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## REDACTED VERSION FOR PUBLIC RELEASE

## PRIVILEGED INFORMATION CONTAINED IN SEPARATE VOLUME

May 16, 2008

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

**Re: California Independent System Operator Corporation  
Compliance Filing  
Docket No. ER08-617-\_\_\_**

Dear Secretary Bose:

The California Independent System Operator Corporation ("ISO") hereby submits an original and five copies of the instant filing in compliance with the Commission's "Order Conditionally Accepting Interconnected Balancing Authority Area Operating Agreement," 123 FERC ¶ 61,092, issued in the above-referenced proceeding on April 29, 2008 ("April 29 Order").

### **I. Compliance with the April 29 Order**

On February 29, 2008, the ISO submitted in the above-referenced proceeding the Interconnected Balancing Authority Area Operating Agreement as Amended and Restated ("Amended IBAAOA") between the ISO and the Western Area Power Administration, Desert Southwest Region ("WALC"). Parties submitted motions to intervene and comments regarding the ISO's February 29, 2008 filing, including comments in which the Metropolitan Water District of Southern California ("MWD") proposed changes to the Amended IBAAOA. On April 4, 2008, the ISO filed an answer to the comments in which it explained that, after discussing MWD's proposed changes with WALC, MWD, and Southern

California Edison Company, each of which is referenced in the Amended IBAAOA, the ISO would have no objection to making all of the changes to the Amended IBAAOA proposed in MWD's comments. In the April 29 Order, the Commission conditionally accepted the Amended IBAAOA, effective April 30, 2008, subject to the inclusion of the changes to the Amended IBAAOA proposed by MWD and agreed to by the ISO.<sup>1</sup>

Pursuant to the directives in the April 29 Order, the ISO submits the Amended IBAAOA with the changes proposed by MWD and agreed to by the ISO.

## **II. Request for Privileged Treatment**

As was the case with the Amended IBAAOA as originally submitted on February 29, 2008, included in a separate volume along with the instant compliance filing, pursuant to Commission Order Nos. 630 and 630-A,<sup>2</sup> is a sealed copy of the non-public portions of the Amended IBAAOA provided in Attachment A to the instant filing, specifically, all of Service Schedule 3 and contact information contained in Service Schedule 12. The ISO is seeking privileged treatment for these portions of Service Schedules 3 and 12 under 18 C.F.R. § 388.112, because they contain confidential contact information regarding ISO and WALC operating personnel. Because the information is sensitive and public disclosure of the information would unnecessarily reveal it, the ISO submits that the information should be exempt from public exposure and should be granted privileged treatment.

## **III. Materials Provided in the Instant Compliance Filing**

In addition to this transmittal letter, the instant compliance filing includes Attachments A and B. Attachment A contains the Amended IBAAOA incorporating the changes described in Section I above, in a format that complies with the Commission's Order No. 614.<sup>3</sup> Attachment B shows these changes to the Amended IBAAOA in black-line format.

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<sup>1</sup> April 29 Order at P 17.

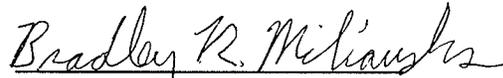
<sup>2</sup> *Critical Energy Infrastructure Information*, Order No. 630, FERC Stats. & Regs. ¶ 31,140, order on reh'g, Order No. 630-A, FERC Stats. & Regs. ¶ 31,147 (2003).

<sup>3</sup> *Designation of Electric Rate Schedule Sheets*, Order No. 614, FERC Stats. & Regs. ¶ 31,096 (2000).

The Honorable Magalie Roman Salas  
May 16, 2008  
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Two additional copies of this filing are enclosed to be date-stamped and returned to our messenger. If there are any questions concerning this filing, please contact the undersigned.

Respectfully submitted,



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# **ATTACHMENT A**

# **CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

## **INTERCONNECTED BALANCING AUTHORITY AREA OPERATING AGREEMENT**

**AS AMENDED AND RESTATED**

Issued by: Charles A. King, PE, Vice President of Market Development and Program Management

Issued on: May 16, 2008

Effective: April 30, 2008

Western Contract No. 99-DSR-11066

**Dated: \_\_\_\_\_ day of \_\_\_\_\_, 2008**

**WESTERN AREA POWER ADMINISTRATION**

**DESERT SOUTHWEST REGION**

**And**

**CALIFORNIA INDEPENDENT SYSTEM**

**OPERATOR CORPORATION**

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**INTERCONNECTED BALANCING AUTHORITY AREA  
OPERATING AGREEMENT**

**AS AMENDED AND RESTATED**

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**INTERCONNECTED BALANCING AUTHORITY AREA  
 OPERATING AGREEMENT, AS AMENDED AND RESTATED**

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## **INTERCONNECTED BALANCING AUTHORITY AREA OPERATING AGREEMENT, AS AMENDED AND RESTATED**

### **1 STANDARD OPERATING AGREEMENT**

#### **Interconnected Balancing Authority Area Operating Agreement, as amended and restated**

THIS INTERCONNECTED BALANCING AUTHORITY AREA OPERATING AGREEMENT, as amended and restated, (OPERATING AGREEMENT) is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2008 and is accepted by and between:

**Western Area Power Administration, Desert Southwest Region,** (Western) having its registered and principal executive office at 615 South 43<sup>rd</sup> Ave, Phoenix, Arizona 85009. Western is the designated Balancing Authority for Western Area Power Administration, Lower Colorado (WALC) service area and is herein referred to as WALC.

And

**California Independent System Operator Corporation (ISO),** a California nonprofit public benefit Corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630.

WALC and the ISO are hereinafter referred to as the Parties.

#### **Whereas:**

1. WALC operates a Balancing Authority Area that is interconnected with the ISO Balancing Authority Area (Interconnection).
2. The Parties wish to coordinate operation and maintenance of the Interconnection to satisfy North American Electric Reliability Corporation (NERC), or its successors, Reliability Standards and Western Electricity Coordinating Council (WECC), or its successors, Reliability Standards and if applicable, WECC Minimum Operating Reliability Criteria (MORC), as may be revised, and Good Utility Practice.

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3. The ISO has certain statutory obligations under California law to maintain power system reliability.
4. WALC has authority to maintain the reliability of Federal power systems which consist of the Pacific Northwest / Pacific Southwest Intertie Project, the Mead-Phoenix Project, the Parker-Davis Project and the Boulder Canyon Project which interconnect with ISO and Southern California Edison Company (SCE).

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

## **1.2 Purpose and Intent**

### **1.2.1 Purpose**

The purpose of this Operating Agreement is to establish the rights and obligations of the ISO and WALC with respect to the operation, maintenance, and control of the Interconnection. This Operating Agreement is based upon the ISO Tariff, NERC Reliability Standards, and WECC MORC, existing contracts between WALC, and Participating Transmission Owners comprising the ISO, and established operating procedures. This Operating Agreement acknowledges that other Transmission Owners may have concurrent rights and responsibilities.

### **1.2.2 Intent**

The intent of this Operating Agreement is to acknowledge contractual requirements, establish procedures, and designate responsibilities for the operation and management of the Interconnection. It is not the intent of this Operating Agreement to abrogate or alter the rights and obligations under existing contracts pertaining to the subject of Interconnection.

## **1.3 Term and Termination**

### **1.3.1 Effective Date**

This Operating Agreement shall be effective as of the later of the date of execution of this Operating Agreement or the date this Operating Agreement is accepted for filing and made effective by the Federal Energy Regulatory Commission (FERC), and shall continue in effect until terminated. This Operating Agreement shall supersede the Original Operating Agreement and subsequent Amendment No. 1.

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If FERC, in an order that has become final and non-appealable, requires a revision of or modification to the terms of this Operating Agreement, and if either party, in its sole discretion, determines that such revision or modification is unacceptable to it, then such party may terminate this Operating Agreement upon thirty (30) days' written notice to the other, provided that such written notice be given not less than thirty (30) days following the date on which such order becomes final and non-appealable.

### **1.3.2 Termination**

As a precondition, this Operating Agreement may be terminated by either Party upon two years advance written notice to the other Party or upon mutual consent of both Parties. For entities subject to FERC jurisdiction, termination will be effective upon acceptance of the notice of termination by FERC. The ISO shall file any notice of termination with FERC within thirty (30) days of receipt.

## **2 DEFINITIONS**

### **2.1 NERC Definitions**

Except as defined below, terms and expressions used in this Operating Agreement shall have the same meanings as those contained in the NERC Glossary of Terms Used in Reliability Standards.

### **2.2 Specific Definitions**

**2.2.1 Forced Outage:** An Outage for which sufficient notice cannot be given to allow the Outage to be factored into the preschedule processes and the established Outage coordination principles of the Balancing Authorities.

**2.2.2 Good Utility Practice:** Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry in the WECC region during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

- 2.2.3 Interconnection:** Transmission facilities that connect one Balancing Authority Area to another Balancing Authority Area. The Interconnection for this Operating Agreement is described in Service Schedule 1.
- 2.2.4 ISO:** The California Independent System Operator Corporation, a state-chartered, nonprofit corporation that controls the transmission facilities of all Participating Transmission Owners and dispatches certain generating units and loads and is the Balancing Authority.
- 2.2.5 ISO Controlled Grid:** The system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the ISO's operational control.
- 2.2.6 ISO Tariff:** ISO Operating Agreement, Protocols, and Tariff as amended from time to time, together with any appendices or attachments thereto.
- 2.2.7 Nomogram:** A set of operating or scheduling rules which are used to ensure that simultaneous operating limits are respected, in order to meet NERC and WECC operating criteria.
- 2.2.8 Outage:** Disconnection or separation, planned or forced, of one or more elements of an electric system.
- 2.2.9 Participating Transmission Owner:** An owner of transmission that has placed its transmission assets and entitlements under the ISO's operational control.
- 2.2.10 Planned Outage:** An Outage for which sufficient notice has been given to allow the Outage to be factored into the processes and the established Outage coordination principles of the Balancing Authorities.
- 2.2.11 Point of Contact:** A person or entity having the authority to receive and act upon scheduling or dispatch communications from the other Balancing Authority and available through a communications device mutually agreed upon on a 24-hour, 7-day basis.
- 2.2.12 Real-Time Operating Limits:** The rated transfer capability less reductions during any hour caused by, but not limited to, physical limitations beyond the control of the Balancing Authority, and operational limitations resulting from transmission line Outages, equipment Outages, stability limits and loop flow.

- 2.2.13 Reliability Standard:** A requirement approved by the FERC under Section 215 of the Federal Power Act to provide for reliable operation of the bulk power system. The term includes requirements for the operation of the existing bulk power system facilities, including cyber security protection, and the design of planned additions or modifications to such facilities to the extent necessary for the reliable operation of the bulk power system; but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.
- 2.2.14 Scheduling Coordinator:** An entity certified by the ISO for the purposes of undertaking the functions of: submitting 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 ISO's charges; and ensuring compliance with ISO protocols.
- 2.2.15 Transmission Owner:** An entity owning transmission facilities or entitlements at the Interconnection.
- 2.2.16 WECC Reliability Coordinator:** One of the area control centers assigned by the WECC to proactively anticipate and mitigate potential problems, facilitate notification, and coordinate restoration following a disturbance.

