

## **Appendix B**

## WASHINGTON COMMERCIAL AND INDUSTRIAL DEMAND RESPONSE

**This document includes the following sections:**

- Definitions
- Program Description
- Participation Requirements and Procedures
- Dispatch Parameters and Incentives
- Additional Conditions

### DEFINITIONS

**Available Dispatch Hours:** Daily timeframe within which Pacific Power may dispatch its demand response control system.

**Co- Participation:** electrical loads at a Participating Customer's location that agree to participate in one of the following Dispatch Notifications, (60-minute or 20-minute or 7-minute) AND Real Time Dispatch Notification.

**Criteria:** Additional requirements for participation beyond being an Eligible Customer. Criteria are set forth in Table 1 below.

**Data Pulse Equipment:** means a single pulse initiator providing a Form C contact closure (KYZ) and any equipment or appurtenances, including a load profile card, a KYZ pulse initiator, junction boxes, fuses and terminal strips.

**Dispatch Days:** The days upon which Pacific Power may or may not dispatch its demand response control system.

**Dispatch Duration:** The duration of time that demand response events may be dispatched for.

**Dispatch Event:** The period during which Participating Customers' electrical loads are shut off or controlled to minimize electrical consumption.

**Dispatch Parameters:** The criteria within which Pacific Power may dispatch its load control system.

**Dispatch Notification:** The approximate, time between a Participating Customer receiving a notice from the Program Administrator or Pacific Power and the beginning of the Dispatch Event. Participating Customers shall receive no less than this amount of notification (in minutes) for Dispatch Events. "Hour ahead" shall mean 60-minutes. "Real Time" shall mean no time between notice and beginning of event.

**Dispatch Period:** The calendar year timeframe within which Pacific Power may dispatch its demand response control system.

**Eligible Customer:** Any party who has applied for, been accepted, and receives electric service at the real property, or is the electricity user at the real property.

**Holiday:** means New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

**Incentive:** Payments of money or bill credits made by Program Administrator or Company to a Participating Customer for participation in a demand response offer. Incentives are specific to Dispatch Notification the Participating Customer elects for the season.

**Maximum Dispatch Hours:** The maximum amount of time Pacific Power may dispatch its demand response control system annually.

**Maximum Dispatch Events:** The maximum number of events Pacific Power may utilize in dispatching its demand response control system annually.

**Opt-Out:** The process whereby a Participating Customer notifies the Program Administrator and/or the Company they don't want to be included in an upcoming event. Opt-Out notification must be received prior to the beginning of the event.

**Participating Customers:** Eligible Customers who meet the Criteria and agree to participate in the Commercial and Industrial Demand Response Program.

**Program Administrator:** A third-party entity selected by Pacific Power to engage with Eligible Customers about the commercial and industrial demand response program, contract with Participating Customers on behalf of Pacific Power and provide the systems to control Participating Customers loads during certain times.

**Targeted Area:** One or more geographic area within Pacific Power's Washington area that may have additional demand response requirements and/or value. Targeted Areas may be used by the Program Administrator do one or more of the following: focus marketing, differentiate participation requirements and/or Incentives.

**Targeted Customers:** Eligible Customers with electrical equipment or energy use patterns that make them a preferred Participating Customer. These customers may be the focus of targeted enrollment or marketing efforts.

## **PROGRAM DESCRIPTION**

The Commercial and Industrial Demand Response Program is a program offered by Pacific Power that provides Incentives to Participating Customers in exchange for granting Pacific Power the right to curtail Participating Customers' loads at certain times within the Dispatch Parameters and during the Dispatch Period. Pacific Power contracts with the Program Administrator to deliver the Commercial and Industrial Demand Response Program; the Program Administrator will oversee the enrollment of Participating Customers, deliver Dispatch Notifications, and call Dispatch Events on behalf of Pacific Power. The ability to curtail these loads provides Pacific Power with curtailment, regulation reserve, contingency reserve, and frequency response grid services.

### **1) Participation**

Eligible Customer and relevant Criteria are included in the table in this document. Eligible Customers who meet the Criteria and agree to participate are Participating Customers. Participating Customers will be required to sign a standard agreement with the Program Administrator to initiate participation. The agreement is perpetual (unless terminated by either party) and does not need to be re-signed at the start of each year.

Participating customers may enroll specific electric loads in one of the following Dispatch Notifications, (60 minute or 20 minute or 7 minute) AND Real Time Dispatch Notification. In the case where there are Dispatch Events occurring at the same time, the loads must be curtailed at the beginning of the first Dispatch Event and remain curtailed through the end of the last

Dispatch Event. Loads that are enrolled in more than one Dispatch Option and perform during Dispatch Events will receive an incentive for each Dispatch Option.

