



Portland General Electric
121 SW Salmon Street · Portland, Ore. 97204

April 24, 2020

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street, S.E.
P.O. Box 1088
Salem, OR 97308-1088

**RE: Second Supplemental Filing of Advice No. 20-06, Revisions to Rule C on
Emergency Curtailment & Updating the Short-Term Emergency Curtailment
Plan**

Portland General Electric Company (PGE) submits this filing pursuant to Oregon Revised Statutes (ORS) 757.205 and 757.210 and Oregon Administrative Rule (OAR) 860-022-0025 for filing a proposed tariff sheet associated with Tariff P.U.C. No. 18. PGE initially filed Advice No. 20-06 on March 20, 2020 with a requested effective date of April 21, 2020. PGE then supplemented the filing because the requested effective date was the same day as the public meeting and PGE requested an effective date of April 22, 2020. PGE now submits this Supplemental Filing at the request of the Commission and Staff stemming from the outcome of the Public Meeting on April 21, 2020 with a requested effective date of **June 3, 2020**.

Enclosed is the following replacement sheet:

First Revision of Sheet No. C-2

All other sheets previously filed are no longer valid.

At the request of the Commission and Staff at the Public Meeting on April 21, 2020, PGE is submitting this supplemental filing. Staff and Commissioners indicated their support for the housekeeping updates and revisions to Rule C, Section B regarding Emergency Curtailment of electric service in PGE's service territory, that PGE submitted in Advice No 20-06 on March 20, 2020.

The filing had included the Company's interim proposal to curtail New Load Direct Access Customers (NLDA) to protect cost-of-service customers from NLDA customer's lack of contribution to resource adequacy. In the Public Meeting on April 21, 2020 the Commission rejected and denied PGE's NLDA curtailment proposal. Based on the Commissioners decision, PGE has revised its Short Term Emergency Curtailment Plan,

removing NLDA Curtailment and hereby submits Advice No 20-06 supplemental filing. All the NLDA Curtailment provisions in the previous filing have been removed.

PGE is filing tariff updates that includes revisions to Rule C, Section B regarding Emergency Curtailment of electric service in PGE's service territory. PGE is also filing an updated version of its Short Term Emergency Curtailment Plan, described in Rule C, Section B of PGE's tariff.

There are two Commission approved curtailment plans in PGE's tariff: the Regional Curtailment Plan in Rule N which is triggered by state authorities during regional energy shortages, and the Short Term Emergency Curtailment Plan described in Rule C. PGE activates its Short Term Emergency Curtailment Plan under the circumstances that would alert the Company to a system emergency, events that threaten the performance, integrity, reliability or stability of PGE's electrical system. This filing does not affect PGE's Regional Curtailment Plan.

The Short Term Emergency Curtailment Plan, included as Attachment A, provides a high-level overview of PGE's operating procedures and event reporting responsibilities when system conditions require curtailment of electric service in PGE's service territory. While PGE periodically files updates to its curtailment plan with the Commission, detailed operating procedures are more frequently updated internally to reflect changes in personnel, critical customer accounts, and critical feeders.

The Short Term Emergency Curtailment Plan contains several updates since its previous filing with the Commission, including the requirement to adhere to NERC reliability standards. These standards dictate how PGE responds to emergencies, documents actions taken to preserve reliability, and coordinates with PGE's Reliability Coordinator and other utilities.

Several sections of the Short Term Emergency Curtailment Plan have been removed since the previous filing that included a detailed description of PGE's load shedding procedures. PGE is removing this section to keep the plan more high-level and concise.

Attachment A, the Short Term Emergency Curtailment Plan appendices include:

- Appendix A, Capacity Emergency Levels – details the merchant and NERC compliance requirements.
- Appendix B, Critical Load Feeder Criteria provides the critical load feeder criteria. This document informs, but is not reflective of, PGE's operational procedures for load shedding. The criteria for critical customers are provided, including hospitals, 911 call centers, police and fire stations, water and sewage treatment plants. This appendix was referred to as "Exempted Customer Criteria" in the previous version of the Plan. There are currently no NLDA Customers that meet the critical customer criteria.

