

August 5, 2011

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Re: California Independent System Operator Corporation Filing of non-conforming Service Agreement No. 2157 Docket No. ER11-4243-000

Dear Secretary Bose:

The California Independent System Operator Corporation ("ISO") submits for Commission filing and acceptance an agreement for a pilot intra-hour scheduling program with the Bonneville Power Administration ("BPA"). This agreement, called the Intra-Hour Scheduling Pilot Agreement ("Pilot Agreement"), is necessary to implement a limited pilot program between the ISO and BPA. The ISO proposes that the Pilot Agreement be made effective on October 1, 2011 to enable this program to commence as of that date.

I. The Purpose of and Background of the Pilot Agreement

The purpose of this Pilot Agreement is to facilitate a program that generally will involve using dynamic e-Tags and electronic communications to facilitate intra-hour changes to transmission schedules for wind generation facilities in BPA's balancing authority area that are scheduling into the ISO's balancing authority area. Participation in the pilot is limited to 400 MW of capacity, and the initial term of the pilot program will be for one year from the date of Commission acceptance of the Pilot Agreement. The pilot program provides for intra-hour schedules and, therefore, the 400 MW limit on participation would be separate from any limitation that BPA may have with respect to dynamic transfers.

The ISO is also sometimes referred to as the CAISO. The ISO submits the Intra-Hour Scheduling Pilot Agreement pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d and Part 35 of the Commission's regulations, 18 C.F.R. Part 35, and in compliance with Order No. 714, *Electronic Tariff Filings*, FERC Stats. & Regs. ¶ 31,276 (2009).

See generally, Comments of the California Independent System Corporation, RM10-11-000 (outlining the ISO's efforts to address issues associated with variable energy resources and noting the intra hour pilot program and related efforts with BPA at page 42).

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Participants in the pilot program will submit hourly e-Tags for transmission of energy from their respective resources to the ISO balancing authority area. Participants will submit and update e-Tags for the pilot program in accordance with agreements signed with BPA and the ISO and in accordance with BPA business practices and ISO tariff provisions.³ BPA will use the hourly e-Tags submitted by participants to create a transmission schedule with the ISO for the operating hour, which BPA will communicate electronically to the ISO. The ISO will use the electronic communication from BPA as an input to the ISO's real-time dispatch processes, the results of which the ISO will return electronically to BPA as the ISO's accepted dispatch operating target. During the operating hour for which a participant submits an e-Tag for the pilot program, the participant may update the e-Tag one time during the operating hour to reflect increases or decreases in generation. Once a participant updates an e-Tag, BPA will adjust the schedule to the ISO in accordance with the update provided by the participant, and the ISO will then issue a new or revised dispatch operating target for the resource consistent with the adjustment provided by BPA.

The ISO will settle with participants based on the dispatch operating targets as may be adjusted in accordance with the Pilot Agreement. This will result in a settlement that is different than the manner in which the participants would otherwise be settled in accordance with dispatch operating target timelines for dynamically scheduled resources. This settlement is necessary to account for adjustments in the dispatch operating target and is the only difference between the treatment of participants under the ISO tariff and all other dynamically scheduled resources. The ISO will specifically address this limited settlement treatment for the pilot program through a provision to be included in Schedule 1 of the Dynamic Scheduling Agreement for Scheduling Coordinators entered into by the ISO and participants. Otherwise, nothing in the Pilot Agreement is intended to alter either Party's obligations to abide by NERC or WECC reliability standards, BPA business practices or tariff provisions, ISO tariff provisions or business practice manuals, including the ISO Dynamic Scheduling Protocol (ISO Tariff – Appendix X⁴), or any other agreement between the Parties.

As the ISO noted in its March 2, 2011, comments on FERC's Notice of Proposed Rulemaking on Integration of Variable Energy Resources (Docket RM10-11-000), the ISO and BPA are establishing this pilot program as a demonstration of using transmission reservations and intra-hour scheduling changes on a half-hour basis. A half-hourly timeline was selected based primarily on current computing system limitations and for consistency with BPA's

The ISO will enter into a dynamic scheduling agreement for scheduling coordinators as necessary to include all participants in the pilot program. See ISO Tariff, Appendix B.5, Dynamic Scheduling Agreement For Scheduling Coordinators. The ISO understands BPA will enter into a participant agreement with participants, and the participants may enter into agreements with resource owners.

