developing defects, and the Company assumes no responsibility or liability therefore.

The Customer shall provide the Company with notice at least two weeks before the initial energizing and start-up testing of the Customer's facilities so that the Company may witness the testing of any equipment and protective systems associated with the Interconnection.

If upon connecting to the Company's system a system emergency develops, safety issues arise, or the Quality of Service to other Customers is affected, the Company may then require additional inspections or tests of the Customer's protective equipment as per IEEE 1547 latest version.

### 3.12.3 Requirements for Specific Technologies

Various technologies require unique control, protection, and safety equipment to be installed. The specifications in this section list those requirements unique to the technologies.

### 3.12.3.1 Synchronous Generators

For a Customer's synchronous generator, circuit breakers shall be three-phase devices with electronic or electro-mechanical control. The Customer is solely responsible for properly synchronizing its generator with the Company's Distribution Delivery System. The excitation system response ratio shall be 0.5 or greater. The generator's excitation system(s) shall conform, as near as reasonably achievable, to the field voltage versus time criteria specified in American National Standards Institute Standard C50.13-1989 in order to permit adequate field forcing during transient conditions.

### 3.12.3.2 Induction Generators and Inverter Systems

Induction generation may be connected and brought up to synchronous speed (as an induction motor) if it can be demonstrated that the initial voltage drop measured on the Distribution Delivery System side of the Point of Common Coupling is within the allowable visible flicker standard - see §3.8.9. Otherwise, the Customer may be required to install hardware or employ other techniques to bring voltage fluctuations to acceptable levels.

Self-commutated inverters whether of the utility-interactive type or stand-alone type shall be used in parallel with the Distribution Delivery System only with synchronizing equipment.

Line-commutated inverters do not require synchronizing equipment. When a line commutated inverter system is used, no other fault-interrupting device is required. The inverter interrupts the fault.

#### 3.13 Synchronizing Requirements

The Customer shall be solely responsible for synchronizing and properly connecting and disconnecting its electrical system relative to Parallel Operation with the Company's system. The Customer shall provide an automatic synchronizing scheme to prevent the closing of its circuit breaker when the two electrical systems are out of synchronism. Also see Section 3.8.10.

#### 3.14 Metering Requirements

Based on the applicable rate schedule and the Company's standard practices, the Customer will provide the meter socket. The Company will supply the special meter that will measure the Customer's energy flow.

The Customer will be required to provide the Company with information regarding the total connected load. The Customer may be required to provide and / or install the meter socket, metering transformer enclosure, and adequate attachments or devices for attaching Company's metering facilities to the building. For additional information see the Company's *Customer Installation Standards for Electric Service* which is available on The Entergy web site at www.entergy.com. Go to your state, "Your Business", Builder Standards.

#### 4 References

*IEEE Guide for Protective Relaying of Utility-Consumer Interconnection* C37.95 *(Latest revision)* 

IEEE Recommended Practices and Requirements for Harmonic Control in Electric Power Systems, 519-1992

IEEE Recommended Practice for Electric Power Distribution for Industrial Plants, 141-1993

IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems 1547

IEEE Standard Conformance for Test Procedures for Interconnecting Distributed Resources with Electric Power Systems 1547.1

American National Standards Institute Standard C50.13-1989

UL 1741 Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources

Jurisdictional Rules and Rates for Arkansas, Louisiana, New Orleans and Texas Entergy *Customer Installation Standards for Electric Service, latest edition* 

Entergy Power Quality Standards for Electric Service, latest edition

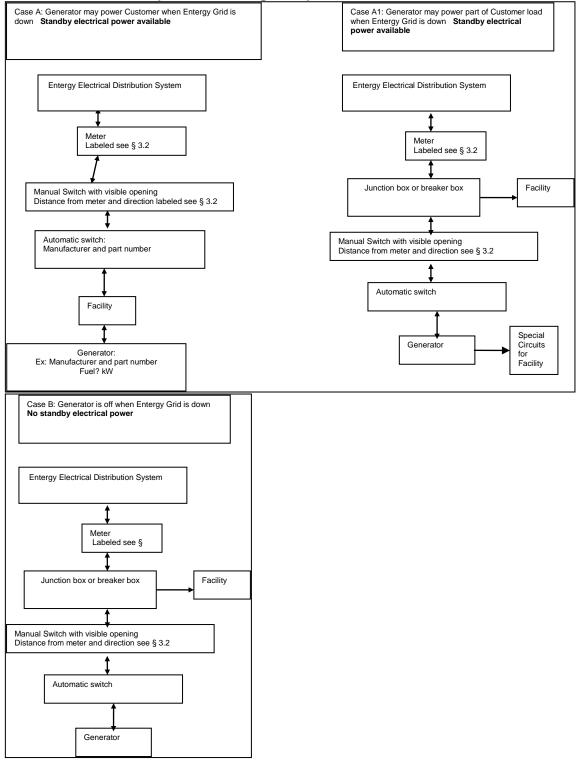
Connecting Large Electric Generators to the Entergy Distribution System (300kVA to 20MVA) Entergy Standard DR701

August 20, 2018

#### 5 FLOW CHARTS (One Line Diagrams)

**Entergy Distribution Design Basis /Standards** 

Distribution System(less than 300kVA)



Note: A one line diagram submitted to the Company could be like the ones above with equipment specific information included

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Page 20 of 23

August 20, 2018

-	
6	Revisions
U	NEVISIOIIS

Entergy Distribution Design Basis /Standards

Distribution System(less than 300kVA)

6	Revision	5	
	06	<ul> <li>Title of Standard changed from Net Metering Facilities Safety and Performance Standards to Connecting Small Electric Generators to the Entergy Distribution System (less than 500kVA) and expanded to include all interconnected generators below 500kVA.</li> <li>Application moved to end of Standard</li> <li>Added questions on application to learn if generator is to be connected less than 10 cycles.</li> <li>Move Manually Operated Load Break Switch requirements from §3.8.1 and merge into §3.2 Reasons for Disconnection from the Distribution Delivery System</li> <li>3.14 Susceptibility to Transmission Faults moved to 3.8.3 Protection of Customer's Equipment</li> <li>3.8.11 sentence "Interconnections for Electric Generators will be allowed in Central Business Districts in overhead or standard underground distribution circuits which can comply with Company's Standards." Removed either the unit is in a legal downtown network grid or not</li> <li>References to §3.2 added to 5.0 Flow Charts</li> </ul>	11/11/08
	07	<ul> <li>3.2 The customer shall get written approval of any and all variances, preferably in the design and planning stage. Contact the local Entergy Representative (or call 1-800-ENTERGY to get a representative assigned).</li> <li>In Application, short circuit rating of entire system only needed.</li> </ul>	10/15/09
	08	<ul> <li>Customer referred to website or 1 800 ENTERGY for application and Standards Interconnection Agreement form</li> <li>Add to 3.2 .(A pull-out type switch not accepted unless it was installed, in place or approved before 1/26/2011)</li> </ul>	1/26/11
	09	<ul> <li>3.2 Only one disconnect allowed for all Net metering generation at site. (submitted for clarity it was always one) per IEEE1547-2003 § 4.1.7</li> <li>Disconnect must be within 10 feet of meter</li> </ul>	7/ 22/11

Entergy Distribution Design Basis /StandardsStandard Number: DRTitle: Connecting Small Electric Generators to the EntergyEffective Date:Distribution System(less than 300kVA)August 20, 2018

10	Caption 1.2 Coope	1/17/2012
10	<ul> <li>Section 1.2 Scope</li> <li>Case 2. Has been changed to: "The Customer may build facilities that are connected to their building or internal electrical system and are not intended to be connected to the distribution system. The Customer shall supply a open and visible break verifiable by Company personnel. The location shall be on the outside of the facility accessible to Company personnel at all hours. A main disconnect in the off position qualifies as an open break. It is recommended that the customer tag the disconnect to help prevent accidental closing.</li> <li>Failure to have a visible break is reason for being disconnected, and subjects Customer to liability for resulting injury to people or property."</li> <li>3.2 Manually Operated Load Break Switch / Reasons for Disconnect from the Distribution Delivery System addition Company will accept a breaker in lieu of blade opening type disconnect for non-battery backup solar units 25kVA and below. This breaker could be in a house</li> </ul>	4/17/2012
	panel/breaker box which is accessible to Company	
	personnel at all hours without notice, and shall meet all	
	of the other conditions of this section.	0/10/10
11	<ul> <li>Modified requirements for labels</li> <li>3.2.2 Labels Customer shall label</li> <li>Meter (or Breaker box if it is within one foot of meter) with type and size of generator with arrow pointing to it stating distance to disconnect. (Example 2.5 kW Solar &amp; batteries, 3 ft → or 2.5 kW Solar &amp; batteries, inside [when using breaker box only])</li> <li>If using breaker – The outside of the breaker box (that is more than one foot from meter) shall be labeled (example Solar Disconnect inside) and the breaker shall be labeled with arrow (Example solar disconnect ⇒)</li> <li>If using blade opening type disconnect – it shall be labeled with type of generator (Example Solar disconnect or wind power disconnect)</li> <li>Label shall be red background with white letters and UV resistant. The lettering on each label/tag shall be 3/16 inch or larger and be either raised or incised on each tag. Each tag shall be riveted or glued to the meter loop or</li> </ul>	3/12/12
	switch or disconnect. Permanently attached tags are required.	

Entergy Distribution Design Basis /Standards	Standard Number: DR07-02, Rev. 14
Title: Connecting Small Electric Generators to the Entergy	Effective Date:
Distribution System(less than 300kVA)	August 20, 2018

Rev 13	Changed Connecting Large Electric Generators to the	5/04/16
	Entergy Distribution System lower range from 500 kVA to	
	300 kVA to align with the less than 300kVA limit for Net	
	Metering Inquiry and Application Processes Standard due to	
	minimum impact on the Distribution System.	
Rev 14	Added reference to new Distributed Generation Standards	8/20/18
	for Inter-Connection with Section 3.8	

Exhibit E CNO Docket No. UD-18-03 Page 1 of 34

#### INTERCONNECTION AND PARALLEL OPERATION OF

#### COMMUNITY SOLAR GENERATING FACILITY AGREEMENT

**BY AND BETWEEN** 

and

ENTERGY NEW ORLEANS, LLC

Form CSG-3

#### TABLE OF CONTENTS

Article I - Definitions				
Article II –Term of Agreement				
Article III – Interconnection Specifications				
A. Description				
B. Operations Date				
Article IV - General Terms and Conditions	7			
A. Electric Services Supplied by the Company	7			
B. Construction	8			
C. Operation	11			
D. Continuity of Service	15			
E. Force Majeure	16			
F. Indemnity	17			
G. Waiver	19			
<ul> <li>H. Assignment</li> <li>I. Governmental Jurisdiction and Authorization</li> </ul>	19 10			
	19			
J. Headings Not To Affect Meaning K. Amendments	20 20			
L. Notice	20			
M. Breach, Cure, and Default	20			
N. Termination of Interconnection Service	23			
N. Termination of Interconnection Service	25			
Article V - Insurance	24			
Article VI - General Provisions	25			
Appendix A - Interconnection Facilities				
Appendix B - Schedule of Rates				
Appendix C - Special Facilities				
Appendix D - Additional Insured Endorsement				
Appendix E – Company's Notice Of Satisfaction				
Appendix F – Customer's Notice Of Satisfaction				

#### INTERCONNECTION AND PARALLEL OPERATION OF

#### COMMUNITY SOLAR GENERATING FACILITY AGREEMENT

#### BY AND BETWEEN

and

#### ENTERGY NEW ORLEANS, LLC

THIS AGREEMENT is made this \_\_\_\_\_ day of \_\_\_\_\_\_, \_\_\_\_, between

\_\_\_\_\_\_, hereinafter called the "Subscriber Organization" or "SO," and Entergy New Orleans, LLC, a \_\_\_\_\_\_ limited liability company organized under the laws of the State of Texas, hereinafter called the "Company." The SO and the Company each may be referred to herein as a "Party," or collectively as "Parties."

#### WITNESSETH:

WHEREAS, The SO requires an interconnection to operate in parallel with the Company's electric distribution system.

NOW, THEREFORE, and in consideration of and subject to the mutual covenants contained herein, it is agreed:

#### **ARTICLE I - DEFINITIONS**

Whenever used in this Agreement, Appendices and attachments hereto, the following terms shall have the following meanings:

<u>Agreement</u> - This Interconnection and Operating Agreement by and between \_\_\_\_\_\_ and Entergy \_\_\_\_\_\_, Inc., also referred to as "the Contract".

ANSI - American National Standards Institute

<u>Company's System -</u> All the facilities owned or controlled by the Company on the Company's side of the Point of Common Coupling related to the provision of electric service, including, but not limited to, the Company's distribution, transmission and interconnection facilities.

<u>SO's Facility</u> – All the physical assets on the SO's side of the interconnection point that relate in any way to the SO generation source. The SO's Facility may sometimes be referred to herein as "Facility."

