

# **DEMAND FORECASTING PROTOCOL**

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**DEMAND FORECASTING PROTOCOL (DFP)**

**DFP 1 Objectives, Definitions and Scope**

**DFP 1.1 Objectives**

The objective of the DFP is to set forth procedures for submission of Demand Forecasts which will provide information to the ISO for projecting future Demand requirements to be served by the ISO Controlled Grid. The ISO shall utilize such forecasts to enable it to assess system reliability and carry out its functions under the Scheduling Protocol (SP) and the Outage Coordination Protocol (OCP).

**DFP 1.2 Definitions**

**DFP 1.2.1 Master Definitions Supplement**

Any word or expression defined in the Master Definitions Supplement to the ISO Tariff shall have the same meaning where used in this Protocol. A reference to a Section or an Appendix refers to a Section or an Appendix of the ISO Tariff unless otherwise indicated. References to DFP are to this Protocol or to the stated paragraph of this Protocol.

**DFP 1.2.2 Special Definitions for this Protocol**

In this Protocol, the following words and expressions shall have the meaning set opposite them:

**“Annual Peak Demand Forecast”** means a Demand Forecast of the highest Hourly Demand in any hour in a calendar year, in MW.

**“Congestion Zone”** means a Zone identified as an Active Zone in Appendix I of the ISO Tariff.

**“Hourly Demand”** means the average of the instantaneous Demand integrated over a single clock hour, in MW.

**“ISO Home Page”** means the ISO internet home page at <http://www.caiso.com/iso> or such other internet address as the ISO shall publish from time to time.

**“Weekly Peak Demand Forecast”** means a Demand Forecast of the highest Hourly Demand in any hour in a period beginning at the start of the hour ending 0100 on Sunday and ending at the end of the hour ending 2400 the following Saturday, in MW.

**DFP 1.2.3 Rules of Interpretation**

- (a) Unless the context otherwise requires, if the provisions of this Protocol and the ISO Tariff conflict, the ISO Tariff will prevail to the extent of the inconsistency. The provisions of the ISO Tariff have been summarized or repeated in this Protocol only to aid understanding.
- (b) A reference in this Protocol to a given agreement, ISO Protocol or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made.
- (c) The captions and headings in this Protocol are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Protocol.
- (d) This Protocol shall be effective as of the ISO Operations Date.

**DFP 1.3 Scope**

**DFP 1.3.1 Scope of Application to Parties**

The DFP applies to the following entities:

- (a) Scheduling Coordinators (SCs);
- (b) Utility Distribution Companies (UDCs); and
- (c) the ISO.

**DFP 1.3.2 Liability of the ISO**

Any liability of the ISO arising out of or in relation to this Protocol shall be subject to Section 14 of the ISO Tariff as if references to the ISO Tariff were references to this Protocol.

**DFP 2 Scheduling Coordinator Demand Forecast Responsibilities**

**DFP 2.1 Data to be Submitted to the ISO by SCs**

At the time specified in DFP 2.3, each SC shall submit to the ISO its Weekly Peak Demand Forecast by Congestion Zone reflecting (1) the Weekly Peak Demand Forecasts of the UDCs that it proposes to Schedule and (2) any other non-UDC Demand that it proposes to Schedule. All Weekly Peak Demand Forecasts submitted shall include Demand Forecasts for the following 52 weeks.

**DFP 2.2 Format of Demand Forecasts**

Demand Forecasts must be submitted to the ISO electronically in the format set forth in Schedule 1 of this Protocol.

**DFP 2.3            Timing of Submission of Demand Forecasts**

The Demand Forecasts described in DFP 2.1 shall be submitted by SCs to the ISO on a monthly basis by noon of the 18th working day of the month.

**DFP 2.4            Forecast Standards**

**DFP 2.4.1        Avoiding Duplication**

SCs submitting Demand Forecasts to the ISO shall ensure, to the best of their ability, that any Demand they are forecasting is not included in another SC's Demand Forecasts. To accomplish this, each SC's Demand Forecasts should only reflect those End-Use Customers who they actually have under contract and who have notified their UDC or previous SC of their intention to change to another SC, and which are actually scheduled to convert.