ISO Tariff Appendix X will be moved to Appendix M upon approval of the ISO's Dynamic Transfer Amendment filed at the Commission on July 29, 2011 in Docket No. ER11-4161-000.

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participation in a Joint Initiative of ColumbiaGrid, Northern Tier Transmission Group, and WestConnect, through which these groups have been coordinating on intra-hour scheduling practices since the Fall of 2009. The results of this pilot program will provide the ISO and BPA with information they can adapt to create a variety of opportunities for flexible scheduling between itself and other balancing authority areas, while complementing the ISO's five-minute energy dispatch within the ISO's balancing authority area. The benefits of the ISO and BPA pilot project will include, but are not limited to, sharing in the firming required for variable energy resources that are produced in one balancing authority area, but serve load in another. Currently, the output of variable energy resources outside the ISO balancing authority area are imported only through static hourly schedules, which must be firmed up by the host balancing authority area. The results of this pilot project will also inform the ISO and BPA with respect to the feasibility and potential advantages or disadvantages of moving to a more granular intra-hour scheduling timeline, such as quarter hourly.

II. The Provisions of the Pilot Agreement

The Pilot Agreement contains the essential elements of the pilot program as they relate to the ISO and BPA. As explained in the Pilot Agreement, all other actions necessary to implement the agreement are already contained in the parties' respective tariffs and business practices, particularly those applicable to the dynamic scheduling functionality that forms the foundation of the pilot program. The Pilot Agreement itself contains the following provisions:

- Section I provides for the effective date and termination of the Pilot Agreement.
- Section 2 contains the general description regarding the intra-hour scheduling pilot program with regard to communications between the ISO, BPA and the participants, and requirements to comply with NERC or WECC reliability standards, the parties' tariffs, and business practices.
- Section 3 states the commencement and duration of the pilot program, and provides for an extension of the pilot program by agreement by the parties.
- Section 4 provides for a timeline to review of the intra-hour scheduling pilot program's progress, make adjustments if necessary, and modify or add participants up to the maximum of 400 MWs of capacity.
- Section 5 states that the ISO and BPA will be responsible for their own costs incurred for the purpose of meeting obligations under the Pilot Agreement.

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Sections 6 through 13 contain "boilerplate" provisions regarding no FERC jurisdiction with respect to BPA (Section 6), no third party beneficiary (Section 7), assignments (Section 8), confidentiality (Section 9), entire agreement (Section 10), amendment (section 11), governing law (section 12), exhibits (Section 13), and signatures (section 14)

In addition, the Pilot Agreement contains the following exhibits:

- Exhibit A identifies the participants, resources and the amount of megawatt limitations for each participant and the pilot program.
 Participants have tentatively committed to take part in the pilot program subject to the execution of participant agreements and the finalization of other arrangements related to their participation.
- Exhibit B provides notices of information with regard to administrative and operational contacts for BPA and the ISO

The provisions of the Pilot Agreement are agreed to by the parties. The ISO requests that the Commission accept the Intra-Hour Scheduling Pilot Agreement between the ISO and BPA as filed as non conforming service agreement no. 2157.

III. Effective Date

The ISO requests that the Pilot Agreement included in the instant filing be made effective on October 1, 2011. The ISO requests waiver, pursuant to Section 35.11 of the Commission's regulations (18 C.F.R. § 35.11), of the 60-day notice requirement set forth in Section 35.3 of the Commission's regulations (18 C.F.R. § 35.3), and to the extent necessary, the ISO respectfully requests that the Commission grant any other waivers of Part 35 of its regulations that may be required in connection with the requested effective date. October 1 is the effective date that the ISO and BPA have agreed upon and it is important the pilot program be made effective as of this date in order for the parties to commence on schedule and begin to gather information that will help understand the benefits and impacts of intra-hour scheduling on their respective systems.

IV. Service

The ISO has served copies of this filing upon Bonneville Power Administration the California Public Utilities Commission, and the California Energy Commission. In addition, the ISO has posted the filing on the ISO website.