Attachment B – As a courtesy, PGE is including a redline of Rule C.

PGE requests that the Commission issue an order that finds the revised tariff sheets and Short Term Emergency Curtailment Plan satisfy applicable statutes and administrative rules, including ORS 757.720. This plan is particularly designed to ensure that basic human needs are given priority in the allocation of energy resources. See ORS 469.010(2) (c). PGE will periodically update its Short Term Emergency Curtailment Plan.

To satisfy the requirements of OAR 860-022-0025, PGE responds as follows:

This change does not increase, decrease, otherwise change existing rates, or impact revenues.

Please direct any questions regarding this filing to Chris Pleasant at (503) 464-2555. Please direct your communications related to this filing to the following email address: pge.opuc.filings@pgn.com.

Sincerely,

\s\ Robert Macfarlane

Robert Macfarlane
Manager, Pricing & Tariffs

Enclosures

B. Short Term Emergency Curtailment

During short term curtailment emergencies, the Company may find it necessary or prudent to protect the performance, integrity, reliability, or stability of the Company's electrical system or any electrical system with which it is interconnected by initiating an Emergency Curtailment. A system emergency includes, but is not limited to, events caused by extreme weather, the temporary loss of a major generating plant or transmission facilities, or conditions that violate the North American Reliability Corporation (NERC) standards, or conditions that violate the operating requirements set forth by the Company's Reliability Coordinator. , The Company will contact the Commission prior to an Emergency Curtailment unless circumstances deem prior notice impracticable. Upon the instigation of an Emergency Curtailment, the Company will begin complying with its Curtailment Operating Plan to restore system stability.

The Company's Curtailment Plan and underlying operating procedures include, but are not limited to, steps for implementing rotating outages. During rotating outages the Company would discontinue Electricity Service to a specific number of circuits for approximately one-hour periods. If, after the first hour, system integrity were still in jeopardy, the circuits initially curtailed would have service restored while a second block of circuits would simultaneously have service discontinued. This cycle would continue until the Company determined that system emergency conditions no longer existed. Facilities deemed necessary to public health, safety and welfare are excluded from the rotating outage, as well as feeders serving Customers participating in the Schedule 88, Load Reduction Program.

During system emergencies, Customers having their own generation facilities or access to Electricity from non-utility power sources may choose to use energy from those other sources.

The Company will not initiate its Curtailment Plan to avoid the purchase of high priced power. The Curtailment Plan is periodically updated and submitted to the Commission.

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PGE Second Supplemental Filing of Advice No. 20-06
Attachment A
Short Term Emergency Curtailment Plan in support of Rule C



Portland General Electric Short Term Emergency Curtailment Plan Revision 2020

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PURPOSE

The Short Term Emergency Curtailment Plan describes the utility actions PGE would take if a system emergency required Balancing Authority Operators to initiate load reduction to balance the demand for electricity with the supply available.

PGE Tariff Rule C, Section B, describes the circumstances under which these utility actions are prudent and justified.

These utility actions would be needed to avert a more widespread system emergency that might lead to automatic underfrequency and/or undervoltage load shedding. The plan does not apply to load shedding that might be required by underfrequency or undervoltage conditions in the system. A separate set of procedures has been developed for these events. It also does not apply to longer term region wide power shortages that might lead to the initiation of Rule N voluntary and mandatory load curtailment (stages 1 through 5) by State Authorities.

OVERVIEW

The plan would be implemented when PGE Balancing Authority Operators determine there is a need to shed load because not enough power is available to meet the demand and keep system operating parameters within required limits. The guidelines for recognizing when PGE is energy deficient and might need to implement this plan are described in Appendix A.

PROCEDURE

Once the need for load curtailment in a time of system emergency has been determined, the following actions will be taken to implement the plan:

A. INCIDENT MANAGEMENT TEAM ORGANIZATION

The PGE Corporate Incident Management Team (IMT) will be activated and have responsibility for managing the system emergency. The processes and procedures for management of emergency events such as this are included in PGE's Outage Manual.