## **2) Incentives**

Incentives are available on a \$/kilowatt (kW) per year basis and vary by Dispatch Notification. The \$/kW per year is further allocated by one or more of the following: months, time of day, annual hours. Using data from the Program Administrator installed equipment, loads available for curtailment (kW) during the hours, days and months of the Dispatch Period are averaged to arrive at an average available load which will be multiplied by the Incentive rate depending on the notification option selected. Loads opted out are removed from the connected load calculations and reduce the Incentive payment to the Participating Customer. Incentives are paid by check, electronic funds transfer, or if requested, a bill credit. For the 60-minute Dispatch Option, the incentive is paid after the seasons ends. For the other Dispatch Options, incentives are paid after each calendar quarter. Participating Customers receive Incentives based on the availability of load reduction, regardless of whether Pacific Power calls upon a load reduction during a Dispatch Event.

## **3) Dispatch Notification and Events**

Participating Customers may select from four different Dispatch Notification options; 60 minute-ahead, 20 minute-ahead, 7 minute-ahead, Real Time (or None) which define the time between when the customer is notified of an event and when the event starts. Participating Customers notify the Program Administrator with their preferred notification channel(s) for Dispatch Events and may select more than one notification channel, i.e., text and a phone call. Dispatch Events called with 60 minute- ahead notice are focused on providing the utility with curtailment. Dispatch Events called with 20 minute-ahead notice are focused primarily on providing regulation reserve for the utility. Dispatch Events called with 7 minute-ahead notice are focused primarily on providing a contingency reserve tool for the utility. Dispatch Events called in Real Time with no notice provide frequency response grid services for the utility. The value of the curtailed load to the utility system depends on the time between the notification and the start of the event. Available Incentives reflect the variability in the utility value.

## **4) Equipment Operation**

Event communication and control occurs through a Program Administrator -provided two-way communications device (communicating via cellular signals) installed at the customer site. Individual devices communicate with the software platform provided by the Program Administrator which also provides secure access to Pacific Power to initiate Dispatch Events. Unless activated during an event, the devices do not affect normal control of equipment, but they do convey information about the connected load back to the Program Administrator and Pacific Power. To enable the Program Administrator's event communication and control device, Pacific Power, at their expense may install data pulse equipment onto the utility meter after execution of an agreement between customer and Pacific Power.

## **5) Opt Outs**

To provide Participating Customers with some operational certainty around the impacts of the demand response program on their operations, there are limits on hours in a day, the total number of events, and total hours when the loads may be curtailed. Recognizing that unforeseen

operational issue may arise, Participating Customers in any Dispatch Notification may opt out of all Dispatch Events for specified times by contacting the program administrator. Participating Customers in 60-minute or 20-minute Dispatch Notification may Opt-Out of individual Dispatch Events dispatches by notifying the program administrator after Dispatch Notification is received and prior to the beginning of the Dispatch Event. Opting out will lower Incentive payments proportionally. In order maximize the load available for control and minimize program costs, loads that are available for control are strongly preferred. Loads that are opted out or unavailable on a regular basis may be removed from the program at the sole discretion of the Program Administrator.

### 6) Quality Assurance, Change Process and Reporting

Quality assurance review and techniques may be utilized during the delivery of the program. Periodic program impact and process evaluations will be conducted by a third party working for Pacific Power. Pacific Power will regularly review program performance, quality assurance and evaluation findings, and cost effectiveness results in combination with current Company resource planning results to evaluate potential program changes. Program changes may include changes to information in this document and will follow the process outlined in current version of Washington Schedule 106.

Reports on program performance are provided to the Washington Utilities and Transportation Commission annually.

## PARTICIPATION REQUIREMENTS AND PROCEDURES

**Table 1 – Dispatch Parameters and Incentives**

<b>Dispatch Parameters and Incentives</b>	<b>Description</b>
Eligible Customer	<ul style="list-style-type: none"> <li>All commercial and industrial customers in Washington on Schedules 24, 33, 36, 47T, and 48T.</li> </ul>
Criteria	<ul style="list-style-type: none"> <li>Interval meter installed</li> <li>Meters serving loads may participate in only demand response or time of use pilot(s). They may not participate in both.</li> </ul>
Targeted Customer	<ul style="list-style-type: none"> <li>More than 200 kW of curtailable load</li> </ul>
Dispatch Period	60 minute: <ul style="list-style-type: none"> <li>May 1 through September 30</li> </ul> 20 minute: <ul style="list-style-type: none"> <li>January 1 through Dec 31</li> </ul> 7 minute: <ul style="list-style-type: none"> <li>January 1 through Dec 31</li> </ul> Real Time: <ul style="list-style-type: none"> <li>January 1 through Dec 31</li> </ul>
Targeted Areas	All areas served by Pacific Power in Washington
Dispatch Days	60 minute: <ul style="list-style-type: none"> <li>Weekdays, non-Holidays during Dispatch Period</li> </ul>