### **3 OPERATIONAL RESPONSIBILITIES**

#### **3.1 General Requirements**

##### **3.1.1 Standards to Be Met**

Both the ISO and WALC shall plan and operate the Interconnection in conformance with NERC and WECC Reliability Standards, WECC MORC, and Good Utility Practice.

##### **3.1.2 Existing Contracts**

The ISO will assume certain rights and responsibilities of Participating Transmission Owners in existing contracts, operating agreements, or procedures between WALC and the Participating Transmission Owners regarding the Interconnection where those rights and responsibilities pertain to the coordinated operation of the interconnected Balancing Authority Areas. The ISO and WALC, after consulting with affected Transmission Owners, shall develop the procedures to be used regarding those rights and responsibilities mentioned herein. The specific provisions of the aforementioned

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agreements which are affected by this Operating Agreement and the procedures for implementing such existing agreements are identified in Service Schedule 2.

### **3.1.3 Communication**

The ISO and WALC shall each operate and maintain a 24-hour, 7-day control center with real-time scheduling and Balancing Authority Area functions. Appropriate control center staff will be provided by each Party who shall be responsible for operational communications and who shall have sufficient authority to commit and bind that Party.

The ISO and WALC shall jointly develop communication facilities and procedures necessary to support scheduling, dispatch functions, and insure reliable functionality. The Points of Contact and the communication facilities are identified in Service Schedule 3.

## **3.2 Grid Operation**

### **3.2.1 Responsibility**

The Parties shall coordinate efforts consistent with NERC and WECC Reliability Standards and Good Utility Practice to mitigate adverse conditions that occur at the Interconnection. The ISO and WALC are each responsible for exercising operational control over facilities in their respective Balancing Authority Areas, and shall not exercise operational control over any part of the Interconnection facilities owned or operated by the other Balancing Authority except by mutual agreement. The respective jurisdictions for operational control by the ISO and WALC are identified in Service Schedule 4.

### **3.2.2 Switching Operations**

The ISO and WALC agree that the Transmission Owners retain possession of and will operate those interconnected facilities in accordance with the existing contracts and agreements in force between the Transmission Owners and WALC. Operations on the Interconnection shall be coordinated through the ISO and WALC except as otherwise indicated in subsection 7.3.1. Specific switching responsibilities are identified in Service Schedule 5.

### **3.2.3 Real-Time Operating Limits**

#### **3.2.3.1 Real-Time Operating Limits Established Jointly**

The ISO and WALC, in consultation with the Transmission Owners, shall jointly agree upon the Real-Time Operating Limits of the Interconnection. Real-Time Operating Limits shall be based on the given real-time conditions, current operating criteria, and established

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Nomograms, graphs, and charts specific to the transfer paths within WALC and the ISO. These established operating limits are specified in Service Schedule 6.

### **3.2.3.2 Real-Time Operating Limits Exceeded**

If a Real-Time Operating Limit is exceeded or the operation of either the WALC Balancing Authority or the ISO Balancing Authority is jeopardized, the ISO and WALC shall communicate and coordinate actions to return the affected Balancing Authority Area(s) to Real-Time Operating Limits. In compliance with WECC MORC, the ISO and WALC will make coordinated adjustments to energy flows between the two Balancing Authority Areas such that stability limited facilities are returned to Real-Time Operating Limits within 20 minutes after such limit is exceeded and thermally limited facilities are returned to Real-Time Operating Limits within 30 minutes after such limit is exceeded, or as otherwise established and mandated by NERC and WECC.

### **3.2.4 Relay Action**

The ISO and WALC shall provide pertinent relay data and related equipment condition and operational information concerning the Interconnection to each other as soon as practicable after the occurrence of any relay action on Interconnection equipment, including, as it becomes available, additional information regarding cause, condition, effects, and estimated corrective action. Notwithstanding the foregoing, the ISO and WALC shall agree upon corrective action and the procedure for returning to normal or adjusted operation.

### **3.2.5 Voltage Control**

The ISO and WALC shall coordinate the use of voltage control equipment to maintain transmission voltages and reactive flows at mutually agreed upon levels to ensure system stability within the operating range of electrical equipment and in accordance with NERC and WECC Reliability Standards and WECC MORC. The ISO and WALC shall operate the facilities at the Interconnection at reactive reserve margins that are adequate to maintain minimum acceptable voltage limits under facility Outage conditions. Agreed upon voltage schedule limits and reactive flows are specified in Service Schedule 7.

### **3.2.6 Information Exchange**

The ISO and WALC shall coordinate directly the exchange of any information concerning the reliable operation of the Interconnection facilities and the status of the Balancing Authority Areas. Such

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information shall be communicated through mutually acceptable methods. Procedures and forms for the exchange of emergency information shall be jointly developed and are contained in Service Schedule 8.

### **3.2.6.1 Information Required to be Provided**

Details regarding the information necessary to the reliable operation of the Interconnection are included in Service Schedule 9.

### **3.2.7 Joint Operating Procedures**

Procedures for coordinating the reliable operation of the Interconnection will be jointly implemented by the ISO, WALC, and the Transmission Owners. Such procedures are described in more detail in Service Schedule 10.

## **4 RELIABILITY COORDINATION**

The California-Mexico Reliability Coordinator (CMRC) has been designated the WECC Reliability Coordinator for WECC's California-Mexico Area. The ISO operates under the purview of the CMRC, and is subject to CMRC directives as set forth in the NERC Reliability Standards and the WECC California-Mexico Reliability Coordination Area Reliability Coordination Agreement. The Rocky Mountain Desert Southwest Reliability Coordinator (RDRC) has been designated the WECC Reliability Coordinator for WECC's Desert Southwest Area. WALC operates under the purview of the RDRC and is subject to RDRC directives as set forth in the NERC Reliability Standards and the Rocky Mountain - Desert Southwest Reliability Coordinator Empowerment Agreement.

## **5 SCHEDULING AND DISPATCH**

### **5.1 Coordination and Exchange of Information**

The ISO and WALC shall coordinate and exchange information on schedules and Balancing Authority Area checkouts at the Interconnection. All schedules at the Interconnection shall match. In accordance with NERC and WECC Reliability Standards and WECC MORC, the ISO and WALC shall verify, at mutually acceptable times, the actual and scheduled interchange numbers for past hours as well as scheduled interchange numbers for current and future hours. The ISO and WALC shall jointly develop methods and details for coordinating scheduling procedures, information exchange, and notifications in normal, emergency, and curtailment conditions. These methods and details are included in Service Schedule 11.

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## **5.2 Notifications**

The ISO and WALC shall jointly develop methods for coordinating the notification of all affected scheduling entities within their respective Balancing Authority Areas regarding schedule changes in emergency or curtailment conditions.

## **5.3 Import of Regulation Service by ISO**

The ISO and WALC shall allow for import of Regulation service, as defined in Service Schedule 16, from the WALC Balancing Authority Area to the ISO Balancing Authority Area, provided that WALC elects to support such service. See Service Schedule 16 for a more detailed description of this provision.

## **5.4 Import of Dynamically Scheduled Energy and Non-Regulation Ancillary Services by ISO**

The ISO and WALC shall allow for the import of dynamically scheduled energy and non-regulation ancillary services from the WALC Balancing Authority Area to the ISO Balancing Authority Area in accordance with the provisions of Service Schedule 17.

# **6 OUTAGE COORDINATION**

## **6.1 Maintenance Coordination**

Outages of facilities affecting the Interconnection shall be jointly coordinated by the ISO, WALC, and the Transmission Owner(s) to minimize a reduction and the duration of such reduction to the operating limits of the Interconnection. The ISO and WALC shall provide each other as much advanced notice as practicable to coordinate Planned Outages and scheduled maintenance affecting the Interconnection. Advance coordination of Outages should be maximized but not less than required to meet NERC and WECC Reliability Standards.

The ISO and WALC shall review Planned Outages and scheduled maintenance to determine the feasibility of initiating the switching process. If, given the current or anticipated system conditions at the time, the ISO and WALC jointly determine that system reliability may be impaired and the Outage may be canceled or rescheduled.

Outage coordination procedures to be followed will be jointly developed by the ISO and WALC and included in Service Schedule 12.

## **6.2 Forced Outages**

The ISO and WALC shall coordinate and implement operational changes necessary to accommodate Forced Outages, emergencies or curtailments. All notifications of Forced Outages, emergencies or curtailments shall be communicated between the ISO and WALC Balancing Authorities and the Transmission Owner(s) in accordance with NERC and WECC Reliability Standards. If notice prior to a Forced Outage, emergency, or curtailment cannot be given, the ISO or WALC shall notify the other Party of the event immediately after it occurs.

Forced Outage notifications shall be communicated by both control centers to other Balancing Authorities likely to be affected by the Forced Outage in accordance with NERC and WECC Reliability Standards.

## **7 EMERGENCY OPERATION**

### **7.1 Emergency Assistance Arrangements**

Service Schedule 13 details emergency assistance arrangements.

### **7.2 Unscheduled Flow Mitigation (Loop Flow)**

The ISO and WALC shall implement Unscheduled Flow Mitigation Procedures for their Balancing Authority Areas for their qualified paths, consistent with WECC procedures.

### **7.3 Emergency Action**

In the event of a system emergency, the ISO and WALC shall take coordinated action, as they consider necessary, or as directed by the WECC Reliability Coordinator, to preserve or restore stable operation of the interconnected grid and to preserve or restore reliable, safe, and efficient service as quickly as reasonably practicable in accordance with NERC and WECC Reliability Standards. The ISO and WALC shall, where practicable and without delay, keep operators in the affected Balancing Authority Areas and the appropriate WECC Reliability Coordinators informed as to the nature and extent of the system emergency.

#### **7.3.1 Operations Exercised Independently**

Emergency operation, in response to unforeseen system occurrences that may jeopardize the safety of personnel and the general public

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and/or system stability, may be performed independently by WALC, the ISO, and the Transmission Owner. WALC shall forward the outcomes of emergency operation to which it is a party to the ISO Control Center as soon as it is practicable after the occurrence. The ISO Control Center shall forward the outcomes of emergency operation to which it is a party to the WALC Balancing Authority as soon as it is practicable after the occurrence. The duties and responsibilities for the ISO Balancing Authority, the WALC Balancing Authority, and the Transmission Owner(s) under the foregoing circumstances are described in more detail in Service Schedule 14.

#### **7.4 Restoration Coordination**

The ISO and WALC shall coordinate restoration of the facilities affecting the Interconnection and, in accordance with NERC and WECC Reliability Standards, shall coordinate restoration actions with or under the direction of the WECC Reliability Coordinator. The ISO and WALC shall develop Interconnection restoration procedures, which shall be included in Service Schedule 15.

#### **7.5 Voltage Collapse**

The ISO and WALC shall take measures in their respective Balancing Authority Areas to arrest collapsing voltage that affects the Interconnection.