<u>Emergency</u> - Any abnormal condition on the Company's System that requires automatic or immediate manual action to prevent or limit loss of distribution facilities or generation supply which loss could adversely affect the reliability of the Company's System or the systems to which the Company's System is directly or indirectly connected.

<u>Good Utility Practice</u> - Any of the practices, methods and acts engaged in or approved by a significant proportion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at the lowest reasonable cost consistent with reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method or act to the exclusion of all others, but rather to be a spectrum of acceptable practices, methods or acts.

<u>Interconnection Facilities</u> - All facilities presently in place or presently proposed to be installed, as delineated in Appendix A and Appendix B, or required to be installed in the future in order to interconnect the SO's Facility to the Company's System including, but not limited to, connection, transmission, distribution, engineering, administrative, transformation, switching, metering, protective and safety equipment. Interconnection Facilities shall include any additions and/or reinforcements to the Company's System, that the Company, in a reasonable exercise of its judgment, deems to be necessary.

IEEE - Institute of Electrical and Electronics Engineers.

Interconnection Service - The services provided by the Company to interconnect the SO's Facility with the Company's System pursuant to the terms of this Agreement.

<u>Metering Point</u> - The point, shown in Appendix B, where the Metering Facilities of the Company measure the electric energy delivered either to theCompany by the SO or to the SO by the Company.

NEC - National Electric Code

NEMA - National Electric Manufacturer's Association

<u>Operation Date</u> - The day commencing at 00:01 hours, following the day during which Interconnection Facilities and equipment of the SO's Facility have been completed to the Company's and the SO's mutual satisfaction and energized in parallel operation of the Company's and the SO's systems as <u>confirmed in writing or electronically in the form</u> <u>included as Appendixes E and F, respectively, hereto</u>.

<u>Point of Common Coupling</u> - The point, shown in Appendix A, where the conductors of the Company connect to the conductors of the SO.

<u>Special Facilities</u> - Those certain Interconnection Facilities presently in place, presently proposed to be installed or required to be installed in the future, which Facilities were installed or will be installed and will be maintained by the Company, but at the SO's expense, and which Facilities are subject to the provisions of Appendix C of this Agreement.

<u>System Protection Facilities</u> - The equipment required to protect (1) the Company's System and its other customers from faults occurring at the SO's Facility or system, and (2) the SO's Facility from faults occurring on the Company's System or on the system of others to which the Company's System is directly or indirectly connected.

# ARTICLE II - TERM OF AGREEMENT

This Agreement shall be binding upon execution and shall remain in effect for a term of \_\_\_\_\_\_ years from the Operation Date; provided, that the SO may terminate this Agreement by giving written notice thereof to the Company, not less than 90 days prior to the effective date of such termination. Following conclusion of the primary term, this Agreement shall remain in effect on a year-to-year basis, provided, that either the SO or

the Company may terminate this Agreement, for good cause shown, by giving written notice thereof to the other party not less than ninety (90) days prior to the effective date of such termination. The Company may suspend receipt of deliveries, purchases and payment therefor if the SO's failure to comply with this Agreement affects the Company's operation. If, for any reason, delivery and/or payment therefor are suspended, delivery and payment shall promptly resume upon correction or elimination of the condition that gave rise to the suspension.

#### ARTICLE III – INTERCONNECTION SPECIFICATIONS

#### A. <u>DESCRIPTION</u>

The SO's \_\_\_\_\_ KW Facility located at \_\_\_\_\_, \_\_\_\_\_ shall be the location of the "Point of Common Coupling". Details of this "Point of Common Coupling" and the "SOs Facility" shall be detailed in Appendix A and Appendix B.

# B. <u>OPERATIONS DATE</u>

The scheduled Operation Date of the SO's Facility is \_\_\_\_\_\_, \_\_\_\_\_.

#### ARTICLE IV - GENERAL TERMS AND CONDITIONS

#### A. <u>ELECTRIC SERVICES SUPPLIED BY THE COMPANY</u>

This Agreement does not provide for any electric service by the Company to the SO. If the SO requires electric service from the Company, the SO shall enter into separate contract arrangements with the Company in accordance with the

Company's applicable electric tariffs on file with and authorized by the appropriate regulatory authority.

#### B. <u>CONSTRUCTION</u>

#### 1. Land Rights

The SO agrees to furnish at no cost to the Company all necessary rights of way upon, over, under, and across lands owned or controlled by the SO and/or its affiliated interests for the construction and operation of necessary lines, substations, and other equipment to accomplish interconnection under this Agreement and shall, at all reasonable times, give the Company, or its agents, free access to such lines, substations, and equipment. An accessible, protected and satisfactory site selected upon mutual agreement by the Parties and located on the SO's premises shall be provided by and at the SO's expense for installation of metering devices, unless the Company elects to install meters on poles or other locations controlled by it. The SO grants to the Company at all reasonable times the right of free ingress and egress to the SO's premises for the purpose of installing, testing, reading, inspecting, repairing, operating, altering or removing any of the Company's property located on the SO's premises or for other purposes necessary to enable the Company to receive or to deliver electric energy or determine the SO's compliance with this Agreement. If any part of the Company's facilities are to be installed on property owned by other than the SO, the SO shall, if the Company is unable to do so without cost to the Company, procure from the owners thereof all necessary permanent rights of way and

easements, in a form satisfactory to the Company, for the construction, operation, maintenance and replacement of the Company facilities upon such property. In the event the SO is unable to secure them (a) by condemnation proceedings or (b) by other means, the SO shall reimburse the Company for all costs incurred by the Company in securing such rights.

#### 2. Facility and Equipment Design and Construction

The SO shall be obligated to design, construct, install, own, operate and a. maintain the SO's Facility and all equipment needed to generate power, except for any Special Facilities constructed, installed and maintained by the Company pursuant to Appendix C (Special Facilities), which is attached hereto. The SO's Facility and equipment shall meet all requirements of applicable codes, including, without limitation, those of IEEE, NEMA, ANSI, and NEC, and further, shall meet all requirements of any duly constituted regulatory authority having jurisdiction. The SO shall submit all specifications for the SO's Facility and equipment, including System Protection Facilities, as defined in Article I and more fully described in Article IV, Paragraph C(1) of this Agreement, to the Company for review prior to connecting the said SO's Facility and equipment to the Company's System. The Company's review of the SO's specifications shall be construed neither as confirming nor as endorsing the design, nor as any warranty as to fitness, safety, durability or reliability of the SO's Facility or any of the equipment. The Company shall not, by reasons of such review or failure to review, be responsible for strength, details of design, adequacy or capacity of the SO's Facility or equipment, nor shall the Company's acceptance be deemed to be an endorsement of any Facility or equipment. The SO agrees to make changes to its Interconnection Facilities as may be reasonably required to meet changing requirements of the Company's System. It is agreed that such necessary changes will be made by each Party to its facilities on its respective side of the Point of Common Coupling, at its own expense. The Company agrees to give the SO advance written notice of the time such changes are to be completed, and a reasonable opportunity for the SO to accomplish these changes. Contemporaneous with such notice, the Company shall supply complete engineering information and specifications for the SO to use in determining what changes will be necessary on the SO's side of the Point of Common Coupling.

b. The SO shall be obligated to construct, install, own and maintain any facilities on the SO's side of the Point of Common Coupling, which may be required to operate in parallel with the Company. The Company's Interconnection Facilities shall be of a size to accommodate the delivery of the kW amount referred to in Article III (A) of this Agreement. In the event it is necessary for the Company to install any Special Facilities that are essential to accomplish the purposes of this Agreement, the Company may, at its option, require a contribution, facilities charge, or other compensation to make such facilities available to the SO.

#### 3. <u>Metering</u>

The Company shall provide, install, own and maintain metering. All costs associated with metering the energy supplied to the Company by the SO or any subsequent changes requested by the SO to metering shall be borne by the SO.

# C. <u>OPERATION</u>

# 1. <u>Protection and System Quality</u>

a. It shall be the SO's obligation, at its expense, to install or have installed and keep operative System Protective Facilities, including such protective and regulating devices as are identified by order, rule or regulation of any duly constituted regulatory authority having jurisdiction, or as are otherwise necessary to protect personnel and equipment and to minimize deleterious effects to the Company's electric service operation. Any such protective or regulating devices that may be required on the Company's facilities shall be installed by the Company at the SO's expense.

b. <u>Requirements for Protection</u> – The SO shall provide, install, own, and maintain relays, circuit breakers, and all other devices necessary to promptly remove any fault contribution of the SO's generating equipment to any short circuit occurring on the Company's System not otherwise isolated by the Company's equipment. Such protective equipment shall include, without limitation, a disconnecting device or switch with load interrupting capability to be located between the SO's Facility and the Company's System at an accessible, protected, and satisfactory site selected upon mutual agreement of the Parties. The SO shall be responsible for protection of its Facilities and equipment from such conditions as single-phasing of distribution system, negative sequence currents, over- or under-frequency, sudden load rejection, over- or undervoltage, phase angle jump, and generator loss-of-field. The SO shall be solely responsible for provisions to disconnect its generation when a disturbance on the Company's System results in the SO's Facility becoming isolated from the Company's System.

#### c. <u>System Quality</u> -

i. The SO's Facility and equipment shall not cause excessive voltage excursions or cause the voltage to drop below or rise above the extents of the range maintained by the Company without the SO's generation. The SO's Facility and equipment shall not cause excessive voltage flicker or introduce excessive distortion to the sinusoidal voltage or current waves.

ii. Excessive voltage excursions, excessive voltage flicker, and excessive distortion to the sinusoidal voltage or current waves shall be determined in accordance with the applicable sections of the Companys' most current Standard & Engineering Services Guideline, Electric Standard No. DR07-01, including Sections 3.1.9.8-9, 11-12, which Standard shall be provided to the SO by the Company at the SO's request. Failure by the SO to operate the Facility within the limits set forth in this Agreement and the referenced Standard shall result in immediate disconnection by the Company of the SO's Facility from the Company's System. iii. The operating frequency of the SO's generating equipment shall not deviate more than +0.5 Hertz ("Hz") or –0.7 Hz from a 60 Hz base. The SO shall automatically disconnect the Facility from the Company's System within 15 cycles if this frequency tolerance cannot be maintained. The SO may reconnect when the Company's System voltage and frequency return to normal range and the system is stabilized.

iv. In accordance with IEEE 519 the total harmonic distortion ("THD") voltage shall not exceed 5.0% of the fundamental 60 Hz frequency or 3.0% of the fundamental frequency for any individual harmonic when measured at the Point of Common Coupling with the Company's System.

d. <u>Inspection</u> – The Company shall have the right, but shall have no obligation or responsibility, to: i) observe the SO's tests and/or inspection of any of the SO's protective equipment; ii) review the settings of the SO's protective equipment; and iii) review the SO's maintenance records relative to the SO's Facility and/or protective equipment. The foregoing rights may be exercised by the Company from time to time as deemed necessary by the Company upon reasonable notice to the SO. However, the exercise or non-exercise by the Company of any of the foregoing rights of observation, review or inspection shall be construed neither as an endorsement nor confirmation of any aspect, feature, element, or condition of the SO's Facility or protective equipment or the operation thereof, and shall not constitute a warranty as to fitness, safety, desirability, or reliability of same.

# 2. <u>Meters</u>

a. The Company shall inspect and test all the Company-owned meters upon their installation and at regular intervals thereafter. If requested to do so by the SO, the Company shall inspect or test a meter more frequently than required by standard utility practice or any applicable regulations, at the expense of the SO. The Company shall give reasonable notice of the time when any inspection or test shall take place, and the SO may have representatives present at the test or inspection.

# 3. <u>Communications</u>

a. At the Company's discretion and upon reasonable notice to the SO, a Remote Terminal Unit ("RTU") shall be installed by the SO, or by the Company at the SO's expense, to gather accumulated and instantaneous data to be telemetered to a location designated by the Company. The SO shall put forth best reasonable efforts to install or facilitate installation of such equipment as soon as practicable, provided that installation shall be accomplished within a time period of no more than one hundred and eighty (180) days following said notice by the Company. The communication protocol for this link will be specified by the Company. Instantaneous analog watt and VAR flow information must be telemetered directly to such location.

#### 4. <u>Disconnection</u>

a. <u>Disconnection in Event of Emergency</u> – The Company and the SO shall have the right to disconnect without notice the Interconnection Facilities if, in the Company's or the SO's sole opinion, an Emergency exists and immediate disconnection is necessary to protect persons, the Company's System or facilities, the SO's facilities, or the facilities of the Company's other customers from damages or interference caused by the SO's interconnection and/or generating equipment, or lack of proper or properly operating protective devices. For purposes of this Article IV, Paragraph C(4), protective devices may be deemed by the Company not to be properly operating if the Company's review under Article IV, Paragraph C(1)(d) ("Inspection") discloses irregular or otherwise insufficient maintenance on such devices or that maintenance records do not exist or are otherwise insufficient to demonstrate that adequate maintenance has been and is being performed.

b. <u>Disconnection after Agreement Terminates</u> - Upon termination of this Agreement by its terms, the Company may disconnect the Facility from the Company's System in accordance with a plan for disconnection upon which the Company and the SO agree.