The need for rotating outages should be identified as much in advance as possible so the appropriate mobilization of internal resources and notification of external customers can be made. If the probability of rotating outages is anticipated up to 24 hours in advance, the Incident Commander will declare a Level II outage emergency. (Note: Level I normally refers to typical daily occurrences of unplanned outages on the distribution system when less than 2000 customers are out of service.)

Declaration of a Level II Guarded event is intended to alert the internal resources that they should be prepared to respond to a possible event. External messaging on conservation and communication with the Reliability Coordinator and large industrial customers may also take place during this phase of the emergency.

At 3 hours before the anticipated event, a Level III Elevated outage emergency will be declared. Mobilization of the Corporate IMT will occur and implementation of the communication plan

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will be initiated. The Incident Commander will have responsibility for managing the emergency from this point forward.

In an emergency situation where very little notice of pending rotating outages is available, a Level III Severe emergency will be declared immediately and the Corporate IMT activated as described above.

B. ROTATING OUTAGE LOAD CURTAILMENT PROCESS

PGE system operators will use a mix of feeders with both SCADA and manual control to drop load as needed during a rotating outage event. The primary choice will be to use the feeder breakers with SCADA control, which can be operated from the SCC, in order to minimize operator action in the field. These breakers will be opened and closed from the SCC using the EMS.

Both the SCADA and manual feeders have been randomly sequenced in the list and broken into blocks. The only selection criteria used for the order was that feeders from the same substation would be separated as much as possible to try and minimize the impact of rotating outages in one area. The blocks are prioritized to first shed blocks that are not configured for automatic load shedding in order to minimize overlap between manual and automatic load shedding. Also, feeders providing alternate service (to customers who have paid for alternate service in accordance with Rule L of the tariff) were spread out as much as possible so both their main and alternate feeders are not shut off at the same time.

The outage on any given feeder will last approximately one hour. At the end of one hour, the second set of feeders will be deenergized and the first set will be reenergized. This will continue through the duration of the event.

The starting SCADA and manual blocks for the next rotating outage event will be the next ones in series. One of the primary objectives during an emergency involving rotating outages will be to minimize the impact on all customers by spreading the outages out over as many customers as possible.

C. CUSTOMERS EXCLUDED FROM ROTATING OUTAGE CURTAILMENT

Feeders serving certain critical load customers will be considered for exclusion from rotating outages. PGE has limited these exclusions to those customers who provide health and safety services and those that impact the immediate health and safety of the public. Examples of customers considered for exclusion include hospitals, 911 call centers, police and fire stations, water and sewage treatment plants, the Portland and Salem downtown core areas, facilities critical to electric system operation, radio and television news and emergency broadcast stations and transmitting facilities, and public transportation facilities.

Customers who have paid for an alternate service in accordance with Rule L of PGE's tariff will probably not be impacted by rotating outages. The two feeders supplying service to these

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customers will be separated in the rotating outage sequence so as to prevent both feeders from going off at the same time, but the feeders individually are subject to rotating outages.

Customers applying for exemption from rotating outages for extreme economic hardship will likely be denied. This is because of the short duration of rotating outages, the expected infrequency of events, the fact that PGE does not guarantee uninterrupted service under any circumstances, and the expectation that all customers should be prepared for short planned or unplanned outages at all times. PGE's goal is to do what is necessary to restore demand/supply balance to the system without endangering the health and safety of the public and will require customers to share the burden of that process in modest increments.

The types of facilities considered for exclusion are included in Appendix B. Lists of SCADA and manual feeders are internally maintained and updated as needed.

D. INTERNAL AND EXTERNAL CUSTOMER NOTIFICATION

Communication with internal resources, external customers, the media, and other interested parties will be critical to managing the rotating outage event. In the event this Curtailment Plan is implemented, Corporate Communications will be notified as part of the Corporate IMT activation, and will coordinate with Government Affairs, the Tualatin Call Center and the Business Customer Group to communicate consistently across all channels with customers and the news media.

EVENT REPORTING RESPONSIBILITIES

Should a rotating outage event occur, there are reporting requirements that will need to be completed. The WECC and NERC guidelines for control system operation outline the notification and reporting requirements associated with a short term system emergency load shedding event. The System Control Center will be responsible for completing the necessary WECC and NERC reports.