### **8 LIABILITY**

#### **8.1 Uncontrollable Forces**

An uncontrollable force means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond the reasonable control of a Balancing Authority which could not be avoided through the exercise of Good Utility Practice and compliance with NERC and WECC Reliability Standards.

Neither the ISO nor WALC will be considered in default of any obligation under this Operating Agreement or liable to the other for direct, indirect, or consequential damages if prevented from fulfilling that obligation due to the occurrence of an uncontrollable force.

In the event of the occurrence of an uncontrollable force, which prevents either the ISO or WALC from performing any obligations

under this Operating Agreement, the affected entity shall not be entitled to suspend performance of its obligations in any greater scope or for any longer duration than is required by the uncontrollable force. The ISO and WALC shall each use its best efforts to mitigate the effects of such uncontrollable force, remedy its inability to perform, and resume full performance of its obligations hereunder.

## **8.2 Liability To Third Parties**

Except as otherwise expressly provided herein, nothing in this Operating 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 ISO or WALC.

## **8.3 Liability Between the Parties**

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 or 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 Operating Agreement, except for a Party's negligence or willful misconduct, subject, to the extent applicable, to the limitations of the Federal Torts Claim Act.

## **8.4 Liability For Electric Disturbance and Interruptions**

The ISO and WALC shall plan, operate, and maintain their respective Balancing Authority Areas to minimize or avoid electric disturbances that may interfere with the Balancing Authority Area of the other Party, consistent with NERC and WECC Reliability Standards and Good Utility Practice. The limits of responsibility for the ISO and WALC shall each be for protecting their own respective Balancing Authority Area from possible damage by reason of electric disturbance or faults caused by the operation, faulty operation, or non-operation of their facilities.

Neither Party shall be liable to the other Party for any claim, demand, liability, loss, or damage, whether direct, indirect, or consequential, incurred by the Parties or their respective customers, which results from the separation of the systems in an emergency or interruption.

## **9 SERVICE SCHEDULES**

The ISO and WALC shall establish with each other and where appropriate with the Transmission Owner(s) specific procedures for the reliable operation and scheduling of the Interconnection facilities. The details of these particular operating procedures will be set forth in the applicable Service Schedule.

## **10 MISCELLANEOUS**

### **10.1 Assignments**

Either Party to this Operating Agreement may assign its obligations under this Operating Agreement, with the other Party's prior written consent. Such consent shall not be unreasonably withheld.

Obligations and liabilities under this Operating Agreement shall be binding on the successors and assigns of the Parties. No assignment of this Operating Agreement shall relieve the assigning Party from any obligation or liability under this Operating Agreement arising or accruing prior to the date of assignment.

### **10.2 Notices**

Any notice, demand, or request which may be given to or made upon either Party regarding this Operating 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 Service Schedule 3 relating to its address as that information changes.

### **10.3 Waivers**

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

## **10.4 Governing Law and Forum**

Subject to subsection 10.5, this Operating 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 or of the United States, as applicable, 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 or the laws of the United States, as applicable, will control. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Operating Agreement shall be brought in any of the following forums, as appropriate: 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 Operating Agreement shall be deemed to waive the right of any Party to protest, or challenge in any manner, whether this Operating Agreement, or any action or proceeding arising under or relating to this Operating Agreement, is subject to the jurisdiction of the Federal Energy Regulatory Commission.

## **10.5 Consistency with Federal Laws and Regulations**

(a) Nothing in this Operating Agreement shall compel any person or Federal entity to: (1) violate Federal statutes or regulations; or (2) in the case of a Federal agency, to exceed its statutory authority, as defined by any applicable Federal statutes, regulations, or orders lawfully promulgated thereunder. If any provision of this Operating Agreement is inconsistent with any obligation imposed on any person or Federal entity by Federal law or regulation to that extent, it shall be inapplicable to that person or Federal entity. No person or Federal entity shall incur any liability by failing to comply with any provision of this Operating Agreement that is inapplicable to it by reason of being inconsistent with any Federal statutes, regulations, or orders lawfully promulgated thereunder; provided, however, that such person or Federal entity shall use its best efforts to comply with the ISO Tariff to the extent that applicable Federal laws, regulations, and orders lawfully promulgated thereunder permit it to do so.

(b) If any provision of this Operating Agreement requiring any person or Federal entity to give an indemnity or impose a sanction on any person is unenforceable against a Federal entity, the ISO shall submit to the Secretary of Energy or other appropriate Departmental Secretary a report of any circumstances that would, but for this provision, have rendered a Federal entity liable to indemnify any person or incur a sanction and may request the Secretary of Energy or other appropriate Departmental Secretary to take such steps as are

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necessary to give effect to any provisions of this Operating Agreement that are not enforceable against the Federal entity.

## **10.6 Severability**

If any term, covenant, or condition of this Operating Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Operating Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Operating Agreement.

## **10.7 Section Headings**

Section headings provided in this Operating Agreement are for ease of reading and are not meant to interpret the text in each Section.

## **10.8 Amendments**

This Operating Agreement including the Service Schedules and Attachments attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that are subject to FERC approval shall not take effect until FERC has accepted such amendments for filing and has made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information.

## **10.9 Counterparts**

This Operating Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Operating Agreement.

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The Parties hereto have caused this Operating Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date written in Section 1.

**California Independent System Operator Corporation**

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Western Area Power Administration, Desert Southwest Region**

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_

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**SERVICE SCHEDULE 1**

**INTERCONNECTION**

**[Subsection 2.2.3]**

The Interconnection between the ISO and WALC is comprised of six (6) Interconnections comprised of five (5) 230 kV Interconnections, four (4) at the Mead Substation, and one (1) at the Gene 230 kV Switchyard and one (1) 161 kV Interconnection at Blythe Substation. The Interconnections are with the following Transmission Owners.

**With SCE:**

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2 (WECC Path 58):

The Eldorado - Mead 230 kV Transmission Lines connect SCE's Eldorado Substation to the WALC Mead Substation.

ISO Terminal: Mead Substation

Participating Transmission Owner: SCE

WALC Terminal: Mead Substation

Point of Interconnection: Mead Substation

Blythe 161 kV Substation:

The Blythe 161 kV Substation connects SCE's Blythe 161 kV bus to WALC's Blythe 161 kV bus (WECC Path 59).

ISO Terminal: SCE Blythe 161 kV bus

Participating Transmission Owner: SCE

WALC Terminal: Blythe 161 kV bus

Point of Interconnection: WALC Blythe 161 kV Substation

**With The Metropolitan Water District (MWD):**

Camino - Mead 230 kV East and West Transmission Lines:

Connects MWD's Camino Substation to WALC's Mead Substation.

ISO Terminal: Mead Substation

Participating Transmission Owner: SCE

WALC Terminal: Mead Substation

Point of Interconnection: Mead Substation

Gene (MWD) - Parker 230 kV Transmission Line:

Connects MWD's Gene Pumping Plant to WALC's Parker Generating Plant.

ISO Terminal: Gene 230 kV Switchyard

Participating Transmission Owner: SCE

Transmission Owner: MWD

WALC Terminal: Parker Generating Station

Point of Interconnection: Gene 230 kV Switchyard

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

WALC has in service revenue quality metering at all Interconnection points. ISO has in service RTUs connected to revenue quality metering at all Interconnection points. WALC and ISO metering shall meet the standards as mutually agreed by the Parties. Meters are inspected and tested per existing agreements between WALC, ISO, and the respective Transmission Owner(s). WALC and the ISO shall be entitled to witness testing of the involved Interconnection metering. Any change or modification to such metering equipment by WALC or any other entity shall be coordinated between the Parties. WALC shall allow daily, once a day, read-only access by the ISO to direct poll revenue data from the Interconnection revenue metering in thirty (30) minute intervals with a future upgrade to five (5) minute intervals.

WALC and the ISO shall maintain arrangements that ensure that both Parties shall have access to real-time data from the points identified in this Service Schedule between their Balancing Authority Area Interconnections. The Parties understand that each Party wants to interrogate MW and MVAR data from Interconnection metering, which may include RTUs, at the points identified in this Service Schedule between their Balancing Authority Area Interconnections. The Parties agree to allow each other to directly poll real-time data from the other Party's identified substations and will work together to facilitate direct polling of real-time data from substations of other entities, as required, in a timely manner. 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.

## **Communication Facilities**

In accordance with NERC Reliability Standards, as may be revised from time to time, the ISO and WALC shall provide adequate and reliable telecommunications facilities internally and with other systems, such as Balancing Authority Areas, and Regions to assure the exchange of Interconnection information necessary to maintain reliability. These facilities shall be redundant and diversely routed as required by WECC.

**SERVICE SCHEDULE 2**

**EXISTING CONTRACT PROVISIONS AND PROCEDURES**

**[Subsection 3.1.2]**

**Existing Transmission Service Contracts:**

SCE, as the Participating Transmission Owner, is responsible for providing the ISO with this Service Schedule, outlining the instructions for WALC's existing contracts.

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**SERVICE SCHEDULE 3**

**POINTS OF CONTACT**

**[Subsections 3.1.3, 10.2]**

**Privileged Material Redacted Pursuant  
To 18 C.F.R. § 388.112**

## **SERVICE SCHEDULE 4**

### **RESPECTIVE JURISDICTION FOR OPERATIONAL CONTROL**

#### **[Subsection 3.2.1]**

#### **With SCE:**

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2:

WALC Jurisdiction and Responsibility: Mead Substation is owned, and maintained by WALC. All of the line terminal equipment, busses, and associated controls at Mead Substation are under the switching and clearance jurisdiction of WALC. WALC will arrange for switching personnel at Mead. All routine and emergency disconnect switching will be directed by WALC. Isolating disconnects for the No. 1 transmission line are Nos. 7481 and 7585, and isolating disconnects for the No. 2 transmission line are Nos. 7187 and 7281.

ISO/SCE Jurisdiction and Responsibility: The Eldorado-Mead 230 kV Transmission Line Nos. 1 and 2 are under the switching and clearance jurisdiction of SCE Eldorado Switching Center operator and the operational control of the ISO.

Blythe 161 kV Substation:

ISO/SCE Jurisdiction: SCE Devers Switching Center has operating and maintenance jurisdiction of the Blythe-Eagle Mountain 161 kV Line, 161 kV transformer disconnect switch Nos. 1173, 1273, and 1373, transformer bus sectionalizing disconnect No. 1371, and the #1, #2, #3 161/33 kV transformer banks and the 33 kV switchrack.

Operational Responsibility: Coordinated with SCE, WALC, the ISO, and MWD.

WALC Jurisdiction: WALC has operating and maintenance jurisdiction over the 161 kV operating and transfer busses, including disconnect switch Nos. 371 and 375.

Interconnection Metering: Metering CT's are located on the bus work between SCE's banks #1, #2, #3, and WALC's Blythe 161 kV switchyard.

#### **With MWD:**

Camino - Mead 230 kV East and West Transmission Lines:

Jurisdictional Boundary: MWD owns the transmission lines up to the Mead Substation bus and all of the facilities at Camino. WALC owns and has operational jurisdiction of the 230 kV bus work, breakers, and disconnects at Mead, East: Nos. 6387 and 6481 and West: Nos. 5881 and 5985.