# D. <u>CONTINUITY OF SERVICE</u>

Except in case of Emergency, in order not to interfere unreasonably with the other Party's operations, the curtailing, interrupting or reducing Party shall give the other Party reasonable prior notice of any curtailment, interruption or reduction, the reason for its occurrence and its probable duration. The SO always shall notify the Company promptly of any complete or partial outage of the SO's Facility.

#### E. <u>FORCE MAJEURE</u>

- 1. The term "Force Majeure" as used herein shall mean an event, occurrence, or circumstance beyond the reasonable control of, and without the fault or negligence of, the Party claiming Force Majeure, including, but not limited to, acts of God, acts of war or the public enemy, flood, earthquakes, storms, fire, lightning, epidemics, riots, civil disturbances, sabotage, explosion, curtailments, orders, regulations or restrictions imposed by governmental or military, or lawfully established civilian authorities, labor dispute (including strikes by employees of one of the Parties hereto) or any other event or cause which is beyond the claiming Party's reasonable control, and which wholly or in part prevents the claiming party from performing its obligations under this Agreement. Mere economic hardship of a Party shall not constitute "Force Majeure." The Party unable to carry out an obligation, imposed on it by this Agreement, due to "Force Majeure," shall notify the other Party in writing or electronically or by telephone within a reasonable time after the occurrence of the cause relied on.
- 2. The Company shall not be responsible for any non-performance under the Agreement or failure to purchase electric energy under the Agreement due to "Force Majeure" whether occurring on the Company's electric system or any

connecting electric system affecting the Company's operations. The Company shall be excused from whatever performance is affected only while a "Force Majeure" situation exists and the Company attempts in good faith to alleviate such situation.

- 3. If the SO, because of "Force Majeure," is rendered wholly or partially unable to perform an obligation imposed on it by this Agreement, except for the obligation to make payments of money, the SO shall be excused from whatever performance is affected, but only while a "Force Majeure" situation exists and the SO attempts in good faith to alleviate such situation.
- F. <u>INDEMNITY</u>
- 1. The SO agrees to fully defend indemnify and hold the Company, its shareholders, directors, officers, agents, representatives, employees, servants, its affiliated and associated companies, their respective shareholders and/or its assigns ("SO Indemnified Parties"), harmless from and against any and all claims, demands, liability, losses, damage, costs or expenses including attorney's fees and other costs of defense (collectively "Claims") arising out of any injury, bodily or otherwise, to or death of persons, or for damage to, or destruction of property belonging to SO, Company or others (including the SO's Facility and the Company's system) arising out of or otherwise resulting from the use, ownership, maintenance, or operation of the SO's Facility, resulting from the fault, negligence or willful misconduct of Cusotmer in connection with SO's obligations under this Agreement; provided, however, that the provisions of this

Paragraph shall not apply if such Claims are held to have been caused by the sole negligence and/or the willful misconduct of SO's Indemnified Parties.

- 2. The Company agrees to fully defend indemnify and hold the SO, its shareholders, directors, officers, agents, representatives, employees, servants, its affiliated and associated companies, their respective shareholders and/or its assigns ("Company's Indemnified Parties"), harmless from and against any and all claims, demands, liability, losses, damage, costs or expenses including attorney's fees and other costs of defense (collectively "Claims") arising out of any injury, bodily or otherwise, to or death of persons, or for damage to, or destruction of property belonging to Company, SO or others (including the SO's Facility and the Company's system) arising out of or otherwise resulting from the use, ownership, maintenance, or operation of the Company's system, resulting from the fault, negligence or willful misconduct of Company in connection with Company's obligations under this Agreement; provided, however, that the provisions of this Paragraph shall not apply if such Claims and held to have been caused by the sole negligence and/or the willful misconduct of Company's Indemnified Parties.
- 2. Neither Party shall be liable in contract, in tort (including negligence), or otherwise to the other Party for any incidental or consequential loss or damage whatsoever, including, but not limited to, loss of profits or revenue on work not

performed, for loss of use of or under-utilization of the other Party's facilities, or loss of use of revenues or loss of anticipated profits, resulting from either Party's performance or non-performance of an obligation imposed on it by this Agreement.

#### G. <u>WAIVER</u>

Any waiver at any time by either Party of its rights with respect to a default under this Agreement, or with respect to any other matters arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or other matter.

#### H. ASSIGNMENT

Neither Party shall voluntarily assign its rights nor delegate its duties under this Agreement, or any part of such rights or duties, without the written consent of the other Party, except in connection with the sale, merger or transfer of a substantial portion of its properties (or in the case of the Company, its distribution facilities) including Interconnection Facilities which it owns provided that the assignee in such a sale, merger or transfer assumes directly all rights, duties and obligations arising under this Agreement, and such assignor shall be, without further action, released from its obligations hereunder. Any such assignment or delegation made without such written consent shall be null and void. The Company shall be entitled to assign the Agreement to any whollyowned direct or indirect subsidiary of Entergy Corporation.

#### I. <u>GOVERNMENTAL JURISDICTION AND AUTHORIZATION</u>

- 1. This Agreement shall not become effective until all required governmental authorizations and permits are first obtained and copies thereof are submitted to the Company; provided that this Agreement shall not become effective unless it, and all provisions thereof, is authorized and permitted by such governmental agencies without change or condition.
- 2. This Agreement is subject to present and future valid laws and valid orders, rules and regulations of duly constituted regulatory authorities having jurisdiction. This Agreement shall not become effective until approved by the Council for the City of New Orleans ("Council"), to the extent such approval is required, and/or accepted by any other regulatory bodies having jurisdiction in the premises, if any. Each party expressly reserves, however, the right to appeal and otherwise contest any change ordered by a governmental agency or court having jurisdiction in the rights, terms or conditions specified in this Agreement.

#### J. <u>HEADINGS NOT TO AFFECT MEANING</u>

The descriptive headings of the various Sections and Articles of this Interconnection Agreement have been inserted for convenience of reference only and shall in no way modify or restrict any of the terms and provisions hereof.

#### K. <u>AMENDMENTS</u>

This Agreement may be amended by and only by a written instrument duly executed by each of the parties hereto.

#### L. <u>NOTICES</u>

Any notice, demand or request required or permitted to be given by either Party to the other and any instrument required or permitted to be tendered or delivered by either Party to the other may be so given, tendered or delivered, as the case may be, by depositing the same in any United States Post Office with postage prepaid, for transmission by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out below:

To the Company: Entergy New Orleans, LLC

To the SO:

# M. BREACH, CURE AND DEFAULT

1. <u>General</u>. A breach of this Agreement ("Breach") shall occur upon the failure by a Party to perform or observe any material term or condition of this Agreement. A default of this Agreement ("Default") shall occur upon the failure of a Party in Breach of this Agreement to cure such Breach in accordance with the provisions of Article IV(M)(4) of this Agreement.

- 2. <u>Events of Breach</u> A Breach of this Agreement shall include:
  - (a) The failure to pay any amount when due;
  - (b) The failure to comply with any material term or condition of this Agreement, including but not limited to any material Breach of a representation, warranty or covenant made in this Agreement;
  - (c) If a Party: (1) becomes insolvent; (2) files a voluntary petition in bankruptcy under any provision of any federal or state bankruptcy law or shall consent to the filing of any bankruptcy or reorganization petition against it under any similar law; (3) makes a general assignment for the benefit of its creditors; or (4) consents to the appointment of a receiver, trustee or liquidator;
  - (d) Assignment of this Agreement in a manner inconsistent with the terms of this Agreement;
  - (e) Failure of either Party to provide such access rights, or a Party's attempt to revoke or terminate such access rights, as provided under this Agreement; or
  - (f) Failure of either Party to provide information or data to the other Party as required under this Agreement, provided the Party entitled to the information or data under this Agreement requires such information or data to satisfy its obligations under this Agreement.

- 3 <u>Continued Operation</u>. In the event of a Breach or Default by either Party, the Parties shall continue to operate and maintain, as applicable, such DC power systems, protection and Metering Equipment, telemetering equipment, SCADA equipment, transformers, secondary systems, communications equipment, building facilities, software, documentation, structural components, and other facilities and appurtenances that are reasonably necessary for the Company to operate and maintain the Company's System, or for the SO to operate and maintain the Facility, in a safe and reliable manner.
- 4. <u>Cure and Default</u>. Upon the occurrence of an event of Breach, the Party not in Breach (hereinafter the "Non-Breaching Party"), when it becomes aware of the Breach, shall give written notice of the Breach to the Breaching Party (the "Breaching Party") and to any other person a Party to this Agreement identifies in writing to the other Party in advance. Such notice shall set forth, in reasonable detail, the nature of the Breach, and where known and applicable, the steps necessary to cure such Breaching Party shall have thirty (30) days to cure such Breach. If the Breach is such that it cannot be cured within thirty (30) days, the Breaching Party will commence in good faith all steps as are reasonable and appropriate to cure the Breach within such thirty (30) day time period and thereafter diligently pursue such action to completion. In the

event the Breaching Party fails to cure the Breach, or to commence reasonable and appropriate steps to cure the Breach, within thirty (30) days of becoming aware of the Breach, the Breaching Party will be in Default of the Agreement.

5. <u>Right to Compel Performance</u>. Notwithstanding the foregoing, upon the occurrence of an event of Default, the non-Defaulting Party shall be entitled to: (1) commence an action to require the Defaulting Party to remedy such Default and specifically perform its duties and obligations hereunder in accordance with the terms and conditions hereof, and (2) exercise such other rights and remedies as it may have in equity or at law.

#### N. <u>TERMINATION OF INTERCONNECTION SERVICE</u>

- <u>Expiration of Term</u>. Except as otherwise specified in this Article IV(N), Interconnection Service for the Facility terminates at the conclusion of the Term of this Agreement stated in Article II of this Agreement.
- 2. <u>Termination</u>. A Party may terminate this Agreement upon the Default of the other Party. Subject to the limitations set forth in Article IV(N)(3) below, in the event of a Default, a non-Defaulting Party may terminate this Agreement only upon its giving of written notice of termination to the other Party.
- 3. <u>Survival of Rights</u>. Termination of this Agreement shall not relieve either Party of any of its liabilities and obligations arising hereunder prior to the

date termination becomes effective, and each Party may take whatever judicial or administrative actions as appear necessary or desirable to enforce its rights hereunder.

#### **ARTICLE V - INSURANCE**

Without limiting any obligations or liabilities under this Agreement, the SO shall, at its own expense, provide and maintain, in effect for the life of this Agreement, minimum insurance coverage as follows:

- A. Workers' Compensation Insurance in accordance with all applicable State, Federal, and Maritime laws, including Employer's Liability Insurance in the minimum amount of \$1,000,000. Policy shall be endorsed to include a Waiver of Subrogation in favor of the Company and its affiliated and associated companies.
- B. Comprehensive General Liability Insurance, including Contractual Liability Coverage for liabilities assumed under this Agreement and Personal Injury Coverage, with combined single limit of not less than \$5,000,000 each occurrence. The SO shall furnish to the Company an Additional Insured Endorsement with respect to such insurance in substantially the form shown in Appendix D.

The insurance carrier or carriers and form of policies shall be subject to review and approval by the Company, such approval shall not be unreasonably withheld. All of the SO's policies of insurance shall provide the Company with 30 days prior written notice of cancellation, expiration or material adverse change. Prior to the date the SO's facilities are first operated in parallel with the Company's electric system and annually thereafter during the term of this Agreement, the SO shall furnish Certificate of Insurance to the Company.

#### **ARTICLE VI - GENERAL PROVISIONS**

The Company shall not be liable for any costs or damages due to the inability of the SO or its designated representatives to obtain any licenses or permits required by any authority having jurisdiction over such matters.

This Agreement constitutes the entire agreement between the Parties hereto with reference to the subject matter hereof and no change or modification as to any of the provisions hereof shall be binding on either Party unless reduced to writing and approved by the authorized officer or agent of the SO and the President or a Vice President of the Company. The terms and conditions of this Agreement and every Appendix referred to herein shall be amended, as agreed to by the Parties, to comply with changes or alterations made necessary by a valid applicable order of any governmental regulatory authority, or any court, having jurisdiction hereof.

This Agreement includes the following checked appendices which are attached and incorporated herein:

- Appendix A Interconnection Facilities (One Line)
- \_\_\_\_\_ Appendix B Interconnection Application
- Appendix C Special Facilities

- Appendix D Additional Insured Endorsement
- Appendix E Company's Notice Of Satisfaction
- Appendix F SO's Notice Of Satisfaction

(Signature Page to Follow)

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed by

their duly authorized officers on the day and year first above written.