Enclosed for filing is each of the following:

(1) this letter of transmittal; and

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(2) the Intra-Hour Scheduling Pilot Agreement (Attachment A).

V. Correspondence

The ISO requests that all correspondence, pleadings, and other communications concerning this filing be served upon the following:

John C. Anders*
Senior Counsel
California Independent System
Operator Corporation
250 Outcropping Way
Folsom, CA 95630

Tel: (916) 608-7287 Fax: (916) 608-7222

E-mail: janders@caiso.com

VI. Conclusion

The ISO respectfully requests that the Commission accept this filing and permit the ISO's submittal of the Pilot Agreement to be effective as of the date requested. If there are any questions concerning this filing, please contact the undersigned.

Respectfully submitted,

By: /s/ John C. Anders

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Sidney M. Davies
Assistant General Counsel
John C. Anders
Senior Counsel
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Attorneys for the California Independent System Operator Corporation

^{*} Individual designated for service pursuant to Rule 203(b)(3), 18 C.F.R. § 203(b)(3).



INTRA-HOUR SCHEDULING PILOT AGREEMENT executed by the UNITED STATES OF AMERICA DEPARTMENT OF ENERGY

acting by and through the

BONNEVILLE POWER ADMINISTRATION

and

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

This INTRA-HOUR SCHEDULING PILOT AGREEMENT (Agreement) is executed by the UNITED STATES OF AMERICA, Department of Energy, acting by and through the BONNEVILLE POWER ADMINISTRATION (BPA), and the CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION (CAISO). BPA and the CAISO are sometimes referred to individually as "Party" and collectively as "Parties."

WHEREAS, BPA and the CAISO intend to conduct a temporary pilot program (the Pilot) for the purposes of facilitating intra-hour scheduling of transmission from wind generation facilities in BPA's balancing authority area to the CAISO's balancing authority area and to assess the costs, benefits, and any operational impacts associated with such scheduling;

WHEREAS, the Pilot is expected to commence on or about October 1, 2011, and to last for a period of one year, unless extended by agreement of the Parties;

WHEREAS, the Parties wish to enter into this Agreement in order to identify their roles and responsibilities with respect to the Pilot.

The Parties agree to conduct the Pilot subject to the terms and conditions below:

1. TERM AND TERMINATION

This Agreement will take effect as of the date accepted for filing and made effective by the Federal Energy Regulatory Commission (FERC). Once this Agreement takes effect, it will remain in effect for a period of one year unless terminated prior to that date by either Party. Once this Agreement takes effect, either Party may terminate the Agreement by providing thirty (30) days advance written notice to the other Party.



2. DESCRIPTION OF THE PILOT

The following is a non-binding description of the Pilot included for informational purposes only and could change as the technical development of the Pilot progresses. This Section of the Agreement does not create any right or obligation for any Party:

The Pilot generally will involve using dynamic e-Tag and communication capability to facilitate intra-hour changes to transmission schedules for wind generation facilities in BPA's balancing authority area that are scheduling into the CAISO's balancing authority area. Exhibit A to this Agreement identifies the participants in the Pilot, the resources for which participants will submit schedules during the pilot, and the Resource ID assigned to each resource. Exhibit A also identifies the amount of megawatts participants will be limited to scheduling in the Pilot.

Before each operating hour, participants in the Pilot will submit hourly e-Tags for transmission of energy from their respective resources identified in Exhibit A to this Agreement to the CAISO balancing authority area. For purposes of scheduling in the CAISO markets, participants may submit economic bids in the day-ahead market and must submit self-schedules in the hour-ahead scheduling process. Participants will submit and update e-Tags for the Pilot in accordance with agreements signed with BPA and the CAISO and in accordance with BPA business practices and CAISO tariff provisions. BPA will use the hourly e-Tags submitted by participants to create a transmission schedule with the CAISO for the operating hour. During the operating hour for which a participant submits an e-Tag for the Pilot, the participant may update the e-Tag one time during the operating hour to reflect increases or decreases in generation. Once a participant updates an e-Tag, BPA will adjust the schedule to the CAISO in accordance with the update. The intra-hour dynamic schedule will ramp during predefined time periods, consisting of 20 minutes across the top of the hour and 10 minutes across the bottom of the hour. For all other periods, the intra-hour dynamic schedule will remain constant unless congestion dictates a reduction.