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ISO/SCE Switching Responsibility: SCE, in coordination with the ISO, will authorize MWD switching at Camino. WALC will arrange for personnel at Mead.

WALC Switching Responsibility: Switching and clearances on any of the points of Interconnection will be coordinated among WALC, the ISO, SCE, and MWD.

Operational Responsibility: Coordinated with SCE, MWD, WALC, and the ISO.

Maintenance Responsibility: MWD owns and has maintenance jurisdiction of the transmission line up to the Mead bus and all the facilities at Camino. WALC owns and has maintenance responsibility of the 230 kV bus work, breakers, and disconnects at Mead.

Gene (MWD) - Parker 230 kV Transmission Line:

Jurisdiction Boundary: WALC owns the transmission line to the Gene transmission line-side disconnects. SCE owns CB No. 207 and disconnects at Gene.

ISO/SCE Switching Responsibility: SCE authorizes MWD to perform switching at Gene.

WALC Switching Responsibility: All switching at Parker.

Operational Responsibility: Coordinated, WALC, SCE, MWD, and the ISO.

Maintenance Responsibility: WALC has maintenance responsibility at Parker.

**SERVICE SCHEDULE 5**  
**SWITCHING OPERATIONS**  
**[Subsection 3.2.2]**

The ISO will coordinate all switching on ISO controlled terminals for the following lines with the dispatch and switching centers indicated:

**With SCE:**

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2:

All routine switching and clearances on the Eldorado - Mead Transmission Line Nos. 1 and 2 will be handled by SCE's Eldorado Switching Center and WALC Dispatch Office in Phoenix, Arizona. Eldorado Switching Center and WALC Dispatch Office shall confer before issuing switching orders. Either party must obtain an intercompany clearance from the other party before a transmission line clearance is issued to station or field personnel.

Testing Instructions: See SOP.

Blythe 161 kV Substation;

All switching on the Blythe 161 kV transformer bus will be handled jointly by WALC and SCE Devers System operator. Each party will issue switching orders and clearances to station or field personnel under its jurisdiction.

An intercompany clearance will be issued by the other party to the party performing the work. Neither party will issue a clearance to its station for station or field personnel until it has obtained a clearance from the other party.

Line Restoration Instructions: Coordinated by WALC, SCE, MWD, and the ISO.

Testing Instructions: Coordinated by WALC, SCE, MWD, and the ISO.

Monitoring and Control Instructions: Coordinated by WALC, SCE, the ISO, and MWD.

**With MWD:**

Camino - Mead 230 kV East and West Transmission Lines:

Clearance/Switching Instructions: MWD and WALC issue intercompany clearances, coordinated with ISO and SCE.

Line Restoration Instructions: Coordinated by WALC, SCE, MWD, and the ISO.

Testing Instructions: Coordinated by WALC, SCE, MWD, and the ISO (See SOP).

Monitoring and Control Instructions: Coordinated by WALC, SCE, the ISO, and MWD.

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Gene (MWD) - Parker 230 kV Transmission Line:

Clearance/Switching Instructions: SCE and WALC issue intercompany clearances, coordinated with ISO and MWD.

Line Restoration Instructions: Coordinated by WALC, SCE, MWD, and the ISO.

Testing Instructions: Coordinated by WALC, SCE, MWD, and the ISO (See SOP).

Monitoring and Control Instructions: Coordinated by WALC, SCE, the ISO, and MWD.

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**SERVICE SCHEDULE 6**  
**REAL-TIME OPERATING LIMITS**  
**[Subsection 3.2.3.1]**

The ratings of the ISO-WALC Interconnections, as identified in Service Schedule 1, must consider the other facilities in or out of service, compensation levels, generation at Palo Verde, etc. The real-time ratings are established by the path operator(s) by application of appropriate procedures and Nomograms such as the Arizona Security Monitoring Manual or other operating procedures.

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**SERVICE SCHEDULE 7**

**VOLTAGE CONTROL**

**[Subsection 3.2.5]**

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2

Voltage Schedule: 220-240 kV

MVAR Schedule: 0 MVAR

Blythe – Eagle Mountain 161 / 230 kV Transmission Line

Voltage Schedule: 220-235 kV

MVAR Schedule: 0 MVAR

Camino - Mead 230 kV East and West Transmission Lines

Voltage Schedule: 220-235 kV

MVAR Schedule: 0 MVAR

Gene (MWD) - Parker 230 kV Line

Voltage Schedule: 220-235 kV

MVAR Schedule: 0 MVAR

**SERVICE SCHEDULE 8**  
**INFORMATION EXCHANGE PROCEDURES FOR GRID OPERATIONS**  
**[Subsection 3.2.6]**

**Information Exchange:**

The ISO and the WALC shall coordinate, either directly or through their WECC Reliability Coordinators, the exchange of any information specified in subsection 3.2.6 concerning the Interconnection facilities and the status of the Balancing Authority Areas that may affect the operation of the Interconnection or either of the interconnected Balancing Authority Areas. Real-time information shall be communicated in the most efficient method possible through any shared electronic, voice, or facsimile media or via their respective WECC Reliability Coordinators. Such communication equipment may be common networked mass communication equipment in place and shared by WECC participants or regional transmission groups. Phone numbers are contained in Service Schedule 3. Service Schedule 9 lists information necessary for the reliable operation of the ISO, WALC, and WECC.

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**SERVICE SCHEDULE 9**  
**INTERCONNECTION INFORMATION**  
**[Subsection 3.2.6.1]**

Information necessary for the reliable operation of the ISO, WALC, and the WECC shall include, but is not limited to, the following operational data:

1. Real-time data on the Interconnection, including instantaneous MW and MVAR outputs, bus kV, circuit breaker status and hourly net MWh outputs for each Interconnection point listed in Service Schedule 1, which data will be telemetered to the ISO and WALC over the existing ICCP data link subject to the need to transition to direct ISO and WALC interrogation of the substation RTU receiving the real-time MW and MVAR data in accordance with NERC operating data requirements. In addition, back-up outputs for each Interconnection's instantaneous MW and MVAR outputs will be telemetered to the ISO via either direct connection to the substation RTU or via a single back-up RTU, independent of and in addition to the data transmitted over the existing ICCP data link;
2. Major transmission Outages, planned or unplanned, as they occur or are effected;
3. Restoration of major transmission facilities after planned or unplanned Outages;
4. Loss or impairment of certain reactive equipment;
5. Loss of load or resources resulting in detectable frequency variation;
6. Detectable significant weather data and/or atmospheric conditions;
7. Significant conditions such as fires, floods, and earthquakes;
8. Activation or deactivation of RAS equipment;
9. Any planned or unplanned operation that can or will impair the availability or transfer capability of resources; and
10. Activation of Emergency Command Centers.

Additional information requirements including joint operating procedures may be added by mutual agreement between the ISO and WALC.

**SERVICE SCHEDULE 10**  
**JOINT OPERATING PROCEDURES**  
**[Subsection 3.2.7]**

**Blythe - Eagle Mountain 161 kV Transmission Line:**

The reliability and interconnected transfer capability of WALC 161 kV transmission system south of Parker may be jeopardized upon the loss of the 500/69 kV transformer at APS' North Gila Substation. Should this occur, WALC will notify the ISO of its intent to isolate the Blythe load on the SCE Blythe - Eagle Mountain 161 kV Transmission Line.

California ISO Procedure T-156, Path 59 (CAISO\_WALC Blythe Tie) will be followed to reliably operate Path 59 and to mitigate possible overloads on the Blythe – Eagle Mountain 161 kV Transmission Line.

From time to time, as needed, operating procedures will be developed and implemented.

**Gene - Parker 230 kV Transmission Line**

California ISO Procedure T-174 (Parker – Gene Overload Mitigation) will be followed to reliably operate and mitigate possible overloads on the Gene - Parker 230 kV Transmission Line.

**SERVICE SCHEDULE 11**

**INFORMATION EXCHANGE AND COORDINATION FOR INTERCHANGE  
SCHEDULING AND DISPATCH**

**[Subsection 5.1]**

**A. Preschedule Checkout Procedures:**

Day-Ahead Process: The ISO will confirm net interchange schedules with adjacent Balancing Authorities based on schedules submitted by Scheduling Coordinators within the parameters of the ISO's Day-Ahead market and accordance with any transmission limitations encountered by WALC. Interchange schedules will not be implemented unless accepted by both the ISO and WALC.

Hour-Ahead Process: The ISO will confirm hourly net interchange schedules with adjacent Balancing Authorities based on schedules submitted by Scheduling Coordinators within the parameters of the ISO's Hour-Ahead market and in accordance with any transmission limitations encountered by WALC. Interchange schedules will not be implemented unless accepted by both the ISO and WALC. Interchange schedules submitted by Scheduling Coordinators for existing contract rights-holders that retain rights to submit schedules after the close of the ISO's Hour-Ahead market parameters, will be accepted and the ISO will confirm net interchange schedules with the adjacent Balancing Authorities when the schedule is submitted.

**B. Real-Time Checkout Procedures:**

The ISO will confirm net interchange schedules with adjacent Balancing Authorities on a real-time basis, as required, to meet NERC and WECC Reliability Standards.

**C. After the Fact Checkout Procedures:**

The ISO will confirm actual and scheduled net interchange values (MW) with adjacent Balancing Authorities after the close of each settlement period (the scheduling hour, Hour Ending) as required to meet the obligations of inadvertent interchange energy accounting of prevailing NERC or WECC Reliability Standards.

**D. Monthly Meter Reading Adjustment Procedures:**

The ISO and WALC will coordinate adjustments to correct their respective EMSs to the actual flow accumulations as determined by monthly revenue meter reads in accordance with procedures and criteria developed by WECC.

- E. **Inadvertent Correction Procedures:**  
Inadvertent accumulation corrections shall be performed in compliance with NERC and WECC Reliability Standards.

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**SERVICE SCHEDULE 12**  
**MAINTENANCE COORDINATION PROCEDURES**  
**[Subsection 6.1]**

**ISO Outage Coordination Principles:**

**The ISO Outage Coordination Office (OCO)** will coordinate Outage scheduling with the Participating Transmission Owners and the interconnected Balancing Authorities on the following types of equipment:

1. Interconnected transmission lines.
2. Interconnected transmission equipment including circuit breakers, transformers, disconnects, reactive devices, and wave traps.
3. Protection and control schemes, including RAS, SCADA, EMS, or AGC.
4. Facilities within either Balancing Authority Area that affect the transfer capability of the Interconnection.

In some cases it may be necessary for the Party requesting an Outage to submit procedures and diagrams to facilitate the switching for the Outage.