WITNESSES:

(Subscriber Organization)

 Ву
 Title
ENTERGY NEW ORLEANS, LLC
 Ву
 Title

# APPENDIX A - INTERCONNECTION FACILITIES (ONE LINE)

This Appendix A is a part of the INTERCONNECTION AND OPERATING AGREEMENT by and between the Subscriber Organization and the Company.

See Drawing No. \_\_\_\_\_ dated \_\_\_\_\_, which drawing is attached hereto and made a part hereof.

# APPENDIX B - INTERCONNECTION APPLICATION

This Appendix B is a part of the INTERCONNECTION AND OPERATING AGREEMENT by and between the Subscriber Organization and the Company.

See Interconnection Application No. \_\_\_\_\_ dated \_\_\_\_\_, which is attached hereto and made a part hereof.

# APPENDIX C - SPECIAL FACILITIES

This Appendix C is a part of the INTERCONNECTION AND OPERATING AGREEMENT by and between the Subscriber Organization and the Company.

#### APPENDIX D - ADDITIONAL INSURED ENDORSEMENT

This Appendix D is a part of the INTERCONNECTION AND OPERATING AGREEMENT by and between the Subscriber Organization ("SO") and the Company.

The SO shall furnish to the Company an Additional Insured Endorsement with respect to such insurance in substantially the following form:

"In consideration of the premium charged, Entergy New Orleans, LLC, and its affiliated and associated companies are named as additional insureds with respect to liabilities arising out of the Subscriber Organization's use and ownership of the Subscriber Organization's Facility and Interconnection Facilities.

"The inclusion of more than one insured under this policy shall not operate to impair the rights of one insured against another insured and the coverages afforded by this policy will apply as though separate policies had been issued to each insured. The inclusion of more than one insured will not, however, operate to increase the limits of the carrier's liability. Entergy New Orleans, LLC, will not, for reason of its inclusion under this policy, incur liability to the insurance carrier for payment of premium for this policy."

# APPENDIX E - COMPANY'S NOTICE OF SATISFACTION

- TO: [NAME & ADDRESS OF THE SUBSCRIBER ORGANIZATION ("SO") REPRESENTATIVE AS DESIGNATED IN ARTICLE IV. L.]
- RE: [DESCRIPTION OF THE SO'S FACILITIES]

This is to acknowledge that all the SO's Facilities necessary for the parallel operation of the Company's and the SO's systems pursuant to the Interconnection and Parallel Operation of Community Solar Generating Facilities Agreement, dated \_\_\_\_\_, between the Company and the SO, have been completed to the Company's satisfaction.

Company Representative

DATE: \_\_\_\_\_

APPENDIX F – SUBSCRIBER ORGANIZATION'S ("SO") NOTICE OF SATISFACTION

# TO: [NAME AND ADDRESS OF THE COMPANY REPRESENTATIVE AS DESIGNATED IN ARTICLE IV. L.]

RE: [DESCRIPTION OF THE COMPANY FACILITIES]

This is to acknowledge that all the Company Facilities necessary for the parallel operation of the Company's and the SO's systems pursuant to the Interconnection and Parallel Operation of Community Solar Generating Facilities Agreement, dated \_\_\_\_\_, between the Company and the SO, have been completed to the SO's satisfaction.

SO Representative

DATE: \_\_\_\_\_

# Standard Offer Community Solar Power Purchase Agreement

# Form CSG-4

This Standard Offer Community Solar Power Purchase Agreement ("Agreement") is made and entered into this \_\_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_, by and between Entergy New Orleans, LLC ("ENO" or "Company"), a Texas limited liability company, whose principal place of business is 1600 Perdido Street, New Orleans, Louisiana 70112 and \_\_\_\_\_\_ ("Subscriber Organization") a\_\_\_\_\_\_ whose principal place of business is \_\_\_\_\_\_, each of which may be referred to herein individually as a "Party" or collectively as the "Parties." Subscriber Organization [owns and operates] [operates] the CSG Facility defined below.

#### **RECITALS**:

This Agreement governs the relationship between ENO and Subscriber Organization, both on behalf of itself and as authorized agent for Subscribers (as defined in Section 1.22 below) and the CSG Facility Owner (as defined in Section 1.6 below), if applicable, with respect to the Output generated by the community solar generating facility (the "CSG Facility") installed, or to be installed, at the location described in Exhibit A attached hereto, with a generating capacity rating of \_\_\_\_\_[not to exceed two megawatts as measured by the alternating current rating of the inverter (MW<sub>AC</sub>)].

Any references to "Rules" pertain to the New Orleans Community Solar Rules promulgated by the Council for the City of New Orleans ("Council") in Docket UD-18-03.

In consideration of the premises and mutual covenants herein contained, the Parties hereto agree as follows:

#### ARTICLE I DEFINITIONS

As used herein, the following terms shall have the meanings specified or referred to below which shall apply equally to single and plural forms. Except as otherwise provided for herein, capitalized terms shall have the meanings set forth in the Rules, which specify the facilities, entities, functions and requirements of the New Orleans community solar program ("Community Solar Program"), implemented by the City Council of New Orleans, as of the date of this Agreement.

1.1. "Allocation" shall mean the monthly allocation, stated in kilowatts ("kW") as a share of the total nameplate capacity of the CSG Facility, applicable to each Subscriber's Subscription reflecting such Subscriber's allocable portion of Output produced by the CSG Facility in a particular Production Month. In accordance with Section 4.6 below, the Subscriber Organization is required to timely provide the Allocation to ENO monthly, which ENO will in turn use to calculate the Credit for each billing month.

1.2. "Baseline Annual Usage" shall refer to a Subscriber's accumulated electricity use in kilowatt-hours (kWh) for the previous 12-month period at the time the Subscription is entered into, as measured at ENO's meter, net of any distributed generation provided by the Subscriber to the utility system at that meter. For a Subscriber that does not have a record of 12 months of electricity use at the time of the Subscriber's most recent Subscription, an estimate of the Subscriber's accumulated 12 months of electricity use in kWh, determined in a manner specified in the Community Solar Program Implementation Plan submitted by ENO and approved by the Council in Council Docket UD-18-03 ("Plan").

1.3. "Community Solar Generating Facility" or "CSG Facility" shall mean a solar energy facility that: (i) converts solar energy to electricity; (ii) has a generating capacity/nameplate rating that does not exceed two (2) megawatts (MW); (iii) can provide power to or is connected to ENO's distribution system; (iv) is located in ENO's service territory; (v) is individually metered; (vi) has at least three Subscribers; (vii) sells the Output from the facility to ENO and which the purchase of the Output from the facility shall take the form of a credit against the Subscriber's electric bill; and (viii) the beneficial use and renewable attributes of the Output of the facility belongs to the Subscribers.

1.4. "Council" mean the Council of the City of New Orleans.

1.5. "Credit" shall mean the dollar amount per kilowatt hour ("kWh") paid by ENO to each Subscriber as a credit on the Subscriber's monthly retail electric service bill to compensate the Subscriber for its allocated share of Output produced by the applicable CSG Facility and delivered to ENO, in accordance with ENO's Community Solar Generating Facilities Subscription Service rate schedule ("Schedule CSGF").

1.6. "CSG Facility Owner" shall mean the entity or entities holding legal title or otherwise having full rights of ownership in and to the CSG Facility. If the CSG Facility Owner is the same entity as Subscriber Organization, then Section 3.2 hereof shall not be applicable.

1.7. "Customer" means a retail electric customer account holder of ENO. For purposes of this Agreement, this term shall not be applied to a Subscriber Organization that is issued a retail electric customer account number for a CSG Facility by ENO.

1.8. "Date of Commercial Operation" shall mean the day upon which Commercial Operation is first achieved pursuant to Section 4.3 hereof.

1.9. "Electric Tariffs" shall mean ENO's rates for electric service as in effect and on file with the Council from time to time.

1.10. "Force Majeure" shall have the meaning as set forth in Section 6.1 of this Agreement.

1.11. "House Power" shall mean the supply of retail power for consumption at the Site.

1.12. "Initial Subscriber Report" shall mean the list of potential Subscribers for a CSG Facility provided by the Subscriber Organization to ENO as required by the Plan. The Initial

Subscriber Report shall be in the form required by ENO and shall include for each potential Subscriber the name, identifying information, and the proposed Allocation applicable to the Subscription such that ENO can verify the potential Subscriber's eligibility to participate in the program.

1.13. "Interconnection Agreement" shall mean the separate agreement to be entered into between Developer and ENO providing the terms and conditions by which Developer will interconnect and operate the CSG Facility in parallel with ENO's electric distribution system at the Site.

1.14. "Low-Income Customer" shall mean a Customer whose gross annual household income is at or below fifty percent (50%) of the Area Median Income for the year of subscription or who is certified for any federal, state or local assistance program that limits participation to households whose income is at or below fifty percent (50%) of the Area Median Income.

1.15. "Low-Income Subscriber" means a Subscriber who is a Low-Income Customer.

1.16. "Monthly Subscription Information" shall mean the information submitted to ENO on the Initial Subscription Report as modified by the information provided on the Monthly CSG Facility Subscription Updates required by the Plan and as described in Section 4.6, below.

1.17. "Output" means the energy and power produced by a CSG Facility.

1.18. "Production Month" shall mean the calendar month during which Output is produced by the CSG Facility and delivered to ENO at the Service Connection.

1.19. "Renewable Energy Credit" or "REC" shall mean a contractual right to the full set of non-energy attributes, including any and all credits, benefits, emissions reductions, offsets and allowances, howsoever entitled, directly attributable to a specific amount of electric energy generated from a renewable energy resource.

1.20. "Service Connection" is the location on the CSG Facility's premises/facilities at which a point of delivery of power between ENO and the CSG Facility is established.

1.21. "Site" shall mean the parcel of real property within ENO's territory on which the CSG Facility will be constructed and located, including any easements, rights of way, surface use agreements and other interests or rights in real estate reasonably necessary for the construction, operation and maintenance of the CSG Facility. The Site is more specifically described in Exhibit A to this Agreement.

1.22. "Subscriber" shall mean a Customer of ENO that holds a Subscription to one or more CSG Facilities and has identified one or more individual meters or accounts related to electric service to which the Subscription(s) shall be attributed. A "Subscriber" shall also mean a Low-Income Subscriber.

1.23. "Subscription" shall mean a proportional interest owned or held by a Subscriber in the CSG Facility, which meets all of the requirements set forth in Section 3.3, below.

1.24. "Unsubscribed Energy" refers to any energy Output of a CSG Facility in kWh that is not allocated to a Subscriber as part of a Subscription.

#### ARTICLE II SALE AND DELIVERY OF OUTPUT AND OWNERSHIP OF RENEWABLE ENERGY CREDITS

2.1 Sale and Delivery of Subscribed Output. Effective upon the Date of Commercial Operation, Subscriber Organization shall sell and deliver to ENO at the Production Meter all of the Output produced by the CSG Facility and attributable to Subscriptions held by all Subscribers in the CSG Facility. As set forth in the Rules, ENO shall not be obligated to make any payment to Subscriber Organization for the Subscribed Output but instead will render monthly Credits to Subscribers as described below.

2.2 For each Subscriber, ENO shall apply a monthly Credit each billing period to such Subscriber's bill for retail electric service in accordance with ENO's Rate Schedule CSGF based upon the Allocation as set forth in the applicable Monthly Subscription Information. ENO is only obligated to apply monthly bill Credits for Subscribed Output produced and delivered by the CSG Facility to the Production Meter.

2.3 For purposes of applying the monthly Credit to Subscribers' bills, ENO shall be entitled to rely exclusively on the Monthly Subscription Information as updated by Subscriber Organization in accordance with the procedures required by the Plan referenced in Section 4.6, below. The correction of previously-applied monthly Credits among Subscribers due to any inaccuracy reflected in such Monthly Subscription Information with regard to a Subscriber's Subscription in the CSG Facility and the beneficial share of Output produced by the CSG Facility shall be the full responsibility of the Subscriber Organization.

2.4 The ownership and title to all renewable energy attributes or RECs associated with the CSG Facilities shall belong to the individual Subscribers.

2.5 If the Subscriber Organization can demonstrate an increased value provided directly to Subscribers with ownership and title of the RECs by the Subscriber Organization, the Subscriber Organization should provide said support to the Council, which may allow the Subscriber Organization to offer Subscribers the opportunity to redeem the value of such RECs on an individual or consolidated basis.

2.6 <u>Purchase and Sale of Unsubscribed Energy</u>. Effective upon the Date of Commercial Operation, Subscriber Organization agrees to sell, and ENO agrees to purchase, up to twenty percent (20%) of the monthly Unsubscribed Energy produced by the CSG Facility and delivered to ENO at the Production Meter. The rate per kWh that ENO shall pay Subscriber Organization for the up-to-twenty percent (20%) portion of Unsubscribed Energy pursuant to this Section shall be ENO's estimated avoided energy costs for the appropriate time period from ENO's most recent biennial filing with the Clerk of Council of the City of New Orleans pursuant to the Public Utilities Regulatory Policies Act of 1978, Section 201. As provided in the Rules, ENO shall receive all Unsubscribed Energy beyond the up-to-twenty percent (20%) portion without any obligation or

requirement to render payment therefor. The amount of monthly Unsubscribed Energy shall be determined after all Subscribers have been billed and credited based on the monthly Output of each applicable CSG Facility.