The energy profile on the dynamic e-Tag supplied by the participant prior to each half hour will represent the amount of the intra-hour dynamic schedule. BPA will utilize the e-Tag information and provide the anticipated intra-hour dynamic schedule to the CAISO electronically using agreed upon communication protocols, which the CAISO will input to its real-time market dispatch. The CAISO will return its accepted maximum dispatch operating target for the intra-hour dynamic schedule to BPA and the participant, resulting from its real-time market dispatch processes. In addition, BPA will communicate electronically to the CAISO, using agreed upon communication protocols, the actual delivery of energy as a result of the intra-hour dynamic schedule. The energy delivered through the intra-hour dynamic schedule will be a combination of the energy from the resource identified in Exhibit A, plus or minus balancing services provided by BPA. The CAISO's financial settlements with participants will determine instructed and uninstructed energy for the dynamic schedules reflecting the CAISO's dispatch operating targets and the actual energy as communicated by BPA during the operating hour and in final e-Tag updates.

Nothing in this Agreement is intended to change, supersede, or alter either Party's obligations to abide by NERC or WECC reliability standards, BPA business practice or tariff provisions, CAISO tariff provision or business practice manuals, including the CAISO Dynamic Scheduling Protocol (CAISO Tariff – Appendix X), or other agreements



between the Parties; provided, however, the CAISO will issue dispatch operating targets to participants as described in the paragraph above.

3. COMMENCEMENT AND DURATION OF THE PILOT

The Pilot will start on October 1, 2011, or as otherwise agreed by the Parties, but in no event will the Pilot start prior to the date this Agreement is accepted for filing and made effective by FERC. Once the Pilot starts, it will remain in effect for a period of one year, unless extended by agreement of the Parties.

4. REVIEW OF PILOT RESULTS

The Parties will meet from time to time to discuss how the Pilot is progressing, to discuss potential changes to the Pilot, to consider including additional participant(s) in the Pilot, and to address other matters that may need attention. The Parties will make good faith efforts to hold the first such meeting within 60 days of the start date of the Pilot and to hold a second meeting within 120 days of the start date of the Pilot. If the Parties agree to include additional participants in the Pilot or to modify the terms of participation for current participants, BPA will prepare a revised Exhibit A to this Agreement identifying the revised information specified in Exhibit A. Nothing in this section will obligate BPA or the CAISO to accept schedules under the Pilot from an additional participant until the additional participant has signed any agreements required by BPA or the CAISO.

5. COSTS

Each Party will bear its own costs associated with the Pilot, including but not limited to, costs of procuring and installing any equipment or infrastructure required for the Pilot.

6. NO FERC JURISDICTION WITH RESPECT TO BPA

Nothing in this Agreement shall be construed to grant FERC jurisdiction over BPA or its contracts.

7. NO THIRD PARTY BENEFICIARY

This Agreement is made and entered into for the sole benefit of the Parties, and the Parties intend that no other person or entity shall be a direct or indirect beneficiary of this Agreement, specifically including the participants in the Pilot.

8. ASSIGNMENT

This Agreement is binding on any successors and assigns of the Parties. Neither Party may otherwise transfer or assign this Agreement, in whole or in part, without the other Party's written consent. Such consent shall not be unreasonably withheld.

9. CONFIDENTIALITY

Any information that may be considered confidential (Confidential Information) will be defined and treated in accordance with the Adjacent Balancing Authority Operating Agreement entered into between the CAISO and BPA and dated August 14, 2009 (Agreement No. 09TX-14447).

10. ENTIRE AGREEMENT

This Agreement, including documents expressly incorporated by reference, constitutes the entire agreement between the Parties. It supersedes all previous communications, representations, or contracts, either written or oral, which purport to describe or embody the subject matter of this Agreement.



11. AMENDMENT

Except where this Agreement explicitly allows one Party to unilaterally amend a provision or revise an Exhibit, no Amendment or Exhibit revision to this Agreement shall be of any force or effect unless set forth in a written instrument signed by authorized representatives of each Party.

12. GOVERNING LAW

This Agreement shall be interpreted, construed, and enforced in accordance with Federal law.

