

**NON-BINDING**  
**MEMORANDUM OF UNDERSTANDING**  
**executed by the**  
**UNITED STATES OF AMERICA**  
**DEPARTMENT OF ENERGY**  
**acting by and through the**  
**BONNEVILLE POWER ADMINISTRATION**  
**and**  
**PACIFICORP**  
**and**  
**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

This NON-BINDING MEMORANDUM OF UNDERSTANDING (MOU) is executed by the UNITED STATES OF AMERICA, Department of Energy, acting by and through the BONNEVILLE POWER ADMINISTRATION (BPA), PACIFICORP, and the CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION (CAISO). BPA, PacifiCorp, and CAISO are sometimes referred to individually as "Party" and collectively as "Parties".

**RECITALS**

This document is a non-binding MOU among BPA, PacifiCorp, and CAISO to incorporate, in good faith, the discussion principles identified herein. This MOU identifies potential Energy Imbalance Market (EIM) coordination and facilitation principles, which may lead to the development of EIM operating procedures to be agreed to among BPA, PacifiCorp, and CAISO.

PacifiCorp and CAISO are implementing the EIM, scheduled to begin operation October 1, 2014. BPA has several interests and roles with respect to EIM coordination, including, but not limited to, BPA is: (1) a Transmission Provider which provides transmission and other services to PacifiCorp Energy, a marketing function division of PacifiCorp and a transmission customer of BPA; (2) an adjacent Transmission Provider to both PacifiCorp and CAISO, whose transmission facilities PacifiCorp intends to use for EIM participation; (3) the Path Operator for the northern portion of the California-Oregon Intertie (COI); and (4) an entity with obligations to deliver power to customers within PacifiCorp's Balancing Authority Areas which are served by PacifiCorp in its role as a Transmission Provider and Balancing Authority.

Similarly, PacifiCorp has several interests and roles with respect to EIM coordination, including, but not limited to, PacifiCorp is: implementing the EIM together with CAISO, as the Market Operator, pursuant to the Implementation Agreement dated April 30, 2013<sup>1</sup> (Implementation Agreement), and a BPA transmission customer, through PacifiCorp Energy, that has purchased transmission and other services on BPA's system, including rights over the COI.

CAISO's interests include, but are not limited to, CAISO is: implementing the EIM, as the Market Operator, together with PacifiCorp pursuant to the Implementation Agreement, and the Path Operator of the southern portion of the COI.

Because the EIM represents a significant regional effort, PacifiCorp, CAISO, and BPA seek to enable the EIM and to avoid potential adverse impacts to BPA and its customers.

Coordinated EIM operation provides an opportunity to improve operational effectiveness in a cost-effective manner.

The following constitutes a general summary of the understandings of the Parties for the proposed EIM:

**1. TERM**

This MOU will continue until the earlier of: (1) mutually agreed to EIM operating procedures are adopted by the Parties and the EIM has been in operation for one year; (2) two years from the date the MOU is executed by the Parties; or (3) termination upon 30-days' notice in writing by any of the Parties.

**2. PRINCIPLES FOR COORDINATION AND FACILITATION OF THE EIM**

BPA, PacifiCorp, and CAISO have developed principles intended to coordinate and enable implementation of the EIM on BPA's system among the Parties. The Parties agree to develop operating procedures as needed consistent with the following principles and with applicable statutory requirements:

- (a) This MOU does not create any rights for any Party, commit BPA to provide a specific service, or otherwise obligate the Parties to enter into any specific operational or commercial framework. The Parties will continuously evaluate the EIM to assure a long-term, balanced operational framework, informed by stakeholder feedback and actual EIM performance, that is consistent with agreed-upon principles herein to allow for market go-live on October 1, 2014;

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<sup>1</sup> *Order Accepting Implementation Agreement*, 143 FERC ¶ 61,298 (June 28, 2013).

- (b) Development of a framework that provides for use of BPA's transmission system consistent with Open Access principles, including the terms and conditions for transmission service provided pursuant to BPA's Open Access Transmission Tariff (OATT). BPA will provide reliable transmission service to its customers in a manner consistent with the quality and reliability of service required by its OATT and any other existing agreements;
- (c) Development of a framework that provides for use of PacifiCorp's transmission system consistent with Open Access principles, including the terms and conditions for transmission service provided pursuant to PacifiCorp's OATT. PacifiCorp will provide reliable transmission service to its customers in a manner consistent with the quality and reliability of service required by its OATT and any other existing agreements;
- (d) Operation of the transmission system will be consistent with NERC and WECC reliability standards and will maintain or improve system reliability; and
- (e) The Parties agree that costs will be allocated consistent with cost causation, recognizing mutual benefits.

**3. PROJECT PLAN, KEY MILESTONES, AND DELIVERABLES**

The Parties will develop and maintain a project plan to achieve key deliverables on specific timelines (Project Plan). The Parties will support, in good faith, the following key milestones and deliverables:

- (a) Initial Project Plan developed and approved by all Parties – February 28, 2014;
- (b) Full Market Simulation – July 8, 2014 (Full Design of Operational Framework); and
- (c) Go-Live – October 1, 2014 (Completed and Delivered Operational Framework).