The preferred Outage coordination schedule for the ISO is developed in accordance with the following general schedule:

1. Each year near mid-October the ISO confers with other WECC entities in a long-range regional Outage coordination process. A similar conference occurs in April of each year.
2. Mid-Year: The ISO and WALC will meet to discuss and determine Outage coordination between the two entities with emphasis on long-term construction projects. The result of this meeting will be managed by the ISO and WALC's long-term Outage coordinators.
3. Quarterly Coordination: Each quarter (by the 15th of January, April, July, and October) the interconnected Balancing Authorities and Transmission Owners will coordinate long range Outage plans covering a rolling twelve-month period, beginning the first of the following quarter, and update, as needed, the existing and new Outage schedules with the ISO.
4. Outage Schedule Revisions: Requests for changes, additions, and cancellations to the annual/quarterly Outage schedule can be made at any time. However, the minimum notification for Outage request is governed by the process listed below.
5. Three Day Prior Confirmation/Notification: Any request to change the schedule of an Outage that may affect transfer capability must be submitted at least three (3) working days prior to the starting date of the scheduled Outage. This applies

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to facilities affecting the inter-Balancing Authority Areas operations, including the following:

- a. All 500 kV facilities
  - b. Any transmission line Outage
  - c. Any load transformer Outage
  - d. Any bus Outage
  - e. Relay protection Outages that reduce the transfer capability of a transmission line or path
  - f. Any Outage that requires coordination by two or more connected entities
  - g. Communication system Outages, including SCADA facilities
  - h. Any other Outage that will affect the transfer capability of any transmission line or path
6. **Final Approval:** Acknowledgement of receipt of the Outage request and any initial provision of a negative response to said Outage request between the ISO and WALC Outage Coordinators should occur the same day or the next day between the Outage Coordinators. Both ISO and WALC will consult with their Balancing Authority personnel to determine approval or denial of the scheduled Outage. If, due to current conditions, system reliability may be impaired by the scheduled Outage, either Balancing Authority may cancel the Outage at any time to commencement of removal switching.

**Forced Outages will be handled as follows:**

1. **Immediate Forced Outages:**  
Situations likely to result in a Forced Outage within the next twenty-four (24) hours unless immediate corrective action is taken should be communicated directly between WALC Transmission Dispatcher to the ISO Control Center. The ISO Control Center operators will work with the Participating Transmission Owner and/or the interconnected Balancing Authority to take actions as necessary.
2. **Imminent Forced Outages:**  
Situations not requiring a removal from service of transmission facilities until some time more than twenty-four (24) hours in the future should be communicated between WALC Outage Coordinator and the ISO OCO and will be scheduled for Outage. Time limits for notification will be waived and the request will be expedited by the ISO OCO and the WALC Outage Coordinator provided notice is given as soon as possible.

Switching for scheduled Outages will be coordinated by the ISO Control Center, interconnected Balancing Authority, the Participating Transmission Owner, and the Transmission Owner(s). Following approval to remove the facilities from service, the ISO Control Center will direct the Participating Transmission Owner(s) to work with the interconnected Balancing Authority to open the circuit breakers and then to perform

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necessary switching. The Transmission Owner will report to the ISO Control Center regarding the removal from service of the affected facilities.

Likewise, when returning facilities to service, following approval to return the facilities to service, the ISO Control Center will direct the Participating Transmission Owner to work with the interconnected Balancing Authority to perform necessary switching in preparation for closing circuit breakers and then the actual closing of the circuit breakers. The Transmission Owner will report to the ISO Control Center regarding the return to service of the affected facilities.

Clearances will be exchanged and appropriate records kept between the Transmission Owners and the interconnected Balancing Authorities. The ISO Control Center will also keep records of the Outages.

The ISO OCO will maintain a record of each Outage as it is implemented utilizing the ISO's logging and Outage data management application, utilizing the ISO's logging and Outage data management application, scheduling and logging system for the ISO of California (SLIC). Such records will be available for inspection by the owners of the facilities involved.

#### **ISO Preferred Methods of Submitting Outage Requests**

The primary method of submitting Outage requests to the ISO is via the ISO's SLIC internet application (i.e., ISO's electronic Outage request tool). If that application is unavailable or an interface to other Balancing Authority applications has not been established, other methods may be used, including:

1. E-mail to: \_\_\_\_\_
2. Phone: **Privileged Material Redacted Pursuant**
3. Fax: **To 18 C.F.R. § 388.112**

#### **WALC Outage Coordination Principles:**

For informational purposes, WALC has included the following Outage coordination procedures which may impact the ISO.

The WALC Outage Coordinator will coordinate Outage scheduling with the ISO, Participating Transmission Owners, and the interconnected Balancing Authorities on the following types of equipment:

1. Interconnected transmission lines.
2. Interconnected transmission or substation equipment including circuit breakers, transformers, disconnects, reactive or capacitive devices, and wave traps.
3. Protective relay and control schemes, including RAS, SCADA, EMS, or AGC.

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In some cases, it may be necessary for the ISO, WALC, or a Transmission Owner to submit procedures and diagrams to facilitate switching for the Outage.

The WALC Transmission Dispatcher will monitor actual completion of switching in its Balancing Authority Area and advise the ISO of the completion of the switching procedures

Clearances will be exchanged between Transmission Owner and WALC. WALC will maintain a record of each Outage as it is implemented. Such records will be available for inspection.

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**SERVICE SCHEDULE 13**  
**EMERGENCY ASSISTANCE ARRANGEMENTS**

**[Subsection 7.1]**

To the extent possible and per NERC policies, the Parties will assist each other in an emergency by scheduling energy and/or capacity, or by making available transmission capacity to deliver emergency assistance from remote Balancing Authorities. 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. ISO and WALC operators will agree upon and log MW values, start and end times, ramp rates and times, and integrated MWH values for any emergency assistance provided.

The price paid for ISO emergency assistance will be at the ISO market price for energy and/or capacity, plus all applicable charges, as specified in the ISO Tariff. Such price may be estimated prior to delivery and finalized in the settlement process. The ISO will establish a Scheduling Coordinator account for WALC for the sole purpose of facilitating the settlement of such emergency assistance. Payment to the ISO for such emergency assistance will be made in accordance with the settlement process, billing cycle, and payment timeline set forth in the ISO Tariff.

The price paid for WALC emergency assistance will be at a price agreed upon by the Parties or a price established by WALC for such emergency assistance in advance, as may be applicable. Payment by the ISO for such emergency assistance will be made in accordance with the settlement process, billing cycle, and payment timeline set forth in the ISO Tariff.

**SERVICE SCHEDULE 14**

**INDEPENDENT OPERATION DUTIES AND RESPONSIBILITIES**

**[Subsection 7.3.1]**

Normally all switching operations are coordinated with all appropriate Balancing Authorities prior to performing any actual switching. In situations where the immediate personnel or public safety is an issue, switching may be accomplished without coordination with other Balancing Authority entities and notification provided afterwards, as stated in subsection 7.3.1

Beyond that included in the body of the agreement, no additional independent operation duties and responsibilities currently exist.

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**SERVICE SCHEDULE 15**  
**RESTORATION COORDINATION**  
**[Subsection 7.4]**

WALC and the ISO will work in close cooperation to maximize the reliability of interconnected operations. The NERC and WECC Reliability Standards and WECC MORC and off-nominal frequency procedures will be utilized as applicable. As appropriate, priority will be placed by both parties on restoration of the Interconnection prior to restoration of native load. The Interconnection will be closed only on orders from the ISO and WALC.

**Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2**

Should either or both Eldorado - Mead 230 kV Transmission Lines relay, the ISO, Eldorado Switching Center, and WALC will confer prior to re-energizing a relayed transmission line or reestablishing the Interconnection at Mead.

Should the ISO or WALC Balancing Authorities experience a system wide shutdown, blackstart, or islanded condition, the WALC system operator's highest priority is the provision of shutdown power for the Palo Verde Nuclear Generating Station. As Hoover generation and associated transmission is available and stable in the judgment of the WALC system operator, and with concurrence of the ISO and both Reliability Coordinators (CMRC and RDRC), a Mead interconnection using SCE's Transmission System will be closed. The supply of shutdown power for San Onofre Nuclear Generating Station will be routed through isolated portions of the SCE system as expeditiously as may be accomplished.

## **SERVICE SCHEDULE 16**

### **INTER-BALANCING AUTHORITY AREA REQUIREMENTS FOR SCHEDULING AND DELIVERING REGULATION SERVICE TO THE ISO**

#### **[Subsection 5.3]**

#### **1. General**

- 1.1 **Purpose.** This Service Schedule sets forth the requirements that must be satisfied by Western Area Power Administration, Lower Colorado (WALC) should it elect to support Scheduling Coordinators' requests for the certification, scheduling, and delivery of Regulation service into the ISO Balancing Authority Area. In supporting delivery of Regulation service into the ISO Balancing Authority Area under the provisions of this Service Schedule, WALC retains the right to separate, add, include, exclude, or substitute resources from any source, either individually or in aggregate as deemed appropriate by the WALC, provided that ISO and WALC operating requirements are satisfied.
- 1.2 **NERC/WECC Operating Standards Observed.** Nothing in this Service Schedule is intended to change, supercede, or alter either Party's obligations to abide by NERC and WECC Reliability Standards. This Service Schedule does not supersede pre-existing and effective power contracts or letter agreements to which either Party may individually be obligated.
- 1.3 **Applicable Standards.** This Service Schedule incorporates by reference, but is not limited to, the ISO's "*Standards for Imports of Regulation*" (Standards). The Standards document is available for viewing and can be also downloaded from the ISO internet home page: [www.caiso.com](http://www.caiso.com).
- 1.4 **Meaning of System Resource.** System Resource is defined in the ISO Tariff and, in the context of this Service Schedule, may include combinations of resources as described in the Standards. Specifically, System Resource may include any combination of resources, single resource or a portion of a resource located outside the ISO Balancing Authority Area, public or private, made available by the WALC, as the WALC deems appropriate, to provide for delivery of Regulation service by means of a dynamic schedule from WALC to the ISO Balancing Authority Area. In the event of a conflict between the ISO Tariff definition of System Resource and the definition in this Service Schedule, the definition in this Service Schedule shall apply.
- 1.5 **Meaning of Regulation.** The Regulation service to be delivered to the ISO Balancing Authority Area that is the subject of this Service Schedule is as defined in the ISO Tariff and shall have that meaning for purposes of this Service

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Schedule, subject to the terms of the Standards with regard to delivery of Regulation service from a System Resource. Nothing in this definition shall be deemed contrary to the WECC and NERC definitions of Regulating Reserve and Regulation Service, respectively.

## 2. **Telecommunications Requirements**

The ISO and WALC shall establish and maintain real-time, redundant, diversely routed, bi-directional, communications links between the ISO energy management system (EMS) and the WALC EMS, utilizing standard inter-company communications protocol (ICCP) or equivalent, mutually accepted, communications methods. For further details regarding telecommunications requirements, refer to the Standards.

## 3. **Telemetry and Control**

3.1 **Telemetry**. For each operating hour for which a System Resource is scheduled to deliver Regulation service to the ISO Balancing Authority Area, WALC shall provide, via the ICCP communication links to the ISO EMS, all data for each System Resource represented by a dynamic schedule, as set forth in the Standards, while applying operating methodology consistent with WALC operating practices applicable to that resource, provided that such practices are coordinated with the ISO.

3.2 **Control**. The WALC EMS shall be able to receive control signals, in real-time, from the ISO EMS, via the ICCP communications links, causing the System Resource to vary its energy production or allocation level from the prescheduled preferred operating point by the specified amount. Refer to the Standards for detailed information regarding control requirements. In case of telemetry failures or computer malfunctions, the WALC shall manually override dynamic schedule control signals and the WALC real-time operators will advise the ISO real-time operators of that manual override.