13. EXHIBITS.

Exhibits A (Participants and Resources Information) and B (Notices) are incorporated herein and made a part hereof.

14. SIGNATURES

The Parties have caused this Agreement to be executed as of the date both Parties have signed this Agreement.

	M OPERATOR CORPORATION	UNITED STATES OF AMERICA Department of Energy Bonneville Power Administration	
Ву:	GABRI	Ву:	
Name:	Steve Berberich (Print/Type) President &	Name:	Young S. Linn (Print/Type)
Title:	Chief Executive Officer	Title:	Transmission Account Executive
Date:	8/2/11	Date:	





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CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION		UNITED STATES OF AMERICA Department of Energy Bonneville Power Administration	
Ву:		By: Josep J. Sur	
Name:	(Print/Type)	Name: Young S. Linn (Print/Type)	
Title:		Title: Transmission Account Executive	
Date:		Date: 8/03/2011	



EXHIBIT A PARTICIPANTS AND RESOURCES INFORMATION

Upon mutual agreement, the Parties may add participants to the Pilot up to a total of 400 MW capacity.

1	Participant	Powerex
		Name: Wheat Field Wind Facility
	Resource	Location: Jones Canyon 230 kV Substation
		Nameplate Capacity: 96.6 MW
		Maximum Capacity for Scheduling in Pilot: 96.6 MW
	Resource ID	MALIN_5_INHRPX

2	Participant	Southern California Edison
	Pagaran	Name: North Hurlburt (Caithness Shepherds Flat) Location: Slatt 230 kV Substation
	Resource	Nameplate Capacity: 265 MW
		Maximum Capacity for Scheduling in Pilot: 50 MW
	Resource ID	MALIN_5_INHRED

3	Participant	Portland General Electric
		Name: Biglow Canyon
	Resource	Location: Biglow Canyon 230 kV Substation
		Nameplate Capacity: 450 MW
		Maximum Capacity for Scheduling in Pilot: 50 MW
	Resource ID	MALIN_5_INHRPG



EXHIBIT B NOTICES

1. ADMINISTRATIVE CONTACTS

Any notice or other communication related to this Agreement, other than notices of an operating nature (section 2 below), shall be in writing and shall be deemed to have been received if delivered in person, by First Class mail, by facsimile or sent by overnight delivery service.

Administrative contacts under this Agreement are as follows:

If to CAISO:

Attention: Ms. Roni L. Reese Title: Sr. Contracts Analyst Address: 250 Outcropping Way

City/State/Zip Code: Folsom, CA 95630 Email Address: Folsom, CA 95630 rreese@caiso.com

Phone: (916) 608-7027 Fax No: (916) 608-7292

If to BPA:

Attention: Transmission Account Executive for California Independent System Operator

Corporation - TSE/TPP-2 Phone: (360) 619-6016 Fax: (360) 619-6940

If by First Class Mail:

Bonneville Power Administration P.O. Box 61409 Vancouver, WA 98666-1409

If by Overnight Delivery Service:

Bonneville Power Administration – TSE/TPP-2 7500 NE 41st Street, Suite 130 Vancouver, WA 98662-7905



2. NOTICES OF AN OPERATING NATURE

The Parties each operate and maintain a 24-hour, 7-day control center with real-time scheduling and control functions pursuant to the Adjacent Balancing Authority Operating Agreement between the CAISO and BPA dated August 14, 2009 (Agreement No. 09TX-14447). Appropriate control center staff will be provided by each Party who shall be responsible for operational communications and who shall have sufficient authority to make operational decisions within the scope of this Agreement. The Parties shall jointly develop communication procedures necessary to support scheduling and dispatch functions associated with this Agreement. The Parties agree to exchange operational contact information for insuring reliable communication in a format provided below and completed as of the effective date of this Agreement.

If to CAISO:

If to BPA:

Primary Contact:

Primary Contact:

Secondary Contact:

Secondary Contact:

Outage Coordination:

Outage Coordination:

3. CHANGES IN NOTICES

If either Party changes its contact(s), that Party shall notify the other Party by voice phone, facsimile transmission, or other means immediately. The Party making the change shall send written notice of the change to the other Party within 3 business days. BPA shall revise this Exhibit upon such notice.