**4. COORDINATION AND OUTREACH**

PacifiCorp and CAISO have developed extensive outreach plans to engage stakeholders in the process of implementing the EIM. In parallel with those efforts, BPA is engaged in an effort, including its own extensive stakeholder outreach, to facilitate coordination of the EIM, and to responsibly manage any potential short-term and long-term impacts of the EIM to BPA and its customers. Accordingly, PacifiCorp, CAISO, and BPA will continue to work together, in good faith, to identify and address operational issues of concern prior to go-live October 1, 2014. PacifiCorp, CAISO, and BPA anticipate continued involvement in each other's ongoing EIM-related stakeholder processes, including collaboration in the development or review of EIM-related documents and materials to support the operating procedures, as appropriate.

Before go-live of the EIM, and during the operation of the EIM, PacifiCorp will continue to provide BPA with information necessary for BPA's facilitation of the EIM, including, but not limited to, a list of contracts and associated generating resources that it intends to use to participate in the EIM.

**5. DEVELOPMENT OF EIM OPERATING PROCEDURES**

PacifiCorp, CAISO, and BPA anticipate developing operating procedures consistent with the following principles and with applicable statutory requirements (EIM Operating Procedures):

- (a) The EIM should not adversely affect the reliability of the bulk electric system;
- (b) BPA should have sufficient visibility and controls with respect to EIM resources' use of BPA's transmission system dynamically to maintain system reliability and quality of service for its customers;
- (c) The EIM should operate within the limits of existing transmission rights and any applicable operational constraints, as appropriate;
- (d) Review at regular intervals the actual performance of the EIM Operating Procedures in terms of system reliability;
- (e) PacifiCorp and CAISO should provide visibility over current and forecasted operations to BPA through the sharing of appropriate system data. At a minimum, the data being shared between CAISO to BPA will be the binding fifteen-minute schedules plus any pertinent advisories, as well as the five-minute market flow data;
- (f) At a minimum, BPA will share with CAISO the five-minute rate of change limits and upper/lower limits that will be enforced in five-minute markets;
- (g) EIM resources should operate within jointly developed operational controls to ensure the reliable operation of the EIM relative to all transmission flow impacts:
  - (1) While BPA may agree that PacifiCorp and CASIO may operate EIM resources within applicable limits, this operational flexibility would be reconsidered if any of these coordination or facilitation principles were violated;
  - (2) BPA has the ability to take appropriate actions at all times consistent with Open Access principles to maintain reliability of its system;
  - (3) In the future, if there are additional competing needs for use of this operational flexibility, the coordination and facilitation principles described herein will be reconsidered consistent with Open Access principles; and

- (4) An operational review of existing BPA Dynamic Transfer Capacity business practices should occur as part of a separate process.
- (h) The EIM should not affect PacifiCorp's obligation to provide service to BPA's transfer customers in accordance with the terms of its OATT and existing agreements, as they may be modified or replaced with successor agreements; nor should the EIM adversely impact service to BPA's transfer service customers;
- (i) PacifiCorp should promptly notify BPA in writing of any change in its relevant contracts or generating resources with sufficient notice to allow BPA to assess the impacts of any such changes;
- (j) The Parties agree to meet as needed to review project scope, conduct a project performance plan evaluation, and work collaboratively in good faith to resolve any issues;
- (k) The Parties will work together to develop metrics to measure performance against these standards and establish a process for making mutually agreed upon changes; and
- (l) The EIM Procedures will be consistent with the rights of COI owners and capacity holders.

**6. NON-BINDING NATURE OF MOU**

This MOU is not a binding and enforceable contract but is intended to serve as a basis for further discussion, study, analysis, and negotiations between the Parties with respect to the EIM. This MOU does not constitute an offer, agreement or commitment.

7. **LIMITATION OF LIABILITY**

Each of the Parties acknowledges and agrees that the other Parties shall not be liable to it for any claim, loss, cost, liability, damage, or expense, whether at law or in equity, including but not limited to any direct damage or any special, indirect, exemplary, punitive, incidental, or consequential loss or damage (including any loss of revenue, income, profits, or investment opportunities or claims of third party customers), arising out of or directly or indirectly related to any other Party's performance or nonperformance under this MOU. The rights and obligations under this Section 7 shall survive the expiration and termination of this MOU.

8. **SIGNATURES**

The Parties have executed this MOU as of the last date indicated below.

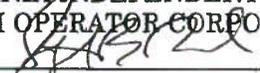
PACIFICORP

By:   
Name: PATRICK ZEIDAN  
(Print/Type)  
Title: Pres./CEO Pacific Power  
Date: 2/14/14

UNITED STATES OF AMERICA  
Department of Energy  
Bonneville Power Administration

By:   
Name: Curtis E. Mainer  
(Print/Type)  
Title: Administrator + CEO (Acting)  
Date: 2/14/14

CALIFORNIA INDEPENDENT  
SYSTEM OPERATOR CORPORATION

By:   
Name: Steve Barberich  
(Print/Type)  
Title: Pres + CEO  
Date: 2/14/14

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