2.7 <u>Title, Risk of Loss, and Warranty of Title</u>. As between the Parties, Subscriber Organization shall be deemed to be in control of the energy output from the CSG Facility up to and until delivery and receipt by ENO at the Service Connection and ENO shall be deemed to be in control of such energy from and after delivery and receipt at such Service Connection. Subscriber Organization warrants and represents to ENO that it has or will have at the time of delivery good and sufficient title to all Output and/or the ability to transfer good and sufficient title of same to ENO.

2.8 Exclusive Dealing. Subscriber Organization shall not sell any Output generated from the CSG Facility to any person or entity other than ENO during the Term of this Agreement.

# ARTICLE III <u>REPRESENTATIONS OF THE PARTIES AND CONDITIONS PRECEDENT</u>

3.1 Subscriber Organization represents and warrants as follows:

(a) it is registered with the Council and has a valid identification number, which shall be maintained and renewed annually in accordance with the Rules;

(b) it has and will maintain acceptable proof of Site control such as evidence of property ownership, an executed lease agreement, or a signed option to purchase a lease;

(c) it has the right and authority to sell the Unsubscribed Energy produced by the CSG Facility to ENO on behalf of the CSG Facility Owner, the Subscribers and itself; and

(d) it will at all times maintain a valid Interconnection Agreement.

3.2 If the CSG Facility Owner and the Subscriber Organization are not the same person, then the undersigned CSG Facility Owner hereby agrees and consents to the terms of this Agreement and hereby authorizes Subscriber Organization to perform any and all acts necessary on its behalf to carry out the duties, responsibilities and obligations provided for herein as Subscriber Organization, and to sell on the CSG Facility Owner's behalf any and all of CSG Facility Owner's interest in the Output produced by the CSG Facility to ENO in accordance with the terms hereof.

3.3 <u>Requirements and Restrictions Applicable to Subscribers and Subscriptions</u>. The conditions set forth in the following subparagraphs (a) through (d) of this Section 3.3 must be satisfied at all times during the Term of this Agreement, except as specifically provided otherwise below. ENO reserves the right to refuse to accept any additions, deletions or changes to the Monthly Subscription Information to the extent such addition, deletion or change results in non-compliance with any of such conditions. For purposes of this Agreement, the Allocation for any Subscriber or Subscription that no longer satisfies the below conditions for qualification as a valid Subscriber or Subscription shall be treated as an unsubscribed portion, and the Monthly Subscription Information automatically changed accordingly, unless and until such Allocation is changed by Subscriber Organization in a manner that satisfies all such conditions.

(a) A Customer may not hold Subscriptions representing a total amount of energy in the Community Solar Program that exceeds 100 percent (100%) of the value of the Subscriber's Baseline Annual Usage.

(b) No Customer may own more than a forty percent (40%) interest in the beneficial use of the electricity generated by the CSG Facility, including without limitation, the renewable energy and RECs associated with or attributable to the CSG Facility.

(c) Each Subscription shall be sized to represent at least one kW of the CSG Facility's nameplate rating. The minimum one kW sizing requirement herein shall not apply to Subscriptions owned by an eligible Low-Income Subscriber.

(d) CSG Facilities shall be classified into one of two categories: (i) Open Category: CSG Facilities of any size up to two MW as measured by the alternating current rating of the system's inverter; and (ii) Low-Income Category: CSG Facilities of any size up to two MW as measured by the alternating current rating of the system's inverter in which a minimum of 30 percent (30%) of the CSG Facility's Output is provided to Low-Income Subscribers.

3.4 <u>Requirements and Restrictions Applicable to the CSG Facility</u>. The conditions set forth in the following subparagraphs (a) through (d) of this Section 3.4 must be satisfied at all times during the Term of this Agreement. ENO shall have the right hereunder to refuse to purchase any and all Output from the CSG Facility during the period it is not in compliance with any of such conditions if the Subscriber Organization does not remedy the deficiency in a timely manner.

(a) The CSG Facility shall have at least three (3) Subscribers.

(b) The CSG Facility's generating capacity/nameplate rating must not exceed two (2) MW as measured by the alternating current rating of the system's inverter.

(c) The CSG Facility must be located within ENO's service territory, must be individually metered and must connect to ENO's distribution system.

(d) The total number of accounts per CSG Facility may be determined by the Subscriber Organization; however, each Subscription shall be sized to represent at least one kW of the CSG Facility's nameplate rating. The minimum one kW sizing requirement herein shall not apply to Subscriptions owned by an eligible Low-Income Subscriber.

3.5 <u>Responsibility for Verification of Subscriber Eligibility</u>. The Subscriber Organization and ENO shall jointly verify that each Subscriber is eligible to be a Subscriber in the CSG Facility. The Subscriber Organization shall provide an Initial Subscriber Report to ENO within the deadline and in the form required by the Plan. Should ENO determine that any of the customer information provided is either incorrect or incomplete, the Subscriber Organization shall correct the deficiency within the required deadline. The Initial Subscriber Report shall include, at a minimum, each potential Subscriber's name and ENO Account number, the percentage share of the CSG Facility Allocation owned by the Subscriber, the effective date of the ownership of that Subscription, and the premises to which the Subscription is attributed for the purpose of applying billing credits. Changes in the Subscriber enrollment records shall be communicated by the Subscriber Organization to ENO electronically using the Monthly CSG Facility Subscription

Update form required by the Plan, as described in Section 4.6, below. Transfers of Subscriptions shall also be communicated by the Subscriber Organization to ENO using the required Monthly CSG Facility Subscription Update form and will be handled as described in the Plan and Section 4.6, below.

3.6 <u>Compliance with Laws</u>. A Subscriber Organization, and, where relevant, thirdparty-owner/developer, are responsible for ensuring that its CSG Facility is constructed, maintained, and operated in compliance with all relevant local, state and federal laws, rules, regulations and standards, including but not limited to, reliability, safety, zoning, permitting, occupational safety and health, and environmental laws, rules, regulations and standards, as well as adherence to ENO's interconnection policies and procedures and the Rules.

3.7 <u>False Representation</u>. Any representation or warranty made by Subscriber Organization in this Agreement that shall prove to have been false or misleading in any material respect when made or ceases to remain true during the Term if such cessation would reasonably be expected to result in a material adverse impact on ENO, shall constitute an event of default subject to Section 7.1 hereof.

3.8 <u>ENO Disclaimer</u>. Nothing in this Agreement shall be construed as a representation or warranty by ENO of the design, installation or operation of the CSG Facility or any component thereof, and ENO expressly disclaims all warranties of the equipment as to workmanship, quality, or performance, including the fitness of the equipment for the purpose intended.

### ARTICLE IV TERM, COMMERCIAL OPERATION AND PERFORMANCE

4.1 <u>Term</u>. This Agreement shall become effective upon its execution by the Parties and shall continue in effect for a Term of 20 years from and after the Date of Commercial Operation, subject to early termination as set forth herein. Applicable provisions of this Agreement shall continue in effect after termination, including early termination, to the extent necessary to enforce or complete the duties, obligations or responsibilities of the Parties arising prior to termination and, as applicable, to provide for final billings and adjustments related to the period prior to termination, repayment of any money due and owing to either Party pursuant to this Agreement, and the indemnifications specified in this Agreement.

4.2 <u>Project Development</u>. Prior to the Commercial Operation Date, Subscriber Organization agrees to (i) submit semi-annual progress reports to Company including current status of each Construction Milestone (as specified on Exhibit B), any significant developments or delays along with an action plan for making up delays, and Subscriber Organization's best estimate of the Commercial Operation Date; (ii) provide copies of reports submitted to the Facility Lender relating to status, progress and development of the project, (iii) Upon Company request, meet with the Company to participate in semi-annual meetings to discuss the progress reports, answer questions, and assess the schedule, and (iv) participate in semi-annual progress review and issue remediation meetings when requested by the Company. Subscriber Organization shall make all relevant contractors available to Company in order to keep the Company fully informed on the status of the development. The semi-annual progress reports are due on every 6 month interval determined from the date the application is created by ENO, ceasing once Commercial Operation has been obtained. Upon request, the Company shall

have the right to monitor the construction, start-up, testing, and operation of the CSG Facility at the CSG Facility for compliance with this Agreement, *provided*, *however*, *that* Company shall comply with all of Subscriber Organization's applicable safety and health rules and requirements. Company's monitoring of the CSG Facility shall not be construed as inspections or endorsing the design thereof nor as any express or implied warranties including performance, safety, durability, or reliability of the CSG Facility.

4.3 <u>Commercial Operation</u>. Commercial Operation is achieved when: (a) 100% of the nameplate capacity of the CSG Facility is installed; (b) the CSG Facility has operated without experiencing any abnormal or unsafe operating conditions, as witnessed by ENO personnel at the Site; (c) all permits necessary to authorize the production and, if applicable, delivery to ENO of Output generated by the CSG Facility have been obtained; (d) the Production Meter has been installed; and (e) the Interconnection Agreement has been entered into between ENO and Subscriber Organization and the CSG Facility has been interconnected with ENO's electric distribution system pursuant to the Interconnection Agreement.

4.4 <u>Deposit</u>. If Commercial Operation is not achieved within 12 months of any approved application, Subscriber Organization shall provide to ENO an additional deposit of \$50 per kW to continue under the Community Solar Program. ENO shall return the CSG Facility deposit upon commencement of Commercial Operation, unless the CSG Facility fails to begin operating within 18 months of an approved application, in which case the deposit shall be forfeited.

4.5 Maintenance and Repair of CSG Facility. The Subscriber Organization shall maintain the CSG Facility and the individual components thereof in good working order at all times during the Term of this Agreement. If, during the Term of this Agreement the CSG Facility or any of the individual components of the system should be damaged or destroyed, the Subscriber Organization shall provide ENO written notice and promptly repair or replace the equipment to its original specifications, tilt and orientation at the Subscriber Organization's sole expense. All of ENO's obligations hereunder during the period of such repair or replacement shall be suspended, except for making payment for any Output generated and delivered prior to such damage or destruction; provided, however, that if the time period for repair or replacement is reasonably anticipated to exceed one hundred and eighty (180) days, ENO shall have the right, exercisable at its sole option, to terminate this Agreement upon not less than thirty (30) days written notice, with no further obligation of the Parties to perform hereunder following the effective date of such termination. In all other situations, if the CSG Facility is out of operation for more than ninety (90) consecutive days during the Term of this Agreement, ENO shall have the right to terminate this Agreement by providing written notice to Subscriber Organization anytime during the period following the expiration of such ninety (90) days and before the CSG Facility has been made fully operational again. If this Agreement is terminated pursuant to this Section 4.5, then Subscriber Organization shall pay ENO liquidated damages in an amount equal to the estimated annual generation of the CSG Facility, as determined via PV WATTS, multiplied by the number of years remaining in the Term as of the effective date of such termination, multiplied by the average annual Locational Marginal Price ("LMP") for the ENO Load Zone for the prior calendar year.

4.6 <u>Updating of Subscription Information</u>. Subscriber Organizations are required to provide real time reporting of production as specified by ENO. For CSG Facilities greater than

250 kW, the Subscriber Organization shall provide real time access to production data. ENO may require different real time reporting for CSG Facilities 250 kW and smaller. As required by the Plan, the Subscriber Organization will provide electronically to ENO a Monthly CSG Facility Subscription Update for each CSG Facility listing Subscribers who have been added or deleted since the prior month along with their applicable Subscription amounts. The monthly update shall follow a standard format specified by ENO in order to integrate data into ENO's billing system. The monthly update shall also include the amount of the CSG Facility's capacity that remains unsubscribed. The update must be provided within the deadline imposed by the Council-approved Plan for updates to take effect for the first billing cycle of the next month. If the Subscriber Organization provides the update after the specified deadline, updates would take effect on the first billing cycle of the month following the next month.

4.7 <u>Certification of Low-Income Qualification</u>. The Subscriber Organization shall certify to ENO in writing that the Subscriber Organization has verified the eligibility of all Low-Income Subscribers needed to qualify for the program prior to receiving permission to operate from ENO. By May 1 of each year, the Subscriber Organization shall re-certify in writing to the Company the Low-Income Subscriber status of all Subscribers to its CSG Facilities that are designated as such.

4.8 <u>Audits</u>. ENO reserves the right, upon thirty (30) days written notice, to audit Subscriber Organization's Subscriber and Subscription records and to inspect the CSG Facility at any time during the Term of this Agreement, and for an additional period of one year thereafter.