**DFP 2.4.2        Required Performance**

SCs submitting its Demand Forecasts to the ISO shall take all necessary actions to provide Demand Forecasts that reflect the best judgment of the submitting SC to help avoid potential System Reliability concerns and to enable the ISO to administer a meaningful market for Energy and Ancillary Services. From time to time the ISO may publish information on the accuracy of SC Demand Forecasts.

**DFP 2.4.3        Incomplete or Unsuitable Demand Forecasts**

If the Demand Forecasts supplied by a SC to the ISO are, in the ISO's opinion, incomplete or otherwise unsuitable for use, or a particular Demand Forecast has not been supplied by a SC to the ISO as required under this Protocol, the ISO will substitute the last valid Demand Forecast received from the SC in replacement for any incomplete, unsuitable or not supplied Demand Forecasts.

**DFP 3            UDC Responsibilities**

**DFP 3.1        Data to be Submitted to the ISO by UDCs**

At the time specified in DFP 3.3, each UDC shall submit to the ISO its Weekly Peak Demand Forecasts by Congestion Zone reflecting the Weekly Peak Demand Forecast for load expected to be served by facilities under the control of the UDC. All Weekly Peak Demand Forecasts submitted shall include Demand Forecasts for the following 52 weeks.

**DFP 3.2        Format of Demand Forecasts**

Demand Forecasts must be submitted to the ISO electronically in the format set forth in Schedule 2 of this Protocol.

**DFP 3.3            Timing of Submission of Demand Forecasts**

The Demand Forecasts described in DFP 3.1 shall be submitted by UDC to the ISO on a monthly basis by noon of the twelfth working day of the month.

**DFP 3.4            Forecast Standards**

**DFP 3.4.1        Avoiding Duplication**

Each UDC submitting Demand Forecasts to the ISO and its SC shall ensure, to the best of its ability, that any Demand Forecasts that it is submitting to the ISO and its SC are not duplicated in another SC's Demand Forecasts.

**DFP 3.4.2        Required Performance**

Each UDC submitting its Demand Forecasts to the ISO and its SC shall take all necessary actions to provide Demand Forecasts that reflect the best judgment of the submitting UDC to help avoid potential System Reliability concerns and to enable the ISO to administer a meaningful market for Energy and Ancillary Services. The ISO may publish information on the accuracy of UDC Demand Forecasts from time to time.

**DFP 4             ISO Responsibilities**

**DFP 4.1         Advisory Control Area Demand Forecasts**

The ISO will publish on WEnet and supply to the SCs advisory Control Area Demand Forecasts comprised of Hourly Demand Forecasts for each Congestion Zone for each Settlement Period of the relevant Trading Day. The ISO will publish this information in accordance with the timing requirements set forth in the SP.

**DFP 4.2         ISO Demand Forecasts**

The ISO shall publish monthly on WEnet the following two (2) Demand Forecasts for the next 52 weeks.

- (i)            Consolidated SC Forecast. This forecast will be developed by adding together the Weekly Peak Demand Forecasts of the individual SCs.
- (ii)          Independent ISO Forecast. This forecast will be developed by the ISO.

The ISO may, at its discretion, publish on WEnet additional Demand Forecasts for two or more years following the next year.

**DFP 5                    AMENDMENTS TO THE PROTOCOL**

If the ISO determines a need for an amendment to this Protocol, the ISO will follow the requirements as set forth in Section 16 of the ISO Tariff.



**SCHEDULE 1**  
**SC DEMAND FORECAST FORMAT**

**SC 52 Weeks Load Forecast (for the next 52 operating weeks)**

This template is used to post 52 Weeks Load Forecast.

- (a) SC's ID code
- (b) Forecast Weekly Maximum Generation capacity for each of the next 52 weeks
- (c) Forecast Weekly Maximum Demand for each of the next 52 weeks

**SCHEDULE 2**  
**UDC DEMAND FORECAST FORMAT**

**SC/UDC Direct-Access Load Forecast**

This template is for use by the SCs to forecast their direct-access loads for each UDC. The forecast must be for seven (7) future days including the current Day-Ahead Market.

- (a) SC's ID code
- (b) Trading Day of current Day-Ahead Market (month/day/year)
- (c) UDC's ID code
- (d) Hourly Demand Forecast for the 168 hours beginning with the first hour of the current Day-Ahead Market