## 4. **Interchange Scheduling Requirements**

4.1 **Dynamic Scheduling**. WALC shall support Scheduling Coordinators' requests to arrange dynamic interchange schedules for the delivery of Regulation service to the ISO Balancing Authority Area, reflecting the System Resource's instantaneous energy production or allocation level as caused by real-time control signals issued by the ISO EMS/AGC and taking into account available transmission capacity. WALC reserves the right to seek reimbursement from Scheduling Coordinators requesting such support for expenses incurred when preparing for, and providing, support for delivery of Regulation service to the ISO Balancing Authority Area.

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- 4.2 Treatment of Area Control Error. The WALC shall instantaneously compensate its AGC for the System Resource's variable energy output level such that System Resource energy production or allocation changes, caused by the ISO EMS/AGC control signals, have an equal magnitude and opposite sign effect on the WALC's Area Control Error (ACE).
- 4.3 Integration of Dynamic Scheduling. For each operating hour during which Regulation service was dynamically scheduled for delivery to the ISO Balancing Authority Area, WALC shall compute an integrated amount of interchange based on the System Resource's integrated energy production, by integrating the instantaneous System Resource production levels. Such integrated MWH value shall be supplied by WALC hourly and used for the inter-Balancing Authority Area checkout of actuals with the ISO.
- 4.4 Delivery of Megawatts (MW). The ISO and WALC will share in the real-time deviations from the dynamic System Resources on a pro-rata basis. WALC will remain responsible for regulation obligation for the portion of the System Resource's output not dynamically scheduled into the ISO Balancing Authority Area, in accordance with NERC and WECC Reliability Standards.
- 4.5 Access to information. The Parties agree to exchange information related to control signals issued and telemetry received with respect to the delivery of Regulation service at the request of the other Party for purposes of after-the-fact interchange accounting.

## 5. Other

- 5.1 Losses. The ISO shall not be responsible for transmission losses caused by transmitting Regulation service within WALC for delivery to the ISO. WALC shall not be responsible for transmission losses caused by transmitting Regulation service over the ISO transmission system.
- 5.2 Certification. Only ISO-certified System Resource/WALC arrangements will be allowed to bid or self-provide Regulation service in the ISO's ancillary services market through an ISO-certified Scheduling Coordinator. Pre-existing arrangements supporting deliveries of Regulation service from WALC into the ISO Balancing Authority Area are deemed certified by the ISO.
- 5.3 No Guarantee of Award. Certification of a System Resource/WALC arrangement allows for bidding of Regulation service into the ISO market; it does not, however, guarantee selection of such bid.

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- 5.4 Performance Assessment. The ISO will monitor and measure imported Regulation service, whether bid or self-provided, against the performance benchmarks described in the Standards. Other than as set forth in this Service Schedule and the Standards, WALC is not responsible or liable for maintaining the Regulation import service standards set by the ISO. The ISO retains the right to curtail such Regulation service at any time, should the performance of such service become unacceptable. However, the ISO may not bill or penalize WALC for such perceived inadequate performance. The Performance Assessment shall not prevent delivery of Regulation and associated capacity and energy as agreed to in existing contracts predating ISO operations and performance standards.
- 5.5 Pre-Installation Data Point Check. The ISO and the WALC computer support personnel will confirm data points to be transmitted for this Regulation service. Additionally, the data flow and data path process shall be clearly established between the support personnel as the first stage of development. Both Parties must agree to the data point, data flow, and data path processing before programming efforts are to commence or are to be modified for future computer code modifications.

## **SERVICE SCHEDULE 17**

### **INTER-BALANCING AUTHORITY AREA REQUIREMENTS FOR SCHEDULING AND DYNAMIC DELIVERY OF ENERGY, SUPPLEMENTAL ENERGY, AND ENERGY ASSOCIATED WITH NON-REGULATION ANCILLARY SERVICES TO THE ISO**

#### **[Subsection 5.4**

#### **1. General**

- 1.1 **Purpose.** This Service Schedule sets forth the requirements and processes that must be satisfied by an entity requesting the ability to schedule and deliver dynamic energy, supplemental energy, and energy associated with ancillary services (other than regulation service) into the ISO Balancing Authority Area (requesting entity) and that must be coordinated through WALC and the ISO should the requesting entity request to implement of a dynamic scheduling functionality and delivery of energy, supplemental energy, and energy associated with ancillary services (except regulation service) into the ISO Balancing Authority Area. The ISO requires the requesting entity to be represented by a Scheduling Coordinator in any associated ISO processes. The requirements encompass technical energy management system (EMS)/automatic generation control (AGC) and communications, interchange scheduling, telemetry, and aspects of interconnected Balancing Authority Area operations.
- 1.2 **NERC/WECC Operating Standards Observed.** Nothing in this Service Schedule is intended to change, supercede, or alter either Party's obligations to abide by NERC and WECC Reliability Standards and policies.
- 1.3 **Applicable Standards.** This Service Schedule incorporates, by reference, the ISO Tariff Dynamic Scheduling Protocol. WALC also has certain specific implementation requirements to ensure that NERC standards and WECC policies and criteria are satisfied, including the WECC RMS.
- 1.4 **Meaning of System Resource.** System Resource is defined in the ISO Tariff and, in the context of this Service Schedule, may include combinations of resources as described in the ISO Tariff Dynamic Scheduling Protocol.

#### **2. Telecommunications Requirements**

The ISO Balancing Authority and WALC will establish and maintain real-time, redundant, diversely routed, communications links between the ISO EMS and the WALC EMS, with the primary link utilizing the standard inter-Balancing Authority

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Area communications protocol (ICCP) in accordance with the ISO Tariff Dynamic Scheduling Protocol and WALC protocols.

**3. Telemetry**

For each operating hour for which a System Resource is scheduled to deliver energy, supplemental energy, and/or energy associated with any of the non-regulating ancillary services to the ISO Balancing Authority Area, WALC will provide, via the ICCP communication links to the ISO EMS, the data for each System Resource as set forth in the ISO Tariff Dynamic Scheduling Protocol and WALC protocols.

**4. Interchange Scheduling Requirements**

- 4.1 Dynamic Scheduling. The WALC will support a requesting entity's application to arrange dynamic interchange schedules for the delivery of energy to the ISO Balancing Authority Area, reflecting the System Resource's instantaneous energy production or allocation level and taking into account available transmission capacity. All schedules need to be e-tagged in accordance with NERC and WECC requirements and practices, as provided in subsection 5.2 of this Service Schedule.
- 4.2 Treatment of Area Control Error (ACE). The WALC will instantaneously compensate its AGC for the System Resource's energy output that is generated or allocated for establishing the dynamic schedule to the ISO such that the System Resource energy production or allocation changes have an equal magnitude and opposite sign effect on the WALC's ACE.
- 4.3 Integration of Dynamic Scheduling. For each operating hour during which energy was dynamically scheduled for delivery to the ISO Balancing Authority Area, WALC will compute an integrated amount of interchange based on the System Resource's integrated energy production, by integrating the instantaneous System Resource production levels. Such integrated MWH value will be agreed to hourly by the real-time schedulers.
- 4.4 Delivery of Megawatts (MW). The ISO and WALC will share in the real-time deviations from the dynamic System Resources on a pro-rata basis. WALC will remain responsible for regulation obligation for the portion of the System Resource's output not dynamically scheduled into the ISO Balancing Authority Area, in accordance with NERC and WECC Reliability Standards.
- 4.5 Access to Information. The Parties agree to exchange information related to telemetry sent and received with respect to the delivery of energy at the request of the other Party for purposes of after-the-fact interchange accounting.

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**5. Other WALC Responsibilities**

- 5.1 Operational Authority. WALC will have, at a minimum, the level of operational authority over the System Resource and the associated dynamic schedule that NERC and WECC vest in WALC.
- 5.2 E-Tagging. WALC and the ISO Balancing Authority must support associated e-tagging as described in the ISO Tariff Dynamic Scheduling Protocol and deemed to be consistent with NERC and/or WECC requirements.
- 5.3 Real-Time Adjustments. WALC must have a means to manually override and/or otherwise adjust the dynamic signal in real-time, if needed.
- 5.4 Coordination with Other Balancing Authorities. WALC must provide the real-time instantaneous value of each dynamic schedule to every Intermediate Balancing Authority through whose systems such dynamic schedule may be implemented to the ISO.

**6. Other**

- 6.1 Losses. A requesting entity will be responsible for transmission losses caused by transmitting energy, supplemental energy, and energy associated with ancillary services, other than regulation service, within or across the WALC and ISO systems in accordance with the applicable ISO and WALC requirements.
- 6.2 Certification. Only a requesting entity meeting ISO-certified System Resource/WALC arrangements and separate applicable expanded WALC Balancing Authority requirements will be allowed to bid or self-provide ancillary services in the ISO's ancillary services market through an ISO-certified Scheduling Coordinator.
- 6.3 No Guarantee of Award. Certification of a System Resource/WALC arrangement allows for bidding of supplemental energy and/or certain ancillary services into the ISO market; it does not, however, guarantee selection of such bid.
- 6.4 Performance Assessment. The ISO will monitor and measure dynamically imported ancillary services, whether bid or self-provided, against the performance benchmarks described in the ISO Tariff Dynamic Scheduling Protocol.

**7. CONSENT TO IMPLEMENTATION OF DYNAMIC SYSTEM RESOURCES**

Each dynamically scheduled System Resource shall be permitted pursuant to this Service Schedule only upon written consent of both WALC and the ISO and only if the System Resource is subject to a Dynamic Scheduling Agreement for

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Scheduling Coordinators with the ISO. Such written consent may be communicated by e-mail.

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# ATTACHMENT B

**CALIFORNIA INDEPENDENT SYSTEM  
OPERATOR CORPORATION**

**INTERCONNECTED BALANCING  
AUTHORITY AREA OPERATING  
AGREEMENT**

**AS AMENDED AND RESTATED**

Dated: \_\_\_\_\_ day of \_\_\_\_\_, 2008

**WESTERN AREA POWER ADMINISTRATION**

**DESERT SOUTHWEST REGION**

**And**

**CALIFORNIA INDEPENDENT SYSTEM**

**OPERATOR CORPORATION**

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**INTERCONNECTED BALANCING AUTHORITY AREA  
OPERATING AGREEMENT**

**AS AMENDED AND RESTATED**

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# INTERCONNECTED BALANCING AUTHORITY AREA OPERATING AGREEMENT, AS AMENDED AND RESTATED

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# **INTERCONNECTED BALANCING AUTHORITY AREA OPERATING AGREEMENT, AS AMENDED AND RESTATED**

1

## **STANDARD OPERATING AGREEMENT**

**Interconnected Balancing Authority Area Operating Agreement,  
as amended and restated**

THIS INTERCONNECTED BALANCING AUTHORITY AREA OPERATING AGREEMENT, as amended and restated, (OPERATING AGREEMENT) is entered into this \_\_\_\_\_ day of \_\_\_\_\_, 2008 and is accepted by and between:

**Western Area Power Administration, Desert Southwest Region,** (Western) having its registered and principal executive office at 615 South 43<sup>rd</sup> Ave, Phoenix, Arizona 85009. Western is the designated Balancing Authority for Western Area Power Administration, Lower Colorado (WALC) service area and is herein referred to as WALC.