### ARTICLE V PRODUCTION METER AND INTERCONNECTION

5.1 <u>Production Meter</u>. Upon the initial satisfaction of all of the conditions set forth in Sections 3.3 and 3.4 above, and any applicable requirements of the Distribution Interconnection Standards, ENO shall install, and thereafter own, operate, maintain and read the Production Meter, which shall be sufficiently sized to measure all Output generated by the CSG Facility, and Subscriber Organization shall reimburse ENO for the cost of installing the Production Meter. Such reimbursement shall be due within thirty (30) days from the date a bill is presented to Subscriber Organization by ENO after the Production Meter is installed. If Subscriber Organization does not make payment in full within that time, the unpaid balance shall bear interest at the rate of one and one half percent (1.5%) per month. ENO reserves the right to replace the Production Meter, at its sole cost, at any time and for any reason.

5.2 <u>Telecommunications Equipment</u>. Subscriber Organization shall cause to be provided, and shall own, operate and maintain at the Subscriber Organization's sole cost any necessary electronic communications equipment or devices that are required to provide real-time access to 15-minute interval data regarding the Output produced by the CSG Facility. Unless otherwise notified in writing by ENO that an alternative telecommunication device is acceptable, such equipment shall include an active, wired telephone or data line capable of transmitting the monthly 15-minute interval data to ENO. ENO reserves the right to replace the telecommunication equipment at its sole cost.

5.3 Failure to Maintain Telecommunication Line. If the telecommunication line required to be maintained by Subscriber Organization pursuant to Section 5.2 is inactive or nonoperational during any Production Month when ENO attempts to access measurement data from the telemetry equipment on the Production Meter, Subscriber Organization shall be assessed a Trip Charge applicable to non-gratuitous labor service at the currently-effective rate set forth in the Schedule of Charges for Rendering Service section of ENO's electric tariff. If the telecommunication line is inactive or non-operational for three consecutive Production Months, then, in addition to the applicable Trip Charges, all energy produced and delivered from the CSG Facility shall be treated and priced as unsubscribed energy hereunder effective as of the first calendar day of such third Production Month and continuing until the subsequent Production Month during which the telecommunication line is made operational and active. Subscriber Organization's payment of Trip Charges hereunder shall be due within thirty (30) days from the date a bill is presented to Subscriber Organization by ENO. If Subscriber Organization does not make payment in full within that time, the unpaid balance shall bear interest at the rate of one and one half percent (1.5%) per month to be invoiced monthly.

House Power. This Agreement does not provide for House Power. Subscriber 5.4 Organization shall be solely responsible for arranging retail electric service exclusively from ENO in accordance with ENO's Electric Tariffs. Subscriber Organization shall obtain House Power solely through separately metered retail service and shall not obtain House Power through any other means, and waives any regulatory or other legal right to the contrary, except the right to self-generate as provided in this Section 5.4. Subscriber Organization's right to self-generate hereunder shall be limited to the electrical energy consumed at the Site that is directly related to the CSG Facility's generation, including system operation, performance monitoring and associated communications, and shall not include energy necessary for domestic or other purposes, such as for perimeter lighting, a visitor's center or any other structures or facilities at the Site. The Parties acknowledge and agree that the performance of their respective obligations with respect to House Power shall be a separate from this Agreement and shall be interpreted independently of the Parties' respective obligations under this Agreement. Notwithstanding any other provision in this Agreement, nothing with respect to the arrangements for House Power shall alter or modify Subscriber Organization's or ENO's rights, duties, and obligations under this Agreement. This Agreement shall not be construed to create any rights between Subscriber Organization and ENO with respect to the arrangements for House Power.

5.5 <u>Interconnection Agreement</u>. The Parties recognize that Subscriber Organization and ENO will enter into a separate Interconnection Agreement consistent with the provisions of Entergy's Distribution Design Basis/Standards DR7-01 or DR7-02. The Parties acknowledge and agree that the performance of their respective obligations with respect to the interconnection of the CSG Facility pursuant to the Interconnection Agreement shall be subject to the prior satisfaction of all of the conditions set forth in Sections 3.3 and 3.4 above, but that in all other respects the Interconnection Agreement shall be a separate and free-standing contract and shall be interpreted independently of the Parties' respective obligations under this Agreement. Notwithstanding any other provision in this Agreement, nothing in the Interconnection Agreement shall alter or modify Subscriber Organization's or ENO's rights, duties and obligations under this Agreement. This Agreement shall not be construed to create any rights between Subscriber Organization and ENO with respect to the Interconnection Agreement.

### ARTICLE VI FORCE MAJEURE

Definition of Force Majeure. (a) The term "Force Majeure," as used in this 6.1 Agreement, means causes or events beyond the reasonable control of, and without the fault or negligence of the Party claiming Force Majeure, including, without limitation, acts of God, sudden actions of the elements such as floods, earthquakes, hurricanes, or tornadoes; high winds of sufficient strength or duration to materially damage a CSG Facility or significantly impair its operation such that it is no longer capable of generating Output; long-term material changes in Output flows across the CSG Facility caused by climatic change, lightning, fire, ice storms, sabotage, vandalism caused by others despite reasonable efforts of Subscriber Organization to secure and protect the CSG Facility, terrorism, war, riots, fire; explosion, insurrection, strike, slow down or labor disruptions (even if such difficulties could be resolved by conceding to the demands of a labor group), and actions or inactions by any governmental authority taken after the date hereof (including the adoption or change in any rule or regulation or environmental constraints lawfully imposed by such governmental authority), but only if such requirements, actions, or failures to act prevent or delay performance, and inability, despite due diligence, to obtain any licenses, permits, or approvals required by any governmental authority having jurisdiction.

(b) The term Force Majeure does not include (i) any acts or omissions of a n y third party, including, without limitation, any vendor, materialman, customer, or supplier of Subscriber Organization, unless such acts or omissions are themselves excused by reason of Force Majeure; (ii) any full or partial curtailment in the electric output of the CSG Facility that is caused by or arises from a mechanical or equipment breakdown or other mishap or events or conditions attributable to normal wear and tear or flaws, unless such mishap is caused by one of the following: catastrophic equipment failure; acts of God; sudden actions of the elements, including, but not limited to: floods; hurricanes, tornadoes; sabotage; terrorism; war; riots; and emergency orders issued by a governmental authority or (iii) changes in market conditions that affect the cost of ENO's or Subscriber Organization's products.

6.2 <u>Applicability of Force Majeure</u>. (a) Neither Party shall be responsible or liable for any delay or failure in its performance under this Agreement, nor shall any delay, failure, or other occurrence or event become an event of default, to the extent such delay, failure, occurrence or event is substantially caused by conditions or events of Force Majeure, provided that:

- i. the non-performing Party gives the other Party prompt written notice describing the particulars of the occurrence of the Force Majeure;
- ii. the suspension of performance is of no greater scope and of no longer duration than is required by the Force Majeure;
- iii. the non-performing Party proceeds with reasonable diligence to remedy its inability to perform and provides weekly progress reports to the other Party describing actions taken to end the Force Majeure; and
- iv. when the non-performing Party is able to resume performance of its obligations under this Agreement, that Party shall give the other Party written notice to that effect.

(b) Except as otherwise expressly provided for in this Agreement, the existence of a condition or event of Force Majeure shall not relieve the Parties of their obligations under this Agreement (including, but not limited to, payment obligations) to the extent that performance of such obligations is not precluded by the condition or event of Force Majeure. Notwithstanding this provision, ENO shall have no obligation to make any payment for Output under this Agreement except for actual production as measured by the metering provisions of this Agreement.

6.3 <u>Limitations on Effect of Force Majeure</u>. In no event will any delay or failure of performance caused by any conditions or events of Force Majeure extend this Agreement beyond its stated Term. In the event that any delay or failure of performance caused by conditions or events of Force Majeure continues for an uninterrupted period of three hundred sixty-five (365) days from its occurrence or inception, as noticed pursuant to Section 6.2(a)(i) above, the Party not claiming Force Majeure may, at any time following the end of such three hundred sixty-five (365) day period terminate this Agreement upon written notice to the affected Party, without further obligation by either Party except as to costs and balances incurred prior to the effective date of such termination. The Party not claiming Force Majeure may, but shall not be obligated to, extend such three hundred sixty-five (365) day period, for such additional time as it, at its sole discretion, deems appropriate, if the affected Party is exercising due diligence in its efforts to cure the conditions or events of Force Majeure.

### ARTICLE VII DEFAULT, REMEDIES AND DISPUTE RESOLUTION

7.1 Events of default. Any of the following events shall constitute an event of default if such event has not been cured as provided for below:

(A) Third-party owner/developer, Subscriber Organization and their affiliated and parent companies' failure at any time during the Term of this Agreement to meet the requirements under Section 5.1 (Construction Timeline) or Section 3.1(d) (Interconnection Agreement). In such event Company may, and in its sole discretion, terminate this Agreement. Upon such termination Company shall have no further financial or other obligation to the Subscriber Organization as a result of such termination. The provisions of paragraph 7.3 shall not apply to an event of default under this paragraph.

(B) The failure by either Party to perform or observe any other material term or provision of this Agreement, that is not excused by Force Majeure, and such failure remains unremedied for 30 days after notice thereof shall have been given by the non-defaulting Party.

7.2 Prior to commencing any action to enforce this Agreement, the non-defaulting Party shall provide written notice of default to the Party asserted to be in default and the Party asserted to be in default shall have a period of thirty (30) days following receipt of such written notice within which to cure the asserted default (or if the asserted default is of a nature which cannot reasonably be cured within such 30-day period, to commence and thereafter diligently pursue a cure thereof.)

7.3 Failure of either Party to assert a default or to enforce any term or condition of this Agreement shall not constitute a waiver of any other similar or other default, or waiver of such term or condition or of any other term or condition of this Agreement. Each Party hereby

irrevocably and unconditionally waives any right to a trial by jury for the resolution of any dispute arising under this Agreement.

7.4 If any disputes arise concerning this Agreement, including but not limited to enforcement of any term or condition of the Agreement, the prevailing Party in any action brought for the purpose of enforcing such provisions shall be entitled to recover its reasonable attorney fees, expenses and costs of such action from the non-prevailing Party.

### ARTICLE VIII LIABILITY AND INDEMNIFICATION

8.1 <u>Limitation of Liability</u>. ENO shall not be responsible or liable for any personal injury or property damage caused by the CSG Facility or any individual component equipment of the system. ENO shall not be liable to the Subscriber Organization for any punitive, special, exemplary or consequential damages, including but not limited to, lost profits, loss of use, and costs of replacement, whether based in contract, tort, upon any theory of indemnity, or otherwise. ENO makes no warranty or representation concerning the taxable consequences, if any, to Subscriber Organization with respect to the production and sale of Output, and Subscriber Organization is urged to seek professional advice regarding this issue.

8.2 <u>Indemnification by Subscriber Organization</u>. Subscriber Organization shall indemnify, defend, and hold ENO, its employees, agents, successors, assigns, subsidiaries and affiliates harmless against any and all claims, demands, liens, lawsuits, judgments or actions of whatsoever nature that may be brought on account of the installation, maintenance, operation, repair, or replacement of the CSG Facility or any component equipment of the system, or Subscriber Organization's administration of Subscriptions or the performance of its responsibilities as a subscriber organization.

### ARTICLE IX LAWS AND REGULATORY BODIES

9.1 <u>Agreement Subject to Laws and Regulations</u>. This Agreement and the rights and obligations of the Parties hereunder shall be subject to all valid applicable state, local and federal laws, rules, regulations, ordinances, orders and decisions issued or promulgated for or by any court or regulatory agency having or asserting jurisdiction over this Agreement, the services to be performed hereunder, or either of the Parties hereto.

9.2 <u>Rights Upon Regulatory Agency or Court Action</u>. Except as may be otherwise provided herein, in the event that any court or regulatory agency having or asserting jurisdiction over these premises takes any action or issues any determination that directly or indirectly prohibits performance to a material extent under this Agreement by either or both parties or otherwise makes such performance illegal or impossible, such action or determination will be considered to be an event of Force Majeure. In the event that any such court or regulatory agency takes any action or issues any determination that directly or indirectly effects a material adverse change to any substantive provision of this Agreement, in the terms of performance or with respect to the rights or obligations of either party hereto (in that party's reasonable good faith opinion), then the party materially adversely affected may: (i) continue to perform its obligations under the Agreement as changed, (ii) seek to renegotiate the terms of this Agreement by providing written notice to the other party of its desire to renegotiate, or (iii) at any time during a period of ninety (90) days next following receipt by the other party of written notice of any such action by any such court or regulatory agency, terminate this Agreement by providing written notice to the other party hereto on or before the end of such ninety (90) day period, such termination to be effective on the first day of the month next following ninety (90) days after the receipt of such notice of termination; provided however that, if such action or determination is rescinded prior to the effectiveness of such notice, such notice will be deemed invalid. In the event the Agreement terminates under this provision, all further rights and obligations of ENO and Subscriber Organization under this Agreement will be null and void. Each party hereto shall provide reasonable and prompt notice to the other party hereto as to any regulatory proceedings or actions described herein that could affect the rights and obligations of the Parties hereto.