The OPUC also has reporting requirements for these types of events. The System Control Center will be responsible for gathering the necessary information and working with the PGE Rates and Regulatory Affairs Department to submit the necessary documentation.

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APPENDIX A

APPENDIX A – Capacity & Energy Emergency Levels

PGE Merchant and System Control Center Operators rely on both an internal process for defining and addressing energy deficiencies as well as NERC-defined Energy Emergency Alert Levels and actions. When any of these alert levels are met, PGEM and/or System Control Center emergency procedures are activated. System Control Center Operators have the responsibility and authority to take and direct real-time actions to protect and maintain the reliability and integrity of the electrical system.

PGE Merchant Capacity and Energy Alert Levels

The following is a summary of the internal PGE alert levels:

Blue Alert:

Declared by PGE Real Time Pre-Schedule Merchant or Real Time Merchant. PGE has some concern about meeting current electricity demand. Includes 1 or more of the following conditions, 1 or more days in advance:

- A forecasted capacity deficit greater than 10% of forecasted peak load exists, **AND**
- Pre-Schedule markets lack liquidity to provide sufficient energy to cover forecasted peak Balancing Authority (including ESS) load, **AND**
- Real Time markets are anticipated to have insufficient energy to meet forecasted peak loads.

Yellow Alert:

Declared by PGE Real Time Merchant. PGE has some concern about meeting current electricity demand. Includes the following conditions:

- No offline generation is available.
- A forecasted capacity deficit greater than 10% of peak load remains unfilled from preschedule or by loss of generation, **AND**
- Real Time markets lack liquidity to provide sufficient energy to cover forecasted peak Balancing Authority (including ESS) load.

Orange Alert:

Declared by PGE Real Time Merchant or Balancing Authority. PGE's energy situation has escalated to a higher probability of an energy shortage occurring. All the conditions of a Yellow Alert continue to exist with any of the following conditions, unless otherwise foreseen and not correctable:

- Concerned about maintaining firm transactions and sustaining PGE required operating reserves.
- Insufficient response from the Merchant Alert Protocol (MAP) issued by PGEM.



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- PGE is receiving notice of regional transactions being curtailed.
- Inability to meet CPS and DCS standards – consider entry into the appropriate NERC Emergency Energy Alert (EEA) level. Entry into NERC EEA levels should be considered. EEA declarations are made by the Reliability Coordinator on behalf of PGE.

Red Alert:

Despite taking all available actions, PGE's Merchant, or PGE Balancing Authority, or Reserve Sharing Group (Northwest Power Pool [NWPP]) foresees or is experiencing conditions where all available resources are committed to meet PGE's firm load, firm transactions, and reserve commitments, and all PGE's curtailable wholesale sales have been curtailed, concern still exists about sustaining PGE's required operating reserves.

NERC Energy Emergency Alert Levels

The following Energy Emergency Alert Levels are defined by NERC in Reliability Standard EOP-011:

ENERGY EMERGENCY ALERT 1 – All Available Resources in Use

Circumstances:

- PGE's Balancing Authority is experiencing conditions where all available generation resources are committed to meet firm Load, firm transactions, and reserve commitments, and is concerned about sustaining its required Contingency Reserves, **AND**
- Non-firm wholesale energy sales (other than those that are recallable to meet reserve requirements) have been curtailed.

ENERGY EMERGENCY ALERT 2 – Load Management Procedures in Effect

Circumstances:

- PGE Balancing Authority is no longer able to provide its expected energy requirements, and is an energy deficient Balancing Authority.
- PGE Balancing Authority foresees or has implemented provisions of its Emergency Operations Plan up to, but excluding, interruption of firm load commitments. Time permitting, these efforts may include:
 - Public appeals to reduce demand.
 - Voltage reduction.
 - Emergency interruption of non-firm end use loads in accordance with PGE Schedule 88 contract tariffs.
 - Demand-side management (all activities or programs undertaken by PGE or its customers to influence the amount or timing of electricity they use).
 - PGE Balancing Authority is still able to maintain minimum Contingency Reserve requirements.