And

**California Independent System Operator Corporation (ISO),** a California nonprofit public benefit Corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630.

WALC and the ISO are hereinafter referred to as the Parties.

### **Whereas:**

1. WALC operates a Balancing Authority Area that is interconnected with the ISO Balancing Authority Area (Interconnection).
2. The Parties wish to coordinate operation and maintenance of the Interconnection to satisfy North American Electric Reliability Corporation (NERC), or its successors, Reliability Standards and Western Electricity Coordinating Council (WECC), or its successors, Reliability Standards and if applicable, WECC Minimum Operating Reliability Criteria (MORC), as may be revised, and Good Utility Practice.
3. The ISO has certain statutory obligations under California law to maintain power system reliability.

4. WALC has authority to maintain the reliability of Federal power systems which consist of the Pacific Northwest / Pacific Southwest Intertie Project, the Mead-Phoenix Project, the Parker-Davis Project and the Boulder Canyon Project which interconnect with ISO and Southern California Edison Company (SCE).

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

## **1.2 Purpose and Intent**

### **1.2.1 Purpose**

The purpose of this Operating Agreement is to establish the rights and obligations of the ISO and WALC with respect to the operation, maintenance, and control of the Interconnection. This Operating Agreement is based upon the ISO Tariff, NERC Reliability Standards, and WECC MORC, existing contracts between WALC, and Participating Transmission Owners comprising the ISO, and established operating procedures. This Operating Agreement acknowledges that other Transmission Owners may have concurrent rights and responsibilities.

### **1.2.2 Intent**

The intent of this Operating Agreement is to acknowledge contractual requirements, establish procedures, and designate responsibilities for the operation and management of the Interconnection. It is not the intent of this Operating Agreement to abrogate or alter the rights and obligations under existing contracts pertaining to the subject of Interconnection.

## **1.3 Term and Termination**

### **1.3.1 Effective Date**

This Operating Agreement shall be effective as of the later of the date of execution of this Operating Agreement or the date this Operating Agreement is accepted for filing and made effective by the Federal Energy Regulatory Commission (FERC), and shall continue in effect until terminated. This Operating Agreement shall supersede the Original Operating Agreement and subsequent Amendment No. 1.

If FERC, in an order that has become final and non-appealable, requires a revision of or modification to the terms of this Operating Agreement, and if either party, in its sole discretion, determines that such revision or modification is unacceptable to it, then such party may terminate this Operating Agreement upon thirty (30) days' written

notice to the other, provided that such written notice be given not less than thirty (30) days following the date on which such order becomes final and non-appealable.

### **1.3.2 Termination**

As a precondition, this Operating Agreement may be terminated by either Party upon two years advance written notice to the other Party or upon mutual consent of both Parties. For entities subject to FERC jurisdiction, termination will be effective upon acceptance of the notice of termination by FERC. The ISO shall file any notice of termination with FERC within thirty (30) days of receipt.

## **2 DEFINITIONS**

### **2.1 NERC Definitions**

Except as defined below, terms and expressions used in this Operating Agreement shall have the same meanings as those contained in the NERC Glossary of Terms Used in Reliability Standards.

### **2.2 Specific Definitions**

**2.2.1 Forced Outage:** An Outage for which sufficient notice cannot be given to allow the Outage to be factored into the preschedule processes and the established Outage coordination principles of the Balancing Authorities.

**2.2.2 Good Utility Practice:** Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry in the WECC region during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

**2.2.3 Interconnection:** Transmission facilities that connect one Balancing Authority Area to another Balancing Authority Area. The Interconnection for this Operating Agreement is described in Service Schedule 1.

**2.2.4 ISO:** The California Independent System Operator Corporation, a state-chartered, nonprofit corporation that controls the transmission

facilities of all Participating Transmission Owners and dispatches certain generating units and loads and is the Balancing Authority.

- 2.2.5 ISO Controlled Grid:** The system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the ISO's operational control.
- 2.2.6 ISO Tariff:** ISO Operating Agreement, Protocols, and Tariff as amended from time to time, together with any appendices or attachments thereto.
- 2.2.7 Nomogram:** A set of operating or scheduling rules which are used to ensure that simultaneous operating limits are respected, in order to meet NERC and WECC operating criteria.
- 2.2.8 Outage:** Disconnection or separation, planned or forced, of one or more elements of an electric system.
- 2.2.9 Participating Transmission Owner:** An owner of transmission that has placed its transmission assets and entitlements under the ISO's operational control.
- 2.2.10 Planned Outage:** An Outage for which sufficient notice has been given to allow the Outage to be factored into the processes and the established Outage coordination principles of the Balancing Authorities.
- 2.2.11 Point of Contact:** A person or entity having the authority to receive and act upon scheduling or dispatch communications from the other Balancing Authority and available through a communications device mutually agreed upon on a 24-hour, 7-day basis.
- 2.2.12 Real-Time Operating Limits:** The rated transfer capability less reductions during any hour caused by, but not limited to, physical limitations beyond the control of the Balancing Authority, and operational limitations resulting from transmission line Outages, equipment Outages, stability limits and loop flow.
- 2.2.13 Reliability Standard:** A requirement approved by the FERC under Section 215 of the Federal Power Act to provide for reliable operation of the bulk power system. The term includes requirements for the operation of the existing bulk power system facilities, including cyber security protection, and the design of planned additions or modifications to such facilities to the extent necessary for the reliable operation of the bulk power system; but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.

- 2.2.14**      **Scheduling Coordinator:** An entity certified by the ISO for the purposes of undertaking the functions of: submitting 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 ISO's charges; and ensuring compliance with ISO protocols.
- 2.2.15**      **Transmission Owner:** An entity owning transmission facilities or entitlements at the Interconnection.
- 2.2.16**      **WECC Reliability Coordinator:** One of the area control centers assigned by the WECC to proactively anticipate and mitigate potential problems, facilitate notification, and coordinate restoration following a disturbance.

### **3**                      **OPERATIONAL RESPONSIBILITIES**

#### **3.1**                    **General Requirements**

##### **3.1.1**                **Standards to Be Met**

Both the ISO and WALC shall plan and operate the Interconnection in conformance with NERC and WECC Reliability Standards, WECC MORC, and Good Utility Practice.

### **3.1.2 Existing Contracts**

The ISO will assume certain rights and responsibilities of Participating Transmission Owners in existing contracts, operating agreements, or procedures between WALC and the Participating Transmission Owners regarding the Interconnection where those rights and responsibilities pertain to the coordinated operation of the interconnected Balancing Authority Areas. The ISO and WALC, after consulting with affected Transmission Owners, shall develop the procedures to be used regarding those rights and responsibilities mentioned herein. The specific provisions of the aforementioned agreements which are affected by this Operating Agreement and the procedures for implementing such existing agreements are identified in Service Schedule 2.

### **3.1.3 Communication**

The ISO and WALC shall each operate and maintain a 24-hour, 7-day control center with real-time scheduling and Balancing Authority Area functions. Appropriate control center staff will be provided by each Party who shall be responsible for operational communications and who shall have sufficient authority to commit and bind that Party.

The ISO and WALC shall jointly develop communication facilities and procedures necessary to support scheduling, dispatch functions, and insure reliable functionality. The Points of Contact and the communication facilities are identified in Service Schedule 3.

## **3.2 Grid Operation**

### **3.2.1 Responsibility**

The Parties shall coordinate efforts consistent with NERC and WECC Reliability Standards and Good Utility Practice to mitigate adverse conditions that occur at the Interconnection. The ISO and WALC are each responsible for exercising operational control over facilities in their respective Balancing Authority Areas, and shall not exercise operational control over any part of the Interconnection facilities owned or operated by the other Balancing Authority except by mutual agreement. The respective jurisdictions for operational control by the ISO and WALC are identified in Service Schedule 4.

### **3.2.2 Switching Operations**

The ISO and WALC agree that the Transmission Owners retain possession of and will operate those interconnected facilities in accordance with the existing contracts and agreements in force between the Transmission Owners and WALC. Operations on the Interconnection shall be coordinated through the ISO and WALC

except as otherwise indicated in subsection 7.3.1. Specific switching responsibilities are identified in Service Schedule 5.

### **3.2.3 Real-Time Operating Limits**

#### **3.2.3.1 Real-Time Operating Limits Established Jointly**

The ISO and WALC, in consultation with the Transmission Owners, shall jointly agree upon the Real-Time Operating Limits of the Interconnection. Real-Time Operating Limits shall be based on the given real-time conditions, current operating criteria, and established Nomograms, graphs, and charts specific to the transfer paths within WALC and the ISO. These established operating limits are specified in Service Schedule 6.

#### **3.2.3.2 Real-Time Operating Limits Exceeded**

If a Real-Time Operating Limit is exceeded or the operation of either the WALC Balancing Authority or the ISO Balancing Authority is jeopardized, the ISO and WALC shall communicate and coordinate actions to return the affected Balancing Authority Area(s) to Real-Time Operating Limits. In compliance with WECC MORC, the ISO and WALC will make coordinated adjustments to energy flows between the two Balancing Authority Areas such that stability limited facilities are returned to Real-Time Operating Limits within 20 minutes after such limit is exceeded and thermally limited facilities are returned to Real-Time Operating Limits within 30 minutes after such limit is exceeded, or as otherwise established and mandated by NERC and WECC.

### **3.2.4 Relay Action**

The ISO and WALC shall provide pertinent relay data and related equipment condition and operational information concerning the Interconnection to each other as soon as practicable after the occurrence of any relay action on Interconnection equipment, including, as it becomes available, additional information regarding cause, condition, effects, and estimated corrective action. Notwithstanding the foregoing, the ISO and WALC shall agree upon corrective action and the procedure for returning to normal or adjusted operation.

### **3.2.5 Voltage Control**

The ISO and WALC shall coordinate the use of voltage control equipment to maintain transmission voltages and reactive flows at mutually agreed upon levels to ensure system stability within the operating range of electrical equipment and in accordance with NERC and WECC Reliability Standards and WECC MORC. The ISO and WALC shall operate the facilities at the Interconnection at reactive

reserve margins that are adequate to maintain minimum acceptable voltage limits under facility Outage conditions. Agreed upon voltage schedule limits and reactive flows are specified in Service Schedule 7.

### **3.2.6 Information Exchange**

The ISO and WALC shall coordinate directly the exchange of any information concerning the reliable operation of the Interconnection facilities and the status of the Balancing Authority Areas. Such information shall be communicated through mutually acceptable methods. Procedures and forms for the exchange of emergency information shall be jointly developed and are contained in Service Schedule 8.

#### **3.2.6.1 Information Required to be Provided**

Details regarding the information necessary to the reliable operation of the Interconnection are included in Service Schedule 9.

### **3.2.7 Joint Operating Procedures**

Procedures for coordinating the reliable operation of the Interconnection will be jointly implemented by the ISO, WALC, and the ~~Participating~~ Transmission Owners. Such procedures are described in more detail in Service Schedule 10.

## **4 RELIABILITY COORDINATION**

The California-Mexico Reliability Coordinator (CMRC) has been designated the WECC Reliability Coordinator for WECC's California-Mexico Area. The ISO operates under the purview of the CMRC, and is subject to CMRC directives as set forth in the NERC Reliability Standards and the WECC California-Mexico Reliability Coordination Area Reliability Coordination Agreement. The Rocky Mountain Desert Southwest Reliability Coordinator (RDRC) has been designated the WECC Reliability Coordinator for WECC's Desert Southwest Area. WALC operates under the purview of the RDRC and is subject to RDRC directives as set forth in the NERC Reliability Standards and the Rocky Mountain - Desert Southwest Reliability Coordinator Empowerment Agreement.

## **5 SCHEDULING AND DISPATCH**

### **5.1 Coordination and Exchange of Information**

The ISO and WALC shall coordinate and exchange information on schedules and Balancing Authority Area checkouts at the Interconnection. All schedules at the Interconnection shall match. In accordance with NERC and WECC Reliability Standards and WECC

MORC, the ISO and WALC shall verify, at mutually acceptable times, the actual and scheduled interchange numbers for past hours as well as scheduled interchange numbers for current and future hours. The ISO and WALC shall jointly develop methods and details for coordinating scheduling procedures, information exchange, and notifications in normal, emergency, and curtailment conditions. These methods and details are included in Service Schedule 11.

## **5.2 Notifications**

The ISO and WALC shall jointly develop methods for coordinating the notification of all affected scheduling entities within their respective Balancing Authority Areas regarding schedule changes in emergency or curtailment conditions.

## **5.3 Import of Regulation Service by ISO**

The ISO and WALC shall allow for import of Regulation service, as defined in Service Schedule 16, from the WALC Balancing Authority Area to the ISO Balancing Authority Area, provided that WALC elects to support such service. See Service Schedule 16 for a more detailed description of this provision.

## **5.4 Import of Dynamically Scheduled Energy and Non-Regulation Ancillary Services by ISO**

The ISO and WALC shall allow for the import of dynamically scheduled energy and non-regulation ancillary services from the WALC Balancing Authority Area to the ISO Balancing Authority Area in accordance with the provisions of Service Schedule 17.

# **6 OUTAGE COORDINATION**

## **6.1 Maintenance Coordination**

Outages of facilities affecting the Interconnection shall be jointly coordinated by the ISO, WALC, and the Transmission Owner(s) to minimize a reduction and the duration of such reduction to the operating limits of the Interconnection. The ISO and WALC shall provide each other as much advanced notice as practicable to coordinate Planned Outages and scheduled maintenance affecting the Interconnection. Advance coordination of Outages should be maximized but not less than required to meet NERC and WECC Reliability Standards.

The ISO and WALC shall review Planned Outages and scheduled maintenance to determine the feasibility of initiating the switching

process. If, given the current or anticipated system conditions at the time, the ISO and WALC jointly determine that system reliability may be impaired and the Outage may be canceled or rescheduled.

Outage coordination procedures to be followed will be jointly developed by the ISO and WALC and included in Service Schedule 12.

## **6.2 Forced Outages**

The ISO and WALC shall coordinate and implement operational changes necessary to accommodate Forced Outages, emergencies or curtailments. All notifications of Forced Outages, emergencies or curtailments shall be communicated between the ISO and WALC Balancing Authorities and the Transmission Owner(s) in accordance with NERC and WECC Reliability Standards. If notice prior to a Forced Outage, emergency, or curtailment cannot be given, the ISO or WALC shall notify the other Party of the event immediately after it occurs.

Forced Outage notifications shall be communicated by both control centers to other Balancing Authorities likely to be affected by the Forced Outage in accordance with NERC and WECC Reliability Standards.

## **7 EMERGENCY OPERATION**

### **7.1 Emergency Assistance Arrangements**

Service Schedule 13 details emergency assistance arrangements.

### **7.2 Unscheduled Flow Mitigation (Loop Flow)**

The ISO and WALC shall implement Unscheduled Flow Mitigation Procedures for their Balancing Authority Areas for their qualified paths, consistent with WECC procedures.

### **7.3 Emergency Action**

In the event of a system emergency, the ISO and WALC shall take coordinated action, as they consider necessary, or as directed by the WECC Reliability Coordinator, to preserve or restore stable operation of the interconnected grid and to preserve or restore reliable, safe, and efficient service as quickly as reasonably practicable in accordance with NERC and WECC Reliability Standards. The ISO and WALC shall, where practicable and without delay, keep operators in the affected Balancing Authority Areas and the appropriate WECC

Reliability Coordinators informed as to the nature and extent of the system emergency.

### **7.3.1 Operations Exercised Independently**

Emergency operation, in response to unforeseen system occurrences that may jeopardize the safety of personnel and the general public and/or system stability, may be performed independently by WALC, the ISO, and the Transmission Owner. WALC shall forward the outcomes of emergency operation to which it is a party to the ISO Control Center as soon as it is practicable after the occurrence. The ISO Control Center shall forward the outcomes of emergency operation to which it is a party to the WALC Balancing Authority as soon as it is practicable after the occurrence. The duties and responsibilities for the ISO Balancing Authority, the WALC Balancing Authority, and the Transmission Owner(s) under the foregoing circumstances are described in more detail in Service Schedule 14.

### **7.4 Restoration Coordination**

The ISO and WALC shall coordinate restoration of the facilities affecting the Interconnection and, in accordance with NERC and WECC Reliability Standards, shall coordinate restoration actions with or under the direction of the WECC Reliability Coordinator. The ISO and WALC shall develop Interconnection restoration procedures, which shall be included in Service Schedule 15.

### **7.5 Voltage Collapse**

The ISO and WALC shall take measures in their respective Balancing Authority Areas to arrest collapsing voltage that affects the Interconnection.

## **8 LIABILITY**

### **8.1 Uncontrollable Forces**

An uncontrollable force means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond the reasonable control of a Balancing Authority which could not be avoided through the exercise of Good Utility Practice and compliance with NERC and WECC Reliability Standards.

Neither the ISO nor WALC will be considered in default of any obligation under this Operating Agreement or liable to the other for

direct, indirect, or consequential damages if prevented from fulfilling that obligation due to the occurrence of an uncontrollable force.

In the event of the occurrence of an uncontrollable force, which prevents either the ISO or WALC from performing any obligations under this Operating Agreement, the affected entity shall not be entitled to suspend performance of its obligations in any greater scope or for any longer duration than is required by the uncontrollable force. The ISO and WALC shall each use its best efforts to mitigate the effects of such uncontrollable force, remedy its inability to perform, and resume full performance of its obligations hereunder.

## **8.2 Liability To Third Parties**

Except as otherwise expressly provided herein, nothing in this Operating 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 ISO or WALC.

## **8.3 Liability Between the Parties**

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 or 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 Operating Agreement, except for a Party's negligence or willful misconduct, subject, to the extent applicable, to the limitations of the Federal Torts Claim Act.

## **8.4 Liability For Electric Disturbance and Interruptions**

The ISO and WALC shall plan, operate, and maintain their respective Balancing Authority Areas to minimize or avoid electric disturbances that may interfere with the Balancing Authority Area of the other Party, consistent with NERC and WECC Reliability Standards and Good Utility Practice. The limits of responsibility for the ISO and WALC shall each be for protecting their own respective Balancing Authority Area from possible damage by reason of electric disturbance or faults caused by the operation, faulty operation, or non-operation of their facilities.

Neither Party shall be liable to the other Party for any claim, demand, liability, loss, or damage, whether direct, indirect, or consequential, incurred by the Parties or their respective customers, which results from the separation of the systems in an emergency or interruption.

## **9 SERVICE SCHEDULES**

The ISO and WALC shall establish with each other and where appropriate with the Transmission Owner(s) specific procedures for the reliable operation and scheduling of the Interconnection facilities. The details of these particular operating procedures will be set forth in the applicable Service Schedule.

## **10 MISCELLANEOUS**

### **10.1 Assignments**

Either Party to this Operating Agreement may assign its obligations under this Operating Agreement, with the other Party's prior written consent. Such consent shall not be unreasonably withheld.

Obligations and liabilities under this Operating Agreement shall be binding on the successors and assigns of the Parties. No assignment of this Operating Agreement shall relieve the assigning Party from any obligation or liability under this Operating Agreement arising or accruing prior to the date of assignment.

### **10.2 Notices**

Any notice, demand, or request which may be given to or made upon either Party regarding this Operating 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 Service Schedule 3 relating to its address as that information changes.

### **10.3 Waivers**

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

## **10.4 Governing Law and Forum**

Subject to subsection 10.5, this Operating 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 or of the United States, as applicable, 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 or the laws of the United States, as applicable, will control. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Operating Agreement shall be brought in any of the following forums, as appropriate: 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 Operating Agreement shall be deemed to waive the right of any Party to protest, or challenge in any manner, whether this Operating Agreement, or any action or proceeding arising under or relating to this Operating Agreement, is subject to the jurisdiction of the Federal Energy Regulatory Commission.

## **10.5 Consistency with Federal Laws and Regulations**

(a) Nothing in this Operating Agreement shall compel any person or Federal entity to: (1) violate Federal statutes or regulations; or (2) in the case of a Federal agency, to exceed its statutory authority, as defined by any applicable Federal statutes, regulations, or orders lawfully promulgated thereunder. If any provision of this Operating Agreement is inconsistent with any obligation imposed on any person or Federal entity by Federal law or regulation to that extent, it shall be inapplicable to that person or Federal entity. No person or Federal entity shall incur any liability by failing to comply with any provision of this Operating Agreement that is inapplicable to it by reason of being inconsistent with any Federal statutes, regulations, or orders lawfully promulgated thereunder; provided, however, that such person or Federal entity shall use its best efforts to comply with the ISO Tariff to the extent that applicable Federal laws, regulations, and orders lawfully promulgated thereunder permit it to do so.

(b) If any provision of this Operating Agreement requiring any person or Federal entity to give an indemnity or impose a sanction on any person is unenforceable against a Federal entity, the ISO shall submit to the Secretary of Energy or other appropriate Departmental Secretary a report of any circumstances that would, but for this provision, have rendered a Federal entity liable to indemnify any person or incur a sanction and may request the Secretary of Energy or other appropriate Departmental Secretary to take such steps as are necessary to give effect to any provisions of this Operating Agreement that are not enforceable against the Federal entity.

## **10.6 Severability**

If any term, covenant, or condition of this Operating Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Operating Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Operating Agreement.

## **10.7 Section Headings**

Section headings provided in this Operating Agreement are for ease of reading and are not meant to interpret the text in each Section.

## **10.8 Amendments**

This Operating Agreement including the Service Schedules and Attachments attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that are subject to FERC approval shall not take effect until FERC has accepted such amendments for filing and has made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information.

## **10.9 Counterparts**

This