9.3 <u>Performance Pending Renegotiation or Termination</u>. Irrespective of any action by any court or regulatory agency as contemplated by Sections 9.1 or 9.2, above, each of the Parties hereto shall continue to honor and perform all of their respective warranties, representations and obligations under this Agreement including, but not limited to, the obligations of Subscriber Organization to sell and deliver the Output of the CSG Facility to ENO and the obligations of ENO to accept and pay Subscriber Organization as provided herein, until the Parties either mutually renegotiate the terms of this Agreement or until this Agreement terminates pursuant to the provisions of Section 9.2 above.

9.4 <u>Governing Law</u>. This Agreement shall be governed by and interpreted in accordance with the laws of the State of Louisiana.

### ARTICLE X MISCELLANEOUS PROVISIONS

10.1 <u>Counterparts</u>. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all constitute one and the same instrument. The Parties agree that a facsimile copy of a counterpart signed by the other Party will be deemed original and binding.

10.2 <u>Assignment, Successors and Assigns</u>. This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the respective Parties hereto and shall not be assigned by either Party without the written consent of the non-assigning Party, which consent shall not be unreasonably withheld. In no event shall any assignment by Subscriber Organization become effective before a new Subscriber Agency Agreement has been entered into between Subscriber Organization's assignee and each and every Subscriber.

10.3 <u>Relationship of the Parties</u>. Nothing herein is intended nor shall ever be construed to create a joint venture, partnership or any other type of association between the Parties, nor shall either Party have the right to act in behalf of or bind the other for any liability, cost, expense or undertaking except as set forth in this Agreement.

10.4 <u>Amendments or Modifications</u>. No amendment, modification, or change of this Agreement shall be binding upon the Parties unless such amendment, modification, or change is

in writing and executed by the Parties.

10.5 <u>Construction</u>. No understandings or agreements not expressly stated herein shall be binding on the Parties in the construction or fulfillment hereof unless such understandings or agreements are reduced to writing and signed by the respective parties. The rule of construction that ambiguous provisions shall be interpreted against the drafter shall not apply to this Agreement.

10.6 <u>No Third-Party Beneficiaries</u>. Except as otherwise specifically provided herein, this Agreement is not intended to, and shall not, create rights, remedies, or any benefits of any character whatsoever, in favor of any person, corporation or other entity other than the Parties hereto, and the obligations herein assumed are for the use and benefit of the Parties, their successors in interest, and permitted assigns.

10.7 <u>Remedies Cumulative</u>. Except as otherwise specifically provided herein, each remedy provided for under this Agreement shall be taken and construed as cumulative and in addition to every other remedy provided for herein or available at law or in equity.

10.8 <u>Notices</u>. All notices, reports or other communications provided for in this Agreement shall be in writing and shall be deemed to have been sent when delivered by hand, sent by facsimile with verification, or when deposited in the United States mail, postage prepaid and properly addressed or when sent via overnight courier:

If to ENO:

If to Subscriber Organization:

or at such other address as either party may hereafter designate to the other in writing.

[INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the undersigned Parties have executed this Agreement as of the date and year first above written.

SUBSCRIBER ORGANIZATION		
Name (printed):		
Title:		
Signature:	Date:	
ENTERGY NEW ORLEANS, LLC		
Name (printed):		
Title:		
Signature:	Date:	
CSG FACILITY OWNER (if different	from Subscriber Organization)	
Name (printed):		
Title:		
Signature:	Date:	

No. \_\_\_\_\_

## Exhibit A

DESCRIPTION OF CSG Facility SITE:

Exhibit F CNO Docket No. UD-18-03 Page 18 of 19

### Exhibit B to Construction Milestones

DATE		RESULTS ACHIEVED
	1	
	2	
	3	
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### SUBSCRIBER AGENCY AGREEMENT FOR NEW ORLEANS COMMUNITY SOLAR PROGRAM

G-8	
(Primary)	
ng Facility:	
]	(Primary) (Alt.)

The undersigned Subscriber hereby authorizes \_

("Subscriber Organization"), and Subscriber Organization hereby accepts the responsibility, to act as Subscriber's agent for purposes of selling to Entergy New Orleans, LLC ("ENO") all of Subscriber's beneficial interest in and to the Output generated by, and delivered to ENO from, the CSG Facility identified above, including full authority for Subscriber Organization to enter into a long-term contract on behalf of Subscriber for such sale and to administer such contract, all pursuant to the City of New Orleans' Community Solar Program and ENO's Rate Schedule CSGF on file with the Council of the City of New Orleans ("Council") and in effect from time to time. Capitalized words have the meaning assigned herein or in the New Orleans Community Solar Rules established by the Council.

1. Duties of Subscriber Organization Generally. Subscriber Organization shall be responsible for issuing and managing the subscriptions of all Subscribers in the CSG Facility and for selling to ENO the subscribed portions of the Output generated by the CSG Facility and delivered to ENO at the service connection located at the Site. In performing such functions, Subscriber Organization shall communicate directly to ENO Subscriber's information concerning its subscription in the CSG Facility. Subscriber acknowledges and agrees that ENO shall exclusively rely on such information as regularly and timely communicated from the Subscriber Organization for the purpose of calculating the credit that will be applied by ENO and reflected on Subscriber's subsequent electric service bills as compensation for ENO's receipt of Subscriber's share of the Output generated and produced by the CSG Facility, in accordance with applicable Rate Schedule.

2. <u>Subscription Credits</u>. ENO shall apply credits to each Subscriber's monthly bill using the most recently updated monthly Subscriber list and Output data provided by the Subscriber Organization on a two-month lag where actual operational results and the associated bill credit will show up two months following ENO's receipt of the Output data for the CSG Facility. ENO shall determine the amount of CSG Facility monthly kWh Output to be credited to each Subscriber by multiplying the Subscriber's most recent generation proportion of the CSG Facility by the ENO metered Output of the CSG Facility. ENO shall be entitled to rely exclusively on the Monthly Subscription Information as timely entered or changed by Subscriber Organization via the monthly CSG Facility Subscription update form. The correction of previously-applied monthly Credits due to any inaccuracy reflected in such Monthly Subscription Information with regard to a Subscriber's Subscription in the CSG Facility and the beneficial share of Output produced by the CSG Facility shall be the full responsibility of the Subscriber Organization.

3. <u>Limitation of Agency</u>. This Agency Agreement shall only serve to authorize Subscriber Organization to act as Subscriber's agent with respect to Subscriber's beneficial interest in and to the Output generated by the CSG Facility and delivered to ENO to the extent that Subscriber's subscription continues from time-to-time to qualify as a valid subscription in the CSG Facility.

4. <u>Term of Agency and Termination.</u> (a) This Agency Agreement shall become effective upon its execution by both Subscriber and Subscriber Organization and shall continue in effect for so long as a valid and existing contract between ENO and Subscriber Organization for the purchase and sale of such Output.

(b) This Agency Agreement may be terminated by either Subscriber Organization or Subscriber upon ENO's receipt of notice that Subscriber's subscription in the CSG Facility has been terminated or transferred in its entirety, or that Subscriber no longer holds an interest in the beneficial use of the Output generated by the CSG Facility.

(c) This Agency Agreement shall automatically terminate upon: (i) the effective date of the termination of the contract between Subscriber Organization and ENO for the purchase and sale of Output generated by the CSG Facility; or (b) in the event of an

effective assignment by Subscriber Organization of such contract, where ENO has consented to such assignment in writing, the effective date of a replacement agency agreement between Subscriber and the new owner or subscriber organization of the CSG Facility that has taken assignment of such contract from Subscriber Organization.

5. <u>Representation and Acknowledgement</u>. By executing this Subscriber Agency Agreement, Subscriber represents and warrants that the information stated herein is true and correct to the best of Subscriber's knowledge and belief and that Subscriber has signed up for the stated subscription share size in the CSG Facility through Subscriber Organization.

6. <u>Consent to Disclose Account Information</u>. By signing this Form CSG-8, Subscriber Agency Agreement, Subscriber grants consent to Subscriber Organization to request and obtain from ENO information regarding Subscriber's past and present electric usage at the Service Address(es) identified above in order for Subscriber Organization independently to verify the extent of Subscriber's eligibility to hold a Subscription in the CSG Facility.

IN WITNESS WHEREOF, this Agency Agreement was duly executed by the undersigned authorized representatives of Subscriber and Subscriber Organization.

SUBSCRIBER	SUBSCRIBER ORGANIZATION
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:

### New Orleans City Council Community Solar Generating Program

### Initial CSG Facility Subscription Report

### FORM CSG-6

Must be submitted to ENO <u>60 Days prior</u> to anticipated CSG Facility Commercial Operation Date Please email to: NewOrleansCouncilCommunitySolar@Entergy.com

Subscriber Organization Identification Number (assigned by Entergy New Orleans): Template Effective Date:

<b>Entergy Customer Account</b>	Customer Name (as appears on	Customer Service Address	Subscribed Amount	Low Income
Number	Entergy Account)		(kW)	Certified? (Yes/No)



Entergy New Orleans, LLC 1600 Perdido Street New Orleans, LA 70112

### Community Solar Program Notice of Enrollment <u>Form CSG-6</u>

[Date] [customer name] [customer address]

Dear [customer name]:

This is to confirm that we have received notice of your decision to subscribe to a Community Solar Generating Facility registered with the Council for the City of New Orleans ("Council"). We are providing this Notice of Enrollment in accordance with the New Orleans Community Solar Rules approved by the Council in Docket No. UD-18-03. The information below was provided to us by the Subscriber Organization with whom you have agreed to subscribe and participate in the Community Solar program:

Customer Name:	
Customer Service Address:	
Billing Service Address (if different from service address)	
Subscriber Organization:	
Customer Enrollment Effective Date:	

You will receive a monthly credit on your bill in accordance with the Council's Rules and ENO Rate Schedule CSGF (Community Solar Generating Facilities).

If you have any questions about this Notice, please send an email to

<u>NewOrleansCouncilCommunitySolar@Entergy.com</u> and reference your Entergy account number. If you have not agreed to subscribe to a Community Solar Generating facility, please immediately contact the Council's Utility Regulatory Office (CURO) at (504) 658-1110, so they can investigate the matter.

### ENTERGY NEW ORLEANS, LLC

ELECTRIC SERVICE

Effective: xxx x, 20xx Filed: August 29, 2019 Supersedes: New Schedule Schedule Consists of: Three Pages and Attachment A

### COMMUNITY SOLAR GENERATING FACILITIES

### I. AVAILABILITY

SCHEDULE CSGF

This Community Solar Generating Facilities Subscription Service ("CSGF") schedule is available to all customers qualifying as Subscribers to a Community Solar Generating ("CSG") Facility pursuant to the Community Solar Rules approved by the Council of the City of New Orleans ("Council").

### II. DESCRIPTION

Pursuant to the Community Solar Rules, Entergy New Orleans, LLC ("ENO" or "Company"), customers have the option to subscribe to a portion of the Output from one or more CSG Facilities. ENO will provide a monthly credit to customers with such Subscriptions based on the customer's proportionate share of the CGS Facility's monthly energy Output times a dollars per kWh rate. Participating ENO customers are Subscribers with a Subscriber Organization. The Subscriber Organization is responsible for providing ENO with the Subscription information necessary for monthly billing under this schedule in timely manner.

### III. MONTHLY BILLING TO CSG SUBSCRIBERS

The monthly Subscriber credit will be based on the applicable metered CSG Facility energy Output on a two-month lag basis.

- A. Monthly Subscriber Energy = (Customer's kW Subscription for the applicable CSG Facility / Capacity of applicable CSG Facility) x applicable metered Monthly CSG Facility kWh Output.
- B. Credit for Customers who do not qualify as Low-Income Subscribers: Monthly Subscriber Credit = Monthly Subscriber Energy x CSG per kWh credit as defined in the Community Solar Rules per Council Resolution R-19-111 and shown on CSGF Attachment A.
- C. Credit for Customers who qualify as Low-Income Subscribers:
  - i. Monthly Subscriber Credit = Monthly Subscriber Energy x the dollars per kWh value representative of applicable retail rates shown on CSGF Attachment A.
  - ii. The dollar per kWh value representative of the applicable retail rate will be determined each year based on the applicable retail energy-related revenue by rate schedule exclusive of amounts attributable to nonbypassable riders, and the corresponding kWh as reported in the Annual FERC Form 1 for the previous year.

The customer's monthly bill can be reduced to the fixed Customer Charge or otherwise applicable minimum bill subject to any nonbypassable charges, but not less than that amount; any additional bill credit remaining during a given billing cycle will be carried over to the following billing cycle. Such credits will apply to the final bill if customer terminates service, however, no payment from ENO will be made for any remaining bill credit associated with the Subscriber's Subscription if the amount of the credit exceeds the final bill.

### IV. DEFINITIONS

Baseline Annual Usage - A Subscriber's accumulated kWh electricity use for the previous 12-month period at the time the subscription is entered into, as measured at the ENO meter, net of any distributed generation provided by the Subscriber to the utility system at that meter. For a Subscriber that does not have a record of 12 months of electricity use at the time of the Subscriber's most recent Subscription, an estimate of the Subscriber's accumulated 12 months of electricity use in kWh would be developed based on historical data for the customer class.

CSG Facility– A solar energy facility that meets the definition and requirements of the Community Solar Rules.

Low-Income Subscriber – A Subscriber whose gross annual household income is at or below 50 percent of Area Median Income for the year of subscription or who is certified as eligible for any federal, state, or local assistance program that limits participation to households whose income is at or below 50 percent of Area Median Income. The operator of a low-income multi-family dwelling unit may apply to the Council to qualify as a Low-Income Subscriber for the purposes of the Community Solar Program. The operator should demonstrate to the Council that the Subscription Credits will be credited to the tenants of the low-income multi-family dwelling.

Output - The energy and power produced by a CSG Facility. CSG Facility Output will be measured on a calendar month basis.

Subscriber – An ENO customer that holds a Subscription to one or more CSG Facilities and has identified one or more individual meters or accounts related to electric service to which the Subscription(s) shall be attributed.

Subscriber Organization - A person or legal entity that owns and operates a CSG Facility, or operates a CSG Facility that is built and owned by a third party under contract with such Subscriber Organization. A Subscriber Organization may also be a Subscriber to the facility, subject to the Limitations on Subscriptions as described in the Community Solar Rules.

Subscription – The portion or proportionate interest of Output of a CSG Facility that is allocated to a Subscriber, including the Renewable Energy Credits associated with or attributable to the CSG Facility.

### V. TERMS OF SERVICE

- A. All customer classes are eligible to subscribe to a CSG Facility. A customer may subscribe to a CSG Facility regardless of the customer's participation in other ENO-sponsored renewable programs, such as Net Metering Service, provided that the customer's participation does not violate, individually or collectively, eligibility limits.
- B. A customer may not hold Subscriptions representing a total amount of energy exceeding 100 percent of the value of the Subscriber's Baseline Annual Usage, as estimated by the Company.
- C. A customer may purchase multiple Subscriptions from one or more CSG Facilities provided that the total of the Subscriptions does not exceed the Subscriber's Baseline Annual Usage, as estimated by the Company.
- D. No customer may own more than 40 percent interest in the capacity and associated Output from a CSG Facility.

- E. Solar Rules including but not limited to requirements for eligibility, capacity limits, registration and records, verification of low-income status, and any other obligations as described in the Community Solar Rules.
- F. Changes in Subscriber enrollment records will be communicated by Subscriber Organization to ENO, in electronic form, on a monthly basis.
- G. A Subscriber may release all or part of a Subscription back to the Subscriber Organization making it available for transfer to a person or entity who qualifies to be a Subscriber.
- H. Through a Subscriber Organization, a Subscriber who moves to a different location within ENO's service area may change the premises to which the Subscription is attributed. If necessary, the Subscriber must adjust his Subscription, so that it does not exceed 100 percent of the Baseline Annual Usage at the new location as estimated by the Company.
- I. Subscriber Organizations will provide the Company with updated Subscriber information no later than the tenth calendar day of each month for CSG credits to be reflected on customer bills during the upcoming billing month. Any updated Subscriber information provided after the tenth calendar day of the month will be reflected on customer bills during the next billing month following the upcoming billing month.

Page 42.4

Attachment A Page 1 of 1 Effective Date: xxx xx, 20xx

### ENTERGY NEW ORLEANS, LLC COMMUNITY SOLAR GENERATING FACILITIES CSGF

CSG SUBSCRIBER:	
Non Low Income Credit	\$-x.xxx per kWh
Residential Low Income Credit	\$-x.xxx per kWh

### New Orleans City Council Community Solar Generating Program Monthly CSG Facility Subscription Report

FORM CSG-7

Updated template must be received from Subscriber Organization by close of business on the **<u>10th calendar day</u>** of the month *Please email to NewOrleansCouncilCommunitySolar@Entergy.com* 

Subscriber Organization Identification Number (assigned by Entergy New Orleans): Template Effective Date:

Entergy Customer Account Number	Customer Name (as appears on Entergy Account)	Customer Service Address	Subscribed Amount (kW)	Low Income Certified? (Yes/No)	Action (Add/Delete)



Exhibit L CNO Docket No. UD-18-03 Page 1 of 5 Entergy New Orleans, LLC 1600 Perdido Street, Bldg #505 New Orleans, LA 70112 Tel 504 670 3680 Fax 504 670 3615

**Gary E. Huntley** Vice President, Regulatory Affairs ghuntle@entergy.com

June 29, 2018

Via US Mail

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

# RE: Entergy New Orleans, Inc. 2018 Reporting of Data in Accordance with Section 210 of the Public Utility Regulatory Policy Act of 1978

Dear Ms. Johnson:

Enclosed for filing with the Council of the City of New Orleans, pursuant to the Public Utility Regulatory Policy Act of 1978, Public Law 95-617, section 210, is a copy of the data from which avoided costs may be derived for Entergy New Orleans, LLC's electric system.

This information is maintained for public inspection at the Entergy office located at: 1600 Perdido Street, New Orleans, Louisiana 70112.

Thanking you for your attention and courtesies in this matter, I am

Sincerely,

Gary E. Huntley

cc: w/attachments Council Utilities Regulatory Office Advisors to the City Council

# Entergy New Orleans, LLC

# Public Utility Regulatory Policies Act - Section 210

qualifying facilities. Such levels of purchases shall be stated in blocks of not more than 100 megawatts for systems with peak demand of 1000 megawatts or more, and in blocks equivalent to not more than 10 percent of the system peak demand for systems of less than 1000 megawatts. The avoided costs shall be stated on a cents/kilowatt-hour basis, during daily and seasonal peak and off-peak periods, by year, for the current calendar year and each of the next 5 years. 292.302 (b) (1) The estimated avoided cost on the electric utility's system, solely with respect to the energy component, for various levels of purchases from ENO

	Winter	3.581	3.234	
2023	Summer	4.161	3.243	
22	Winter	3.455	3.128	
2022	Summer	4.212	3.167	
2021	Winter	3.284	2.984	
202	Summer	4.005	3.048	
2020	Winter	3.171	2.847	
	Summer	3.895	2.931	
-	Winter	3.148	2.761	
2019	Summer	4.042	2.852	
2018	Winter	3.049	2.651	
	Summer	4.062	2.788	
¢/kWh		Peak	Off-Peak	

Peak 6 a.m. to 10 p.m. (Hour Ending 0700 - 2200) Monday through Saturday Off-Peak All other Hours	Peak 6 a.m. to 10 p.m. (Hour Ending 0700 - 2200) Monday through Saturday Off-Peak All other Hours
Peak Off-Peak	Peak Off-Peak
Jan-Mar Oct-Dec	Apr-Sep
Winter Months	Summer Months

### Entergy New Orleans, LLC

### Public Utility Regulatory Policies Act - Section 210

	Additions Purchases		ises	Retirements		
Year	Plant/Unit	MW	Plant/Unit	MW	Plant/Unit	MW
2018	*	0	Oxy PPA	8.8		0
2019	*	2.4	Оху РРА	8.8		0
2020	*	130.4	Оху РРА	8.8		0
2021	*	178	Оху РРА	8.8		0
2022	*	178	Оху РРА	8.8		0
2023	*	178	Оху РРА	8.8		0
2024	*	178	Oxy PPA	8.8		0
2025	*	178	Οχγ ΡΡΑ	8.8		0
2026	*	178	Оху РРА	8.8		0
2027	*	178	Оху РРА	8.8		0

**292.302 (b) (2)** The electric utility's plan for the addition of capacity by amount and type, for purchases of firm energy and capacity, and for capacity retirements for each year during the succeeding 10 years.

### NOTES

\*Additions include ENOL's pledge for 100 MW of solar. Embedded within this amount is ENOL Self build rooftop project (~5MW) (solar shown with 50% effective capacity),

.

### Entergy New Orleans, LLC

### Public Utility Regulatory Policies Act - Section 210

### ENO Solar NOPs Total Year MW MW MW 0.0 0.0 2.4 2.4 2.4 130.4

### 292.302 (b) (2) - Detail of Additions

Exhibit L CNO Docket No. UD-18-03 Page 5 of 5

### Entergy New Orleans, LLC

Public Utility Regulatory Policies Act - Section 210

**292.302 (b) (3)** The estimated capacity costs at completion of the planned additions and planned capacity firm purchases, on the basis of dollars per kilowatt, and the associated energy costs of each unit, expressed in cents per kilowatt hour. These costs shall be expressed in terms of individual generating units and of individual planned firm purchases.

	Grand Gulf			
Year	Capacity (\$/kW-Mo)	Energy (¢/kWh)		
2018	-	0.92		
2019	-	0.83		
2020	-	0.77		
2021	-	0.71		
2022	-	0.71		
2023	-	0.64		
2024	-	0.71		
2025	-	0.69		
2026	-	0.78		
2027	-	0.76		

Note: Grand Gulf Nuclear Steam Electric Station is owned by System Energy Resources, Inc. (90%) and South Mississippi Electric Power Association (10%). Entergy New Orleans purchases 17% of the Entergy share of Grand Gulf in accordance with a FERC decision. Other purchase quantities are based on estimated target amounts, the pricing of which will be dependent on actual purchase experience.

### CERTIFICATE OF SERVICE Docket No. UD-18-03

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.

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

Andrew Tuzzolo CM Moreno Chief of Staff 1300 Perdido Street, Room 2W40 New Orleans, LA

Sunni LeBeouf City Attorney Office City Hall, Room 5th Floor 1300 Perdido Street New Orleans, LA 70112

Jonathan M. Rhodes, Director of Utilities, Mayor's Office City Hall – Room 2E04 1300 Perdido Street New Orleans, LA 70112

Clinton A. Vince, Esq. Presley R. Reed, Jr., Esq. Emma F. Hand, Esq. Herminia Gomez Dentons US LLP 1900 K Street NW Washington, DC 20006

Joseph W. Rogers Victor M. Prep Byron S. Watson Legend Consulting Group 6041 South Syracuse Way, Suite 105 Greenwood Village, CO 80111 Erin Spears, Chief of Staff Bobbie Mason Council Utilities Regulatory Office City of New Orleans City Hall, Room 6E07 1300 Perdido Street New Orleans, LA 70112

David Gavlinski Council Chief of Staff New Orleans City Council City Hall, Room 1E06 1300 Perdido Street New Orleans, LA 70112

Norman White Department of Finance City Hall, Room 3E06 1300 Perdido Street New Orleans, LA 70112

Hon. Jeffery S. Gulin 3203 Bridle Ridge Lane Lutherville, MD 21093

Basile J. Uddo, Esq. J.A. "Jay" Beatmann, Jr. c/o Dentons US LLP The Poydras Center 650 Poydras Street, Suite 2850 New Orleans, LA 70130-6132

Errol Smith, CPA Bruno and Tervalon 4298 Elysian Fields Avenue New Orleans, LA 70122 Brian L. Guillot VP, Regulatory Affairs Entergy New Orleans, LLC Mail Unit L-MAG-505B 1600 Perdido Street New Orleans, LA 70112

Polly S. Rosemond Seth Cureington Derek Mills Keith Wood Kevin Boleware Entergy New Orleans, LLC Mail Unit L-MAG-505B 1600 Perdido Street New Orleans, LA 70112

Andy Kowalczyk 350 New Orleans 1115 Congress St. New Orleans, LA 70117

Renate Heurich 350 Louisiana 1407 Napoleon Avenue, Suite #C New Orleans, LA 70115

Carrie Tournillon Kean Miller LLP 900 Poydras Street, Suite 3600 New Orleans, 70112

Logan Atkinson Burke Sophie Zaken Alliance for Affordable Energy 4505 S. Claiborne Avenue New Orleans, La 70125 Timothy S. Cragin Harry M. Barton Alyssa Maurice-Anderson Entergy Services, LLC Mail Unit L-ENT-26E 639 Loyola Avenue New Orleans, LA 70113

Joseph J. Romano, III Suzanne Fontan Therese Perrault Entergy Services, LLC Mail Unit L-ENT-4C 639 Loyola Avenue New Orleans, LA 70113

Benjamin Quimby 1621 S. Rampart St. New Orleans, LA 70113

Katherine W. King Randy Young Kean Miller LLP 400 Convention Street, Suite 700 Post Office Box 3513 Baton Rouge, LA 70821

Maurice Brubaker Air Products and Chemicals, Inc. 16690 Swingly Ridge Road, Suite 140 Chesterfield, MO 63017

Jeffery D. Cantin Stephen Wright Gulf States Renewable Energy Industries Association 400 Poydras Street, Suite 900 New Orleans, LA 70130

New Orleans, Louisiana, this 29th day of August, 2019. Harry M. Barton