



May 21, 2015

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 Adjacent Balancing Authority Operating Agreement and (CAISO Rate Schedule No. 78), Notice of Termination of Interconnected Control Area Operating Agreement (CAISO Rate Schedule No. 17), and Request for Waiver of Notice Requirement**

**Docket No. ER15-\_\_\_\_-000**

Dear Secretary Bose:

The California Independent System Operator Corporation (“CAISO”) submits for Commission filing and acceptance: (1) an Adjacent Balancing Authority Operating Agreement (“ABAOA”) between the CAISO and the Arizona Public Service Company (“APS”) (together, the “parties”); and (2) a notice of termination of the existing Interconnected Control Area Operating Agreement (“ICAOA”) between the CAISO and APS.<sup>1</sup>

The ABAOA supersedes and replaces the ICAOA. Both the ABAOA and ICAOA address the interconnected operating relationship between the CAISO and APS. The ABAOA, however, contains fewer provisions than the ICAOA because most of the provisions of the ICAOA are now covered by reliability standards that went into effect after the Commission accepted the ICAOA. The ABAOA also reflects the implementation of an arrangement between APS and the CAISO pursuant to which the new Hassayampa-North Gila 500 kV line (“HANG2 line”), which is now undergoing testing and is expected to go into

---

<sup>1</sup> The CAISO submits this filing 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.

service as early as May 21, 2015, and will be located in the CAISO balancing authority area on an interim basis.<sup>2</sup>

The CAISO respectfully requests that the Commission grant waiver of its notice requirements to permit the ABAOA to go into effect as of May 22, 2015 (*i.e.*, one day after the earliest expected in-service date of the HANG2 line) and to permit the ICAOA to be terminated as of that same date.

## **I. Termination of the ICAOA**

The ICAOA defines the terms and conditions governing operational responsibilities, scheduling and dispatch functions, the coordination of outages, and emergency arrangements for the CAISO and APS control areas.

The original version of the ICAOA was filed with the Commission on December 10, 1997 in Docket No. ER98-1028-000. In a letter order issued February 25, 1998, the Commission accepted that filing, subject to suspension, hearing procedures, and refund procedures.<sup>3</sup> On October 2, 1998, the CAISO filed an offer of settlement, which it proposed certain agreed-upon revisions. The Commission approved the offer of settlement in *California Independent System Operator Corporation*, 87 FERC ¶ 61,231 (1999) on July 28, 1999. The CAISO submitted a compliance report containing the revised version of the agreement in Docket No. ER98-1028-001, which the Commission accepted by letter order issued on March 14, 2001.

The Commission should accept the enclosed notice of termination of the ICAOA concurrent with its acceptance of the ABAOA. The ABAOA is intended to supersede and replace the ICAOA and, in conjunction with the North American Electric Reliability Corporation (“NERC”) reliability standards, the ABAOA addresses all matters previously included in the ICAOA. APS supports this termination.

---

<sup>2</sup> The CAISO is contemporaneously filing a separate amendment to the ABAOA in this proceeding with a requested effective date of July 23, 2015. The parties intend that Commission acceptance of the ABAOA contained in the instant filing be conditioned upon Commission acceptance of the separately filed amendment to the ABAOA. If the Commission accepts the ABAOA contained in the instant filing but does not accept the amendment to the ABAOA, the CAISO will make a filing to withdraw or modify the ABAOA contained in the instant filing in accordance with a mutual agreement to be reached by the parties.

<sup>3</sup> *California Independent System Operator Corp.*, 82 FERC ¶ 61,174 (1998).

## II. The ABAOA

The ABAOA sets forth the rates, terms, and conditions pursuant to which the CAISO and APS, as balancing authorities registered with NERC, operate the interconnection between their balancing authority areas and provide emergency assistance as required by the applicable NERC reliability standard.<sup>4</sup> The ABAOA will therefore replace the ICAOA upon Commission acceptance. The Commission has previously accepted similar agreements with respect to the CAISO's interconnected operating relationship with other adjacent balancing authorities.<sup>5</sup>

The ABAOA differs from the ICAOA in that it addresses fewer matters than previously addressed in the ICAOA. This is because NERC reliability standards adopted after the ICAOA was implemented effectively cover much of the subject matter previously included in the ICAOA.

As reflected in the similar agreements between the CAISO and other adjacent balancing authorities that the Commission has previously accepted, the CAISO's preferred approach to adjacent balancing authority operations with the entities to which it is interconnected is to defer to the NERC reliability standards to the maximum extent possible. This avoids confusion and potential inconsistency between a contractual obligation and a reliability standard. The ABAOA addresses all matters required by the reliability standards.

The ABAOA also contains provisions that address the interim configuration of the HANG2 line and related matters regarding the scheduling and settlement of transactions that use the HANG2 line.

---

<sup>4</sup> See NERC reliability standard EOP-001 (requiring an agreement for emergency assistance among neighboring balancing authorities).

<sup>5</sup> See Commission orders issued in Docket No. ER09-1630-000 (accepting the amended ABAOA between the CAISO and the Bonneville Power Administration), Docket No. ER10-1761-000 (accepting the ABAOA between the CAISO and the Imperial Irrigation District), Docket No. ER11-3387-000 (accepting the ABAOA between the CAISO and the Balancing Authority of Northern California and termination of the Interconnected Control Area Operating Agreement between the CAISO and the Sacramento Municipal Utility District), Docket No. ER13-224-000 (accepting the ABAOA between the CAISO and the Nevada Power Company, doing business as NV Energy), and Docket No. ER14-568-000 (accepting the ABAOA between the CAISO and the Western Area Power Administration – Desert Southwest Region).

**A. The HANG2 Line**

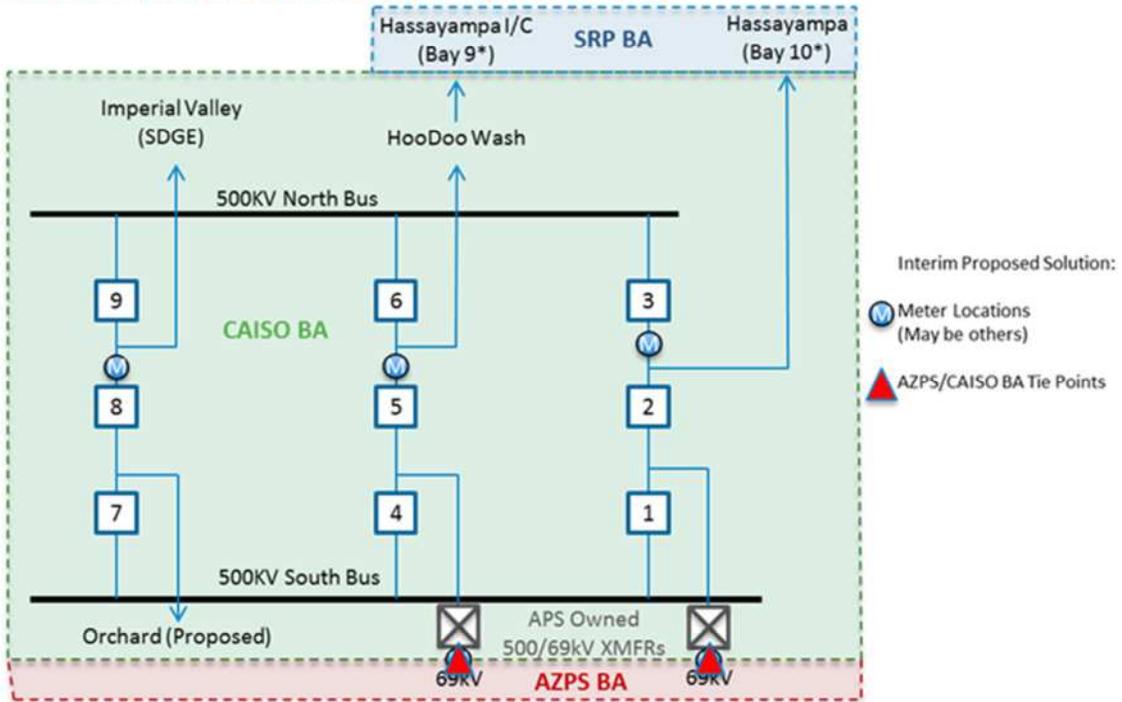
The HANG2 line was developed with the intent that it be located in the APS balancing authority area with an interconnection to the balancing authority area of the Salt River Project Agricultural Improvement and Power District at the Hassayampa switchyard and to the CAISO balancing authority area at the North Gila switchyard. APS and the Imperial Irrigation District (“IID”) are co-owners of the HANG2 line. APS is testing the HANG2 line and plans to put it in service as early as May 21, 2015 to support its summer operations.

The CAISO was notified on March 12, 2015 that APS intended to locate these facilities in its balancing authority area and place them in service in late May. This did not allow sufficient time for the CAISO to make the necessary modeling and procedural changes to include the HANG2 line in APS’s balancing authority area at the time the line goes into service. Accordingly, the ABAOA reflects an interim configuration that places the HANG2 line in the CAISO’s balancing authority area and treats that line as a transmission ownership right for the approximately two-month period (May 22 to July 23, 2015) until the changes required for the long-term configuration can be implemented.<sup>6</sup> The interim configuration is illustrated below in a diagram depicting the North Gila switchyard and the various transmission lines that tie into that switchyard.

---

<sup>6</sup> See *generally* CAISO Tariff section 17 and Schedule A to the ABAOA. This will provide the owners of the HANG2 line with much the same rights as if the HANG2 line were located in the APS balancing authority area, except that transactions using the HANG2 line must be scheduled with the CAISO and certain CAISO tariff charges will apply.

Interim Proposed BA AREA Solution (through July 23, 2015):



## B. Interim Configuration Scheduling and Settlement

The CAISO recognizes the owners' intent to locate the HANG2 line in the APS balancing authority area, and APS acknowledges that it did not provide the CAISO with sufficient notice to achieve its objective prior to the line going into service, thereby avoiding the need for an interim configuration. Accordingly, Schedule A to the ABAOA reflects the parties' agreement that during the period that the interim configuration is in effect, APS will schedule transactions on the HANG2 line and the CAISO will not apply the grid management charge to schedules on the HANG2 line. This reflects a reasonable accommodation given the very brief period of time in which the interim configuration will be in place. Moreover, but for a lack of notice and the need to place the line in service prior to summer operations, this accommodation would not even be necessary.

In addition, Schedule A to the ABAOA states that all other CAISO market charges applicable to transmission ownership rights scheduled in the CAISO systems, including losses, will apply to transactions on the HANG2 line during the period that the interim configuration is in place. Implementing this agreement with the interim configuration supports the facilities going into service as early as May 21, 2015 in advance of summer operations, is consistent with the owners' intent to ultimately locate the HANG2 line in the APS balancing authority area, and will only be in place for approximately two months until the long-term configuration is implemented. This agreement has been executed by the CAISO and APS and is also supported by the other co-owner of the HANG2 line, IID. To

the best of the CAISO's knowledge, no entity objects to this agreement. For these reasons, the Commission should accept the executed ABAOA, effective as of May 22, 2015.

#### **IV. Effective Date and Request for Waiver**

The CAISO respectfully requests that the Commission accept the ABAOA effective as of May 22, 2015, *i.e.*, one day after the date the earliest date that the HANG2 line is expected to be placed in service. The CAISO also requests that the Commission accept the notice of termination of the ICAOA as of May 22, 2015.

The CAISO requests waiver of the notice requirements set forth in the Commission's regulations to permit this effective date.<sup>7</sup> As shown in the ABAOA, May 22 is the effective date that the CAISO and APS have agreed upon in order to facilitate the ability of APS to meet the intended in-service date for the HANG2 line. Granting the requested effective date and waiver, therefore, is appropriate.

The CAISO has submitted the ABAOA with a requested effective date of May 22, 2015, one day after the earliest expected in-service date. However, the actual in-service date may be other than May 22. Consequently, the CAISO will submit a subsequent filing reflecting a revised effective date of the ABAOA and termination of the ICAOA if in fact the in-service date is other than expected.

#### **V. Attachments**

In addition to this transmittal letter, the following attachments support the instant filing:

- |              |  |
|--------------|--|
| Attachment A | the ABAOA (CAISO Rate Schedule No. 78); and                          |
| Attachment B | the notice of termination of the ICAOA (CAISO Rate Schedule No. 17). |

---

<sup>7</sup> Specifically, pursuant to Section 35.11 of the Commission's regulations (18 C.F.R. § 35.11), the CAISO requests waiver of the notice requirements set forth in Section 35.3 of the Commission's regulations (18 C.F.R. § 35.3).

The Honorable Kimberly D. Bose

May 21, 2015

Page 7

## **VI. Service**

The CAISO has served copies of this filing upon APS, IID, the Salt River Project Agricultural Improvement and Power District, San Diego Gas & Electric Company, Southern California Edison Company, the California Public Utilities Commission, and the California Energy Commission. In addition, the filing has been served upon all CAISO scheduling coordinators and has been posted on the CAISO website.

## **VII. Correspondence**

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

John C. Anders  
Lead Counsel  
California Independent System  
Operator Corporation  
250 Outcropping Way  
Folsom, CA 95630  
Tel: (916) 608-7287  
E-mail: [janders@caiso.com](mailto:janders@caiso.com)

The Honorable Kimberly D. Bose

May 21, 2015

Page 8

**VIII. Conclusion**

The CAISO respectfully requests that the Commission accept the ABAOA and notice of termination of the ICAOA contained in this filing effective as of May 22, 2015. Please contact the undersigned with any questions.

Respectfully submitted,

**By: /s/ John C. Anders**

Roger E. Collanton

General Counsel

Sidney L. Mannheim

Assistant General Counsel

John C. Anders

Lead Counsel

California Independent System

Operator Corporation

250 Outcropping Way

Folsom, CA 95630

Tel: (916) 608-7287

[janders@caiso.com](mailto:janders@caiso.com)

Attorneys for the California Independent  
System Operator Corporation

**Attachment A – Adjacent Balancing Authority Operating Agreement**

**Rate Schedule 78 – Arizona Public Service Company ABAOA**

**California Independent System Operator Corporation**

California Independent System Operator Corporation  
Rate Schedule No. 78

---

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

**AND**

**ARIZONA PUBLIC SERVICE COMPANY**

**ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT**

---

Proposed Effective Date: May 22, 2015  
Version Number: 0.0.0



**ADJACENT BALANCING AUTHORITY OPERATING AGREEMENT**

**Executed by**

**ARIZONA PUBLIC SERVICE COMPANY**

**and**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

This Adjacent Balancing Authority Operating Agreement, (“Agreement”) dated as of May 19, 2015, is between the Arizona Public Service Company having its registered and principal executive office at 400 North 5<sup>th</sup> Street, Phoenix, Arizona 85004-3902 (“APS”) and the California Independent System Operator Corporation (“CAISO”), a California nonprofit public benefit corporation having a principal executive office located at 250 Outcropping Way, Folsom California 95630. Each is referred to herein as a “Party” and collectively as the “Parties.”

**Recitals**

A) Each Party is a member of the Western Electricity Coordinating Council (“WECC”), an organization whose members are located in the Western Interconnection as defined in the WECC Bylaws and is registered with WECC as a Balancing Authority pursuant to the North American Electric Reliability Corporation (“NERC”) Reliability Functional Model and Registry Criteria.

B) Federal Energy Regulatory Commission (“FERC”) approved mandatory NERC Reliability Standards for the Bulk-Power Systems of North America include Standard EOP-001 which provides that each Balancing Authority is required to develop, maintain, and implement a set of plans to mitigate operating emergencies, and to coordinate such plans with other Balancing Authorities. EOP-001, which may be revised from time to time, directs Balancing Authorities to have operating agreements in place with adjacent Balancing Authorities that, at a minimum, contain provisions for emergency assistance, including provisions to obtain emergency assistance from remote Balancing Authorities.

C) The Parties are adjacent Balancing Authorities by virtue of their transmission systems being interconnected at one or more points. The CAISO has responsibilities as a Balancing Authority and operates the CAISO Balancing Authority Area. APS has responsibilities as a Balancing Authority and operates the AZPS Balancing Authority Area.

D) The Hassayampa-North Gila 500 kV line (HANG2) was developed by APS and the Imperial Irrigation District (“IID”) with the intent that it be located in the APS Balancing Authority Area. The HANG2 line is intended to energize on May 21, 2015



and there is not sufficient time to implement all necessary changes to locate the HANG2 line in the AZPS Balancing Authority Area. Accordingly, the Parties desire to establish a temporary arrangement with the HANG2 line located in the CAISO's Balancing Authority Area, which would include waiver of Grid Management Charges for schedules on the HANG2 line until the HANG2 line can be transferred to the AZPS Balancing Authority Area. The transfer of the HANG2 line will include a change to the Balancing Authority Area boundary among APS, CAISO, and Salt River Project Agricultural Improvement and Power District ("SRP"), which is the subject of an amendment concurrently executed with this Agreement (the "First Amendment"). The Parties agree that the First Amendment to this Agreement be made effective on July 23, 2015.

E) The Parties intend by this Agreement to identify each Party's responsibility to the other under the Requirements of EOP-001 by recognizing the continuing commitment of each Party to the other to cooperate to mitigate operating emergencies.

Therefore, the Parties mutually agree as follows:

## 1. Definitions

### 1.1 NERC Definitions

1.1.1 Except as defined in Section 1.2 or as otherwise defined in this Agreement, terms and expressions used in this Agreement shall have the same meanings as those contained in the NERC Glossary of Terms Used in Reliability Standards.

### 1.2 Specific Definitions

1.2.1 CAISO Tariff: CAISO operating agreement and tariff as amended from time to time.

1.2.2 Grid Management Charge: The CAISO monthly charge on all Scheduling Coordinators approved by FERC provides for the recovery of the CAISO's costs listed in Section 11.22.2 through the service charges described in Section 11.22.2.5 of the CAISO Tariff. The charges that comprise the Grid Management Charge consist of: 1) the Market Services Charge, 2) the System Operations Charge, 3) the CRR Services Charge, 4) the TOR Charge, 5) the Bid Segment Fee, 6) the CRR Transaction Fee, 7) the Inter-Scheduling Coordinator Trade Transaction Fee and 8) the Scheduling Coordinator ID Charge.

1.2.3 Scheduling Coordinator: An entity certified by the CAISO for the purposes of undertaking the functions of: submitting bids and self-schedules for energy, generation, transmission losses, and ancillary services; coordinating generation; tracking, billing, and settling trades with other Scheduling



Coordinators; submitting forecast information; paying the CAISO's charges; and ensuring compliance with CAISO protocols.

## **2. Term and Termination**

2.1 This Agreement shall be effective as of the date of execution, provided that the provisions of Schedules A and B shall not be effective until the later of: (1) the date of execution, or (2) the date this Agreement is accepted for filing and made effective by FERC pursuant to a filing with FERC by the CAISO (the "Effective Date") without any material modification or condition that is unacceptable to either Party in that Party's sole discretion. If any material modification or condition is ordered by FERC that is unacceptable to a Party, such Party shall communicate its lack of consent to such modification or condition to the other Party within ten (10) business days after the date on which FERC issues its order, and the Parties shall use best efforts to negotiate mutually acceptable revisions to this Agreement to address the modification or condition. Upon the occurrence of the Effective Date, this Agreement shall remain in effect until terminated by either Party upon thirty (30) days advance written notice to the other Party or upon written consent of both Parties. The CAISO shall file a notice of termination with FERC as soon as practicable but no later than thirty (30) days after its issuance or receipt of such advance written notice of termination or the date of the Parties' written consent. Termination will be effective upon acceptance of the notice of termination by FERC; provided, however, APS will cease both to provide and to take any service under this Agreement as of: (i) thirty (30) days after issuance or receipt of an advance written notice of termination, or (ii) the date of the Parties' written consent, regardless of any action or inaction by FERC with respect to any application by the CAISO to terminate this Agreement.

## **3. Responsibilities of the Parties**

3.1 The Parties agree to cooperate to mitigate any operating emergencies by adhering to: (1) the mandatory NERC Reliability Standards and WECC Regional Reliability Standards which relate to emergency operations, as may be amended from time to time, and (2) the directives of the applicable Reliability Coordinator ("Reliability Coordinator").

3.2 To the extent possible, and in accordance with NERC mandatory Reliability Standards, each Party ("Delivering Party") shall assist the other Party ("Receiving Party") in an operating emergency by delivering emergency assistance to the requesting Receiving Party, including emergency capacity or energy transfers from such Delivering Party's Balancing Authority Area or from other remote Balancing Authorities over available transmission capacity, in accordance with Schedule B to this Agreement. Arrangements for deliveries of emergency capacity or energy transfers shall be through normal operating channels in accordance with EOP-001. Such emergency assistance shall be provided at the sole discretion of the entity supplying it and shall be recallable without advance notice as required to meet reliability requirements.



#### **4. Coordination and Communication**

4.1 In the event of an operating emergency that affects or may affect the reliable operation of interconnected transmission facilities, each Party shall coordinate its actions with the other Party, as such Party deems necessary or as directed by the appropriate Reliability Coordinator(s), to preserve or restore the interconnected transmission system to stable operations and to preserve or restore reliable, safe, and efficient service as quickly as practicable. The Parties shall, without delay, individually notify the appropriate Reliability Coordinator(s) as to the nature and extent of the operating emergency.

4.2 Each Party operates and maintains, or provides for operation and maintenance of a 24-hour, 7-day control center with real-time scheduling and control functions. The appropriate control center staff shall be responsible for operational communications and shall have sufficient authority to commit and bind that Party on decisions relating to emergency operations. The Parties agree to exchange operational contact information for insuring reliable communication in a format to be agreed to by the Parties and completed as of the effective date of this Agreement.

#### **5. Interconnection Points**

5.1 The Parties are adjacent Balancing Authorities, and are interconnected at the points specified in Schedule A to this Agreement. In the event that new interconnection points are added, or existing points are modified or eliminated, Schedule A will be amended as necessary, to reflect any such changes that are mutually agreed upon by both Parties in a written agreement.

5.2 Schedule A is included for the sole purpose of identifying those interconnection points that result in the Parties being adjacent Balancing Authorities. This Agreement is not intended to act as an interconnection agreement between the Parties.

#### **6. Miscellaneous Provisions**

6.1 Exchange of Information and Confidentiality: When a Party (“Providing Party”) provides information to the other Party (“Receiving Party”) under this Agreement and marks such information as privileged or confidential commercial or financial information, critical energy infrastructure information, or trade secret information, the Receiving Party shall treat such information as confidential and protected from disclosure to the extent permitted by law. The Receiving Party shall promptly notify the Providing Party in writing of any request to release such information. The Parties agree to use such information only for purposes of performing each Party’s obligations under this Agreement. The provisions of this Section 6.1 shall survive the termination of this Agreement.



6.2 Amendment: The Parties may amend or modify this Agreement only by written agreement. In the event the mandatory NERC Reliability Standards including EOP-001 are revised or replaced, the Parties agree to abide by any such revisions and shall meet to discuss and determine whether such change will affect the terms and conditions of this Agreement and whether a modification or replacement of the Agreement is needed. An amendment that is subject to FERC approval shall not take effect until FERC has accepted such amendment for filing and has made it effective without any material modification or condition that is unacceptable to either Party in that Party's sole discretion. If any material modification or condition is ordered by FERC that is unacceptable to a Party, such Party shall communicate its lack of consent to such modification or condition to the other Party within ten (10) business days after the date on which FERC issues its order, and the Parties shall use best efforts to negotiate mutually acceptable revisions to this Agreement to address the modification or condition. Revisions to Schedules other than with regard to the contact information in Schedule C shall be processed as an amendment to this Agreement.

6.3 Assignment and Successors: Neither this Agreement nor any rights or responsibilities under this Agreement may be assigned by either Party to a third party without the written consent of the other Party, and such consent will not be unreasonably delayed, conditioned, or withheld. Subject to the preceding sentence, this Agreement is binding upon and will inure to the benefit of the Parties and their successors in interest.

6.4 Notices: Any notice, demand, or request which may be given to or made upon either Party regarding this Agreement shall be made in writing and shall be deemed properly served, given, or made: (a) upon delivery if delivered in person, (b) five (5) days after deposit in the mail if sent by first class United States mail, postage prepaid, (c) upon receipt of confirmation by return facsimile if sent by facsimile, or (d) upon delivery if delivered by prepaid commercial courier service. A Party must update the information in Schedule C of this Agreement relating to its address as that information changes. Such updates to Schedule C shall not constitute an amendment to this Agreement.

6.5 Governing Law and Forum: This Agreement shall be deemed to be a contract made under and for all purposes shall be governed by and construed in accordance with the laws of the State of California, except that if a dispute concerns the operation of transmission lines or facilities, the law of the state where the transmission lines or facilities are located will control. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement shall be brought in any of the following forums, as appropriate: a court of the State of California or any federal court of the United States of America located in the State of California or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission. No provision of this Agreement shall be deemed to waive the right of any Party to protest, or challenge in any manner, whether this Agreement, or any action or proceeding arising under or



relating to this Agreement, is subject to the jurisdiction of the Federal Energy Regulatory Commission.

6.6 No Warranties or Representations; Disclaimer: All information, including confidential information, provided by the Providing Party under this Agreement carries no warranty or representation of any kind, either express or implied. The Receiving Party receives the information “as is” and with all faults, errors, defects, inaccuracies, and omissions. The Providing Party makes no representations or warranties whatsoever with respect to the availability, timeliness, accuracy, reliability, or suitability of any information. The Receiving Party disclaims and waives all rights and remedies that it may otherwise have with respect to all warranties and liabilities of the Providing Party, expressed or implied, arising by law or otherwise, with respect to any faults, errors, defects, inaccuracies or omissions in, or availability, timeliness, reliability, or suitability of the information. Each Party assumes any and all risk and responsibility for selection and use of, and reliance on, any information provided under this Agreement.

6.7 Liability: The Parties’ duties and standard of care with respect to each other, and the benefits and rights conferred on each other, shall be no greater than as explicitly stated herein. Neither Party, its directors, officers, employees, nor agents, shall be liable to the other Party for any loss, damage, claim, cost, charge, or expense, whether direct, indirect, or consequential, arising from the Party’s performance or nonperformance under this Agreement, except for a Party’s gross negligence or willful misconduct subject to applicable law. Except as otherwise expressly provided herein, nothing in this Agreement shall be construed or deemed to confer any right or benefit on, or to create any duty to, or standard of care with reference to any third party, or any liability or obligation, contractual or otherwise, on the part of either Party.

6.8 Waivers: Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or matter arising in connection with this Agreement. Any delay short of the statutory period of limitations, in asserting or enforcing any right under this Agreement, shall not constitute or be deemed a waiver of such right.

6.9 Authority: Each individual signing this Agreement certifies that the Party represented has duly authorized such individual to sign, bind, and obligate such Party.



Accepted and agreed to by:

**California Independent System Operator Corporation**

By:  DocuSigned by:  
0971A84CB55B4B8

---

Name: Eric Schmitt

---

Title: VP, operations

---

Date: 5/19/2015

---

**Arizona Public Service Company**

By: \_\_\_\_\_

Name: Ted Geisler

Title: Director, Transmission Operations & Maintenance

Date: \_\_\_\_\_



Accepted and agreed to by:

**California Independent System Operator Corporation**

**Arizona Public Service Company**

By:

By:

\_\_\_\_\_

\_\_\_\_\_

Name:

Name: Ted Geisler

\_\_\_\_\_

Title:

Title: Director, Transmission Operations & Maintenance

\_\_\_\_\_

Date:

Date:

\_\_\_\_\_

\_\_\_\_\_ 5/19/15



## Schedule A

### ADJACENT BALANCING AUTHORITY INTERCONNECTION POINTS [Sections 5.1, 5.2 and 6.2]

The Interconnection between CAISO and APS is made up of two Interconnection points. These Interconnection points run normally closed.

- **Eldorado - Moenkopi 500 kV Line**

This Interconnection is comprised of one 500 kV line that connects the APS Moenkopi Substation north of Flagstaff in central northern Arizona, with the SCE attended Eldorado Substation near Boulder City, Nevada.

**Transmission Operator Point of Interconnection:**

Middle of the Colorado River

**Transmission Owner (TO):**

Southern California Edison Company (SCE) and APS

**TOs Point of Change of Ownership:**

Middle of the Colorado River

**CAISO & APS Balancing Authority Area Point of Interconnect:**

Middle of the Colorado River

**Roles and Responsibilities:**

The CAISO is the Balancing Authority West of the Balancing Authority Point of Interconnection.

Under the NERC Coordinated Functional Registration between CAISO and SCE, CAISO and SCE are the Transmission Operator (TOP) of the line West of the Transmission Operator Point of Interconnection.

APS is the Transmission Operator (TOP) of the line East of the Transmission Operator Point of Interconnection.

APS is the Balancing Authority East of the Balancing Authority Point of Interconnection.

**Metering Point:**

Eldorado – Moenkopi 500 kV line termination at the Eldorado Switchyard



- **North Gila 500 kV/69 kV Interconnection**

This Interconnection is comprised of two 500 kV/69 kV transformer banks that connect the CAISO and APS Balancing Authority Areas.

**Transmission Operator Point of Interconnection:**

First tower East of the Colorado River on the Imperial Valley-North Gila 500kV line.

**CAISO & APS Balancing Authority Area Points of Interconnect**

1. North Gila #1 500/69 kV transformer bank.
2. North Gila #4 500/69 kV transformer bank

**Transmission Owners:**

1. APS, SDGE, & IID share ownership in the Hassayampa-Hoodoo Wash-North Gila 500kV line (ATS/HANG1) and a portion of the North Gila 500kV Switchyard.
2. APS & IID share ownership rights in the Hassayampa-North Gila 500kV line (HANG2) and a portion of the North Gila Switchyard.
3. SDGE & IID share ownership rights in the North Gila-Imperial Valley 500kV line.

**Roles and Responsibilities:**

The CAISO is the Balancing Authority for the North Gila Switchyard, ATS/HANG1 line, and the HANG2 line.

Under the NERC Coordinated Functional Registration between CAISO and SDGE, CAISO and SDGE are the Transmission Operator (TOP) West of the Transmission Operator Point of Interconnection.

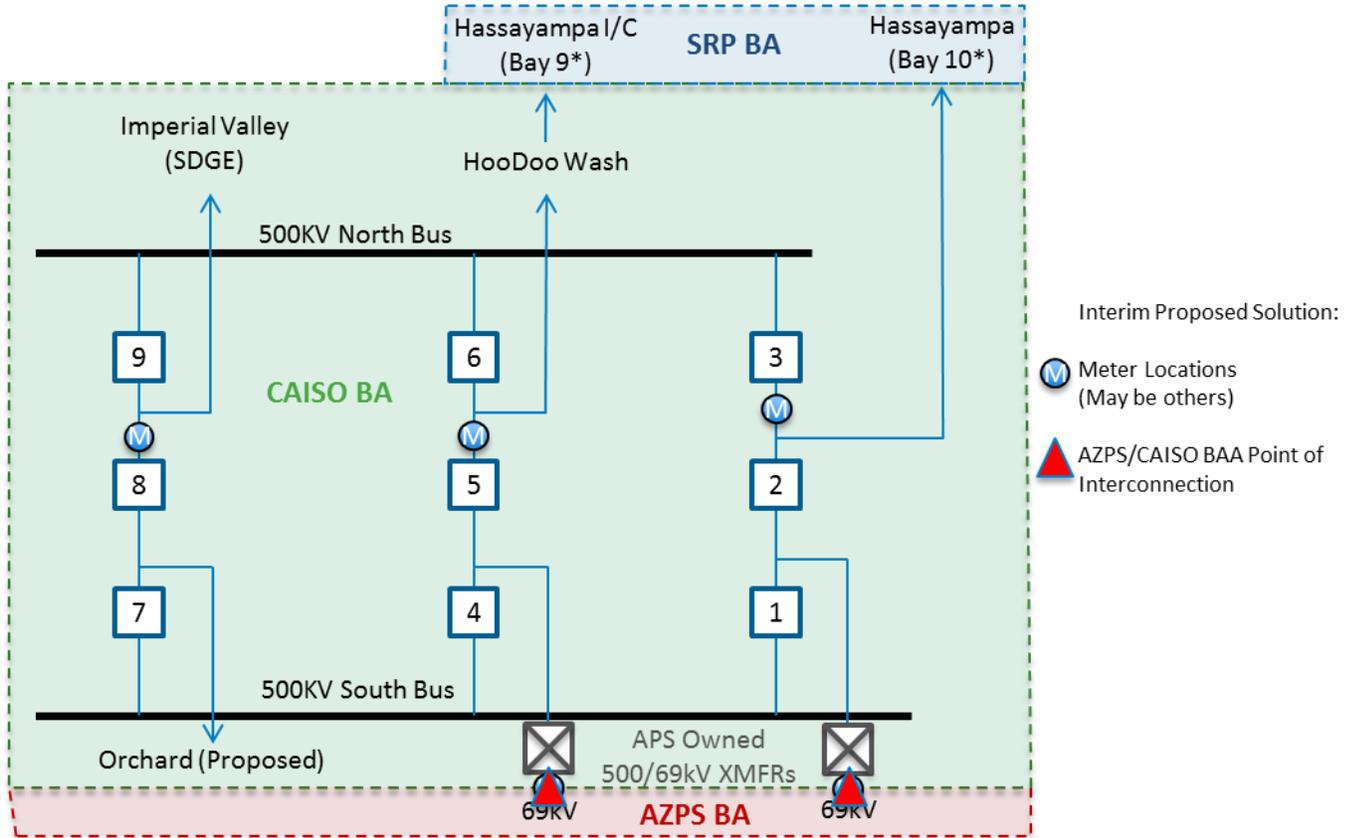
APS is the Transmission Operator (TOP) East of the Transmission Operator Point of Interconnection. APS as Transmission Operator shall abide by those certain NERC operating standards.

**Metering Points:**

1. Low side of the #1 and #4 500/69kV transformers at North Gila Switchyard compensated for transformer losses to the High Side of the 500kV/69kV transformers.

**One-Line Diagram for North Gila Switchyard:**

**Interim Proposed BA AREA Solution (through July 23, 2015):**



**Scheduling on HANG2:**

The HANG2 line owners or its designated Scheduling Coordinator shall schedule with the CAISO all transactions on the HANG2 line in accordance with the scheduling provisions of the CAISO Tariff, applicable Business Practice Manual, CAISO scheduling process, CAISO procedures and CAISO time lines. The HANG2 line owners' Scheduling Coordinator shall meet all requirements with respect to Scheduling Coordinators in the CAISO Tariff. All schedules submitted on the HANG2 line shall be submitted into the CAISO market transmission reservation system and shall be submitted by the HANG2 line owners' Scheduling Coordinator.

**CAISO Grid Management Charges:**

The CAISO shall treat HANG2 as a transmission ownership right in accordance with section 17.3 of the CAISO Tariff, except that the CAISO shall waive Grid Management Charges applicable to schedules on HANG2 during the temporary arrangement.



## **REVENUE METERING AND TELEMTRY AT INTERCONNECTION POINTS**

APS and CAISO metering shall meet any metering standards mutually agreed upon by the Parties for the purpose of operating their adjacent Balancing Authority Areas. APS and the CAISO shall be entitled to witness testing of the involved interconnection metering. Any change or modification to such metering equipment by APS, the CAISO or any other entity shall be coordinated between the Parties. APS shall allow daily, once a day, read-only access by the CAISO to direct poll revenue data from the interconnection revenue metering in five (5) minute intervals at the metering points identified in this Schedule A. The CAISO shall allow daily, once a day, read-only access by the APS to direct poll revenue data from the interconnection revenue metering in five (5) minute intervals at the metering points identified in this Schedule A.

APS and the CAISO shall maintain arrangements that ensure that both Parties shall have access to the same real-time data from the points identified in this Schedule A between their Balancing Authority Area interconnections for the purpose of complying with NERC reliability standards. The Parties understand that each Party wants to obtain MW and MVAR data from interconnection metering, which may include RTUs, at the points identified in this Schedule A between their Balancing Authority Area interconnections. The Parties agree to allow each other to directly poll real-time data from metering at the interconnection substations under the other Party's Balancing Authority Area or, in the case of HANG2 under the other Party's Transmission Operation (TOP). In the event that a second communication port of the RTU is not available for direct polling by a Party, the Party shall have the option to provide a RTU to the substation owner for the purpose of establishing a communication port available for direct polling by such Party.



## **Schedule B**

### **EMERGENCY CAPACITY AND ENERGY [Sections 3.2 and 6.2]**

In accordance with EOP-001 the Parties will, to the extent possible, assist each other in an emergency by scheduling energy and/or capacity. Such emergency assistance will be available at the sole discretion of the Party supplying it and will be recallable without advance notice as required to meet reliability requirements. The Parties will agree upon and log MW values, start, and end times, ramp rates and times, and integrated values for any emergency assistance provided.

The emergency assistance will be provided by a Party will be for system reliability. Such emergency assistance may be estimated prior to delivery and finalized in the settlement process.

The price paid for CAISO emergency assistance will be at the CAISO market price for the energy and/or capacity sold, plus all applicable charges, as specified in the CAISO Tariff provisions for emergency assistance. Such price may be estimated prior to delivery and finalized in the settlement process. Payment to the CAISO for emergency assistance provided by CAISO will be made by the Scheduling Coordinator representing APS, in accordance with the settlement process, billing cycle, and payment timeline set forth in the CAISO Tariff.

The price paid for APS emergency assistance will be at the price specified by APS. In the event APS does not specify the price for energy or capacity at the time of the request for emergency assistance and no other settlement price is established prior to the delivery of the emergency assistance, the default settlement price shall be the CAISO market price, plus all other applicable charges, as specified or as otherwise established in the CAISO Tariff for emergency assistance. If the default settlement price does not compensate APS for the value of the emergency assistance delivered to the CAISO, APS shall have the opportunity to justify a higher settlement price in accordance with the CAISO Tariff provisions for emergency assistance. Payment to APS for emergency assistance provided by APS will be made to the Scheduling Coordinator representing APS, in accordance with the settlement process, billing cycle, and payment timeline set forth in the CAISO Tariff.

Nothing in this Agreement shall obligate APS to be bound by CAISO Tariff provisions unless expressly provided for.



**Schedule C**

**CONTACTS FOR NOTICES  
[Sections 6.2 and 6.4]**

**CAISO:**

Name of Primary Representative:	Regulatory Contracts
Title:	N/A
Address:	250 Outcropping Way
City/State/Zip Code:	Folsom, CA 95630
Email Address:	Regulatorycontracts@caiso.com
Phone:	(916) 608-7027
Fax No.:	(916) 608-7292

Name of Alternate Representative:	Christopher J. Sibley
Title:	Manager, Regulatory Contracts
Address:	250 Outcropping Way
City/State/Zip Code:	Folsom, CA 95630
Email Address:	csibley@caiso.com
Phone:	(916) 608-7030
Fax No.:	(916) 608-7292

**APS:**

Name of Primary Representative:	Interconnect Development
Title:	N/A
Address:	400 North 5 <sup>th</sup> Street
City/State/Zip Code:	Phoenix, Arizona 85004
Email Address:	N/A
Phone:	N/A
Fax No.:	N/A

Name of Alternate Representative:	Joseph Wilhelm
Title:	Leader, Interconnect Development
Address:	400 North 5 <sup>th</sup> Street
City/State/Zip Code:	Phoenix, Arizona 85004
Email Address:	joseph.wilhelm@aps.com
Phone:	(602) 371-5735
Fax No.:	N/A

**Attachment B – Notice of Termination for Rate Schedule 17**

**California Independent System Operator Corporation**