	<p>20 minute:</p> <ul style="list-style-type: none"> <li>• Weekdays, non-Holidays during Dispatch Period</li> </ul> <p>7 minute:</p> <ul style="list-style-type: none"> <li>• Monday through Sunday during Dispatch Period</li> </ul> <p>Real Time:</p> <ul style="list-style-type: none"> <li>• Monday through Sunday during Dispatch Period</li> </ul>
Available Dispatch Hours	<p>60 minute:</p> <ul style="list-style-type: none"> <li>• 3:00 p.m. to 9:00 p.m. Pacific Time on all Dispatch Days</li> </ul> <p>20 minute:</p> <ul style="list-style-type: none"> <li>• 8:00 am to 9:00 p.m. Pacific Time on all Dispatch Days</li> </ul> <p>7 minute:</p> <ul style="list-style-type: none"> <li>• 24 hours/day on all Dispatch Days</li> </ul> <p>Real Time:</p> <ul style="list-style-type: none"> <li>• 24 hours/day on all Dispatch Days</li> </ul>
Maximum Dispatch Hours	<p>60 minute:</p> <ul style="list-style-type: none"> <li>• 40 hours per year</li> </ul> <p>20 minute:</p> <ul style="list-style-type: none"> <li>• 60 hours per year</li> </ul> <p>7 minute:</p> <ul style="list-style-type: none"> <li>• 60 hours per year</li> </ul> <p>Real Time:</p> <ul style="list-style-type: none"> <li>• 5 hours per year</li> </ul>
Maximum Dispatch Events	<p>60 minute:</p> <ul style="list-style-type: none"> <li>• 1 event per day</li> </ul> <p>20 minute:</p> <ul style="list-style-type: none"> <li>• 1 event per day</li> </ul> <p>7 minute:</p> <ul style="list-style-type: none"> <li>• 25 events per year</li> </ul> <p>Real Time:</p> <ul style="list-style-type: none"> <li>• 50 events per year</li> </ul>
Dispatch Duration	<p>60 minute:</p> <ul style="list-style-type: none"> <li>• Up to 3 hours</li> </ul> <p>20 minute:</p> <ul style="list-style-type: none"> <li>• Up to 4 hours</li> </ul> <p>7 minute:</p> <ul style="list-style-type: none"> <li>• Up to 4 hours</li> </ul> <p>Real Time:</p> <ul style="list-style-type: none"> <li>• Up to 15 minutes</li> </ul>
Dispatch Notification	<p>60 minute, 20 minute, 7 minute, Real Time (or None).</p>
Incentive	<ul style="list-style-type: none"> <li>• 60 minute Dispatch Notification is paid at \$30/kW per year allocated equally into the 5 Dispatch Period Months.</li> <li>• 20 minute Dispatch Notification is paid at \$55/kW per year using an allocation (% of total \$/kW per year ) by month. <ul style="list-style-type: none"> <li>○ 10% - January</li> <li>○ 7.5% - February</li> <li>○ 5% - March</li> <li>○ 5% - April</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ 5% - May</li> <li>○ 7.5% - June</li> <li>○ 15% - July</li> <li>○ 15% - August</li> <li>○ 10% - September</li> <li>○ 5% - October</li> <li>○ 5% - November</li> <li>○ 10% - December</li> </ul> <ul style="list-style-type: none"> <li>● 7 minute Dispatch Notification is paid at \$75/kW per year using all allocation (% of total \$/kW per year) by month. <ul style="list-style-type: none"> <li>○ 10% - January</li> <li>○ 7.5% - February</li> <li>○ 5% - March</li> <li>○ 5% - April</li> <li>○ 5% - May</li> <li>○ 7.5% - June</li> <li>○ 15% - July</li> <li>○ 15% - August</li> <li>○ 10% - September</li> <li>○ 5% - October</li> <li>○ 5% - November</li> <li>○ 10% - December</li> <li>○ The monthly incentive is further allocated by time of day. <ul style="list-style-type: none"> <li>▪ 9 AM to 9 PM – 75%</li> <li>▪ 9 PM to 9 AM – 25%</li> </ul> </li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>● Real Time Dispatch Notification is paid at \$85/kW per year by allocating the \$/kW per year incentive equally into each hour of the year.</li> </ul> <p>For 60-minute Dispatch Notification, the available Incentive is calculated at the end of the season and paid to each participant by check, electronic funds transfer, or (if requested) a bill credit. For 20 minute, 7 minute and Real Time Dispatch Notification, the available incentive is calculated at the end of each calendar quarter and paid by check, electronic funds transfer or bill credit. Incentives will be determined by multiplying the average load (kW) a customer can reliably shut-off during Available Dispatch Hours on the Dispatch Days in the Dispatch Period by the Incentive rate (including the application of any allocations) and adjusted for Opt-Outs.</p>
Opt-Out	<p>Participating Customers in any Dispatch Notification may opt out of all Dispatch Events for specified times by contacting the program administrator. Participating Customers in 60-minute or 20-minute Dispatch Notification may Opt-Out of individual Dispatch Events dispatches by notifying the program administrator after Dispatch Notification is received and prior to the beginning of the Dispatch Event. Opting out will lower Incentive payments</p>

	proportionally. Repeated opt outs may result in removal of the site from the program.
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**ADDITIONAL CONDITIONS**

**System Emergency Dispatch:** In the event of a system emergency, Pacific Power may, at its discretion, expand the Dispatch Parameters beyond the parameters listed. Emergency events may be used to satisfy requirements of the North American Electric Reliability Corporation standard BAL-002-WECC-2 for Contingency Reserve Obligation and may be deployed when the utility is experiencing a qualifying event as defined by the Western Power Pool.