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ENERGY EMERGENCY ALERT 3 – Firm Load Interruption Imminent or in Progress

Circumstances:

- PGE Balancing Authority is unable to meet minimum Contingency Reserve requirements.

PGE's Response to Energy Deficient Declaration by Another Balancing Authority

The PGE merchant (PGEM) with available resources shall immediately contact the Energy Deficient Entity. This should include the possibility of selling non-firm (recallable) energy out of available Operating Reserves.

PGE Balancing Authority shall approve emergency e-Tags provided the Generation and Transmission capabilities are available.

Appendix B
Categories of Facilities Considered for Exclusion from Rotating Outage Curtailment

Category of Facility	Definition
Hospitals	All hospitals with 24/7 admittance and emergency care
911 Centers	Facilities operated on a 24-hour basis, which receive 911 calls and dispatch emergency response services, or transfer or relay 911 calls to other public safety agencies
Emergency Media	Radio and TV broadcast services that provide emergency notification
Emergency Operations Centers	County, city, special district, agency, critical infrastructure key responder, state and federal emergency operations centers
Police/Fire Stations	Police and fire stations
Detention Centers	County, state and federal correctional facilities housing inmates on a 24/7 basis
Water Supply	Water supply intakes, water treatment plants and water supply facilities housing command and control staff, SCADA controls, data centers, pump stations required to maintain water for fire suppression
Waste Water	Waste water treatment facilities and other waste water facilities housing command and control staff, SCADA controls, data centers, etc.
Transportation	All Level II airports (as defined by the FAA), aviation control facilities, TriMet lightrail system, drawbridges, and traffic control
Communications Facilities	Communications facilities and infrastructure critical to emergency response and keeping the telephone network operating
Electric Infrastructure	Electricity industry facilities housing critical operations. Includes critical generation, transmission and distribution infrastructure. (includes PGE service center facilities)
Metropolitan Network Electrical Service	All feeders in the Portland and Salem area that provide network service

PGE Second Supplemental Filing of Advice No. 20-06
Attachment B
Courtesy redline of Rule C

B. **Short Term Emergency Curtailment**

~~During system emergencies, including but not limited to those caused by extremely cold weather, the temporary loss of a major generating plant or transmission facilities, or conditions that violate the Willamette Valley/Southwest Washington Area (WILSWA) or Western Electricity Coordinating Council (WECC) standards~~ During short term curtailment emergencies, the Company may find it necessary or prudent to protect the performance, integrity, reliability, or stability of the Company's electrical system or any electrical system with which it is interconnected by initiating an Emergency Curtailment. A system emergency includes, but is not limited to, events caused by extreme weather, the temporary loss of a major generating plant or transmission facilities, or conditions that violate the North American Reliability Corporation (NERC) standards, or conditions that violate the operating requirements set forth by the Company's Reliability Coordinator. The Company will contact the Commission prior to an Emergency Curtailment unless circumstances deem prior notice ~~impractical~~ impracticable. Upon the instigation of an Emergency Curtailment, the Company will begin complying with its Curtailment Operating ~~Procedures in order~~ Plan to restore system stability.

The Company's Curtailment ~~Operating Procedures~~ Plan and underlying operating procedures include, but are not limited to, steps for implementing rotating outages. During rotating outages the Company would discontinue Electricity Service to a specific number of circuits for approximately one-hour periods. If, after the first hour, system integrity were still in jeopardy, the circuits initially curtailed would have service restored while a second block of circuits would simultaneously have service discontinued. This cycle would continue until the Company determined that system emergency conditions no longer existed. Facilities deemed necessary to public health, safety and welfare are excluded from the rotating outage, as well as feeders serving Customers participating in the Schedule 88, Load Reduction Program.

During system emergencies, Customers having their own generation facilities or access to Electricity from non-utility power sources may choose to use energy from those other sources.

The Company will not initiate its Curtailment ~~Operating Procedures~~ Plan to avoid the purchase of high priced power. The Curtailment ~~Operating Procedures~~

[arePlan is](#) periodically updated and submitted to the Commission.

Advice No. 20-06

Issued April 24, 2020

James F. Lobdell, Senior Vice President

**Effective for service
on and after June 3, 2020**