



OPERATIONAL REQUIREMENTS FOR DISTRIBUTED GENERATION

CPS ENERGY and the Customer recognize the importance of having operational and maintenance procedures for the purpose of coordinating the operation of Customer's system with CPS ENERGY's Gas, Electric, and Generation Operation systems. Failure to install, operate and maintain all wiring and apparatus in such condition and/or manner as not to endanger persons or property, or to cause impairment of CPS ENERGY's interconnection and service to Customer, or any of CPS ENERGY's distribution customers, may result in CPS ENERGY disconnecting the Customer from the CPS ENERGY distribution system. The Customer's contractors, agents, and operating/maintenance personnel shall be informed of and follow these procedures. Copies of this document and its attachments shall be posted in all of Customer's applicable operating centers and facility.

Accordingly, to help ensure the protection and safety of Customer's and CPS ENERGY's personnel and property, the continued provision of electric service to Customer, the continued maintenance of an interconnection between Customer and CPS ENERGY, and the reliable functioning of CPS ENERGY's overall system operations, the following operational and maintenance procedures shall be observed:

A. CPS ENERGY System Responsibility

CPS ENERGY maintains a Generation Control and Transmission and Distribution Control Center on a 24-hour basis for the purpose of coordinating the operation of all Transmission, Distribution, and Generation facilities at CPS ENERGY. CPS ENERGY's System Operator will have the ultimate responsibility for carrying out the procedures described herein with Customer. Customer will provide telephone numbers for normal and emergency situations and a one-line diagram of Customer's facility to CPS ENERGY System Operations. The Customer may be required to have an on site or on call person that can take orders from the CPS ENERGY System Operators any time the Generator is on line and generating energy or reactive power into the CPS ENERGY Grid.

CPS ENERGY is a member of the Electric Reliability Council of Texas (ERCOT) and operates its system in accordance with the operating criteria and guidelines of ERCOT. As a result, CPS ENERGY may interrupt service to Customer in the event of an ERCOT declared emergency or as directed by ERCOT Operations. Emergencies may arise anywhere on the interconnected system of which CPS ENERGY is a part. If in CPS ENERGY's sole judgment consistent with CPS Energy's operating procedures, such emergency poses a threat to the area power supply and service interruption may prevent or alleviate the emergency condition, Customer may be called upon by CPS ENERGY's System Operator to operate necessary switches, breakers, reduce generation, change reactive output, etc. in order to prevent or alleviate such an emergency condition.



CPS ENERGY shall install, operate and maintain any SCADA (Supervisory Control and Data Acquisition) equipment which may be installed at the Customer's facility to communicate with CPS ENERGY's Transmission and Distribution Center.

CPS ENERGY shall make a reasonable attempt to notify the Customer the preceding CPS ENERGY business day in advance of any scheduled switching for distribution lines serving Customer.

CPS Energy shall have the right and authority to disconnect Customer at CPS Energy's reasonable discretion if CPS Energy believes (in each case, as determined in a non-discriminatory manner) that: (a) continued interconnection of the DG Facility with CPS Energy's electric system creates or contributes (or will create or contribute) to a system emergency on CPS Energy's electric system; or (b) the DG Facility is not in compliance with the requirements of this Agreement, and the non-compliance adversely affects the safety, reliability or power quality of CPS Energy's electric system. In non-emergency situations, CPS Energy shall give Customer notice of noncompliance including a description of the specific noncompliance condition and allow Customer a reasonable time to correct the noncompliance prior to disconnecting the DG Facility.

B. Customer's System Responsibility

Only authorized employees of CPS ENERGY are permitted to make and energize the connections between CPS ENERGY's service wires and Customer's service entrance conductors. Customer assumes all responsibility for the electrical system on the Customer's side of the Point of Interconnection. If the Point of Interconnection is defined in the interconnection agreement between CPS ENERGY and the Customer, that definition overrides the following definition:

The Point of Interconnection is defined as the terminals of the DG Facility Isolating Switch on the Customer's facility side.

Customer shall make a reasonable attempt to notify CPS ENERGY at least 24 hours in advance of any scheduled switching Customer wishes CPS ENERGY to execute.

Customer will install, operate and maintain all wiring and apparatus in such condition and/or manner as not to endanger persons or property, or to cause impairment of CPS ENERGY's interconnection and service to Customer, or any of CPS ENERGY's distribution customers.

Customer shall coordinate operation of its system with CPS ENERGY to ensure that the overall CPS ENERGY system operation will be consistent with ERCOT operating criteria and guidelines to the extent applicable to this transaction.

Customer shall follow all switching instructions provided by CPS ENERGY's System Operator.



Customer shall promptly notify CPS ENERGY's System Operator of all internal system conditions that could affect CPS ENERGY's distribution system. All communications with the CPS ENERGY's System Operator shall reference the Customer's facility two character mnemonic name (if applicable) and applicable equipment numbers as designated by CPS ENERGY on the one-line diagram attached.

Customer shall provide and maintain a telephone in its facility connected to an outside telephone line independent from Customer's internal telephone system (if there is one). This ensures telephone communications should Customer's internal switchboard become inoperable.

Customer shall provide CPS ENERGY's authorized representatives access to Customer's premises at all reasonable hours for the purpose of inspecting CPS ENERGY's wiring and apparatus, erecting, removing or replacing CPS ENERGY's facilities at the Point of Interconnection, reading CPS ENERGY's meters and for all other purposes connected herewith. For ERCOT meter equipment failure, CPS Energy authorized representatives shall have access 24 hrs a day, 365 days a year.

Customer shall, after reasonable notice by CPS ENERGY, repair, replace or disconnect equipment which violates the CPS ENERGY Technical Requirements for limiting harmonics, voltage fluctuations or other problems that interfere with CPS ENERGY's supply of electric service to other customers.

Customer is responsible for providing all facility equipment in accordance with CPS ENERGY's applicable specifications, both initially and from time to time thereafter, whenever changes in the CPS ENERGY's distribution system (including the distribution system's monitoring and protection devices) requires such changes in the facility in order to maintain its compatibility with the CPS ENERGY's distribution system. Prior to the replacement or modification of any equipment, Customer shall first notify CPS ENERGY of the replacement or modification, submit specifications to CPS ENERGY and obtain CPS ENERGY's approval of compatibility with CPS ENERGY's distribution system.

C. CPS ENERGY Maintenance Responsibility

CPS ENERGY performs periodic maintenance on its equipment. Such maintenance on CPS ENERGY equipment at the Point of Interconnection may require scheduling approximately an eight hour outage annually during normal working hours. Such outage of Customer's equipment will typically be coordinated to coincide with Customer's annual maintenance schedule. If applicable, the Customer's prime mover overhaul schedule shall be on file in the CPS ENERGY System Operators office and must be done for a period of at least one year. Any changes to such schedule shall be reviewed and approved by CPS ENERGY.



CPS ENERGY shall inspect the following devices, instruments, and systems (if installed):

1. Revenue metering equipment owned by CPS ENERGY. This equipment shall be inspected on a reasonable basis not more often than every two months. CPS ENERGY will maintain and replace this equipment as necessary.
2. CPS ENERGY owned high voltage instrument transformers. A power outage to Customer's equipment is required for the maintenance of the revenue metering or control instrument transformers at the Point of Interconnection.
3. All SCADA equipment at the Point of Interconnection. CPS ENERGY will maintain this equipment as necessary and must have access to this equipment 24 hours a day 7 days a week in case the need of reactive maintenance occurs.
4. Protective relays as specified on CPS ENERGY's relay test sheets. CPS ENERGY will set and maintain these relays as necessary. This will include out-of-case testing. Breaker trip testing will be performed at the same time if CPS ENERGY and the Customer agree. CPS ENERGY will provide Customer copies of the results of the annual relay tests upon request and notify Customer of any protective relay equipment requiring repair or replacement.
5. All communication equipment used with distribution line protective relaying including periodic performance testing. Customer will be notified of any problems or irregularities found.

D. Customer Maintenance Responsibility

Customer agrees to install, operate and maintain all wiring and apparatus in such condition and/or manner as not to endanger persons or property, or to cause impairment of CPS ENERGY's interconnection and service to Customer, or any of CPS ENERGY's distribution customers.

Customer shall inspect and maintain all facility structures and equipment provided by Customer on an industry or manufacturer's recommended basis.

If CPS ENERGY does not do the periodic breaker trip testing by mutual agreement with the Customer, Customer will conduct periodic breaker trip testing and notify CPS ENERGY in advance of such testing so that CPS ENERGY may witness such tests.



Customer will visually inspect and conduct periodic maintenance on any facility batteries as recommended by manufacturer. Customer will provide CPS ENERGY copies of test reports and any corrective action taken.

E. Switching Scope and Guidelines

Switching of CPS ENERGY equipment is required for equipment outages to allow CPS ENERGY to perform maintenance and construction and for Customer to perform maintenance and construction. CPS ENERGY and Customer activities should be coordinated whenever possible to reduce switching requirements. To facilitate this process, the following requirements have been included for guidance:

1. When switching CPS ENERGY equipment is desired for maintenance or operation of Customer's system, Customer shall contact CPS ENERGY's System Operator during CPS ENERGY's regular business hours at least 24 hours in advance, but not later than 2:00 P.M. on the day preceding such planned switching and explain the nature of the request. If CPS ENERGY's System Operator approves the switching, Customer must notify CPS ENERGY's System Operator at the scheduled time immediately prior to proceeding with the planned switching.
2. In addition to outages for scheduled maintenance by Customer or CPS ENERGY, switching may be required at the Point of Interconnection as a result of defective equipment being found, failed equipment and emergency situations. In these situations, both CPS ENERGY and Customer agree to provide any required switching as promptly as reasonably possible.
 - (a) To remove a transformer from service, all loads should be removed first.
 - (b) To remove line equipment from service, switching at remote CPS ENERGY or other customer facilities is required. Customer must request an outage as previously described. CPS ENERGY will provide all switching on the CPS ENERGY side of the Point of Interconnection.

Customer and CPS ENERGY shall abide by each other's isolation procedures, including but not limited to abiding by the intent of isolation tags, locks or written notices of both parties.

F. Equipment Identification

CPS ENERGY may display and mount signs, stickers, drawings, telephone numbers, and instructions pertaining to the scheduled maintenance or emergency operation of



Customer's system on outside equipment and inside. Pre-certified equipment shall also be labeled by the Customer in accordance with the Pre-certification Requirements.

G. Clearance Procedures

It is CPS ENERGY's practice that Customer must obtain clearance from CPS ENERGY System Operator for any maintenance activities requiring the outage of CPS ENERGY's distribution lines at the Point of Interconnection. When an outage of distribution line apparatus is desired, the following procedure for securing a clearance will apply:

1. A clearance request is made to CPS ENERGY's System Operator. CPS ENERGY's System Operator shall give switching instructions to CPS ENERGY personnel to accomplish switching at Customer's facility and contact any other CPS ENERGY operators or crews necessary to accomplish switching at remote terminals.
2. Customer and/or CPS ENERGY personnel shall place safety or "hold" tag on switches when they are opened. Tagging of equipment remote from Customer's system shall be done by CPS ENERGY personnel.
3. CPS ENERGY's System Operator shall give the clearance in the name of the party requesting it. CPS ENERGY will use designated CPS ENERGY personnel to check that the procedures of the clearance are completed by the Customer before the prior to final approval. In the event more than one crew is working on a line, each crew shall secure clearance. CPS ENERGY is responsible for placing grounds on CPS ENERGY tie point.
4. When a switch in Customer's system is tagged mutually by Customer and CPS ENERGY personnel, the first operator desiring to remove his tag shall notify CPS ENERGY's System Operator that he is removing his tag and that there is still a tag on the switch. Neither CPS ENERGY nor Customer shall operate the switch until the operator whose tag is still on the switch has notified CPS ENERGY's System Operator that he is removing his tag.
5. Release of all clearances and removal of all grounds are required before "hold" tags are removed and any switches closed. "Hold" tags are removed only after the clearance is released by the individual who secured the clearance and switching instructions are received from CPS ENERGY's System Operator.

H. Grounding Procedures

CPS ENERGY shall place safety grounds on CPS ENERGY equipment when required for maintenance procedures. All grounding on the Customer side will be performed by the Customer personnel. The operator providing maintenance is responsible for placing



safety grounds around the equipment to be maintained. No safety grounds should be placed where a switching device could be opened, removing the protection of a safety ground(s). The number and locations of all grounds should be provided to CPS ENERGY's System Operator.

All grounds must be removed before "hold" tags are removed from switches.

I. Fault Initiated Outages

After automatic tripping of the Customer due to an interruption of CPS ENERGY service at the Point of Interconnection (due to a fault or other system disturbance), Customer shall notify CPS ENERGY's System Operator. Items 1, 2, and 3 below are most important and should be reported as soon as possible. Items 4 and 5 should be reported as soon as the information is available.

1. Present position of circuit breakers or switches (open or closed).
2. Time of outage.
3. Any information which might be helpful in determining the cause of the outage.
4. Indication flags of any relays which initiate trips to the CPS ENERGY circuit breaker at the Point of Interconnection (if applicable). Customer shall make a notation of the relay flags and will not reset flags without permission from CPS ENERGY's System Operator. CPS ENERGY reserves the right to reset relay flags.
5. Circuit breaker operations counter reading on CPS ENERGY circuit breaker at the Point of Interconnection (if applicable).

J. Customer Operations

1. As soon as practical, Customer shall notify CPS ENERGY of any potential problems or of any forced outages and the expected duration thereof.
2. In the event Customer's is isolated from the CPS ENERGY's system, Customer shall notify CPS ENERGY's System Operator before attempting to resynchronize with CPS ENERGY's system.
3. Any records maintained or accessible to the Customer concerning an operating log with records of real and reactive power production, changes in operating status, scheduled and forced outages, and any unusual conditions found during any inspections shall be provided to CPS



ENERGY upon request within thirty (30) days of CPS ENERGY's request.

K. Customer's Operational Reactive Support Responsibility

If CPS ENERGY studies determine Customer should be operated to support the distribution system voltage by regulating volt-amps reactive output, this regulation shall be accomplished in accordance with the following:

1. CPS ENERGY's System Operator shall be responsible for monitoring overall system conditions and Customer shall take such corrective action as CPS ENERGY's System Operator may require.
2. Customer shall maintain the distribution voltage level provided by CPS ENERGY's System Operator up to the reactive levels stated by the CPS ENERGY. If the Customer is categorized by ERCOT as subject to ERCOT reactive supply requirements, CPS ENERGY shall require the Customer to meet the minimum requirements for reactive VAR support as outlined in the ERCOT reactive support requirements for all connected Generators. Customer must submit all reactive support tests as required by the ERCOT compliance templates to the CPS ENERGY Control Center for submission ERCOT.
3. The Customer's voltage regulators must have characteristics acceptable to CPS ENERGY and must be in service at all times.
4. In the event a generating unit's voltage regulator is out of service, Customer shall immediately notify CPS ENERGY's System Operator.
5. Customer shall maintain its speed governor settings as required in CPS ENERGY Technical Requirements. Yearly testing must be done and the test results submitted to the CPS ENERGY Control Center.
6. Customer shall maintain its speed governor in service when operating synchronous to CPS ENERGY unless blocked due to a temporary operating problem. Customer shall immediately notify CPS ENERGY's System Operator when blocked.

L. Amendment Procedure

These procedures may be amended from time to time by CPS ENERGY to reflect subsequent changes in CPS ENERGY's Rate Structure for Electric Service approved by the San Antonio City Council or to account for significant modifications in the manner in which Customer is connected to CPS ENERGY's system. Notice of such amendment(s) will be mailed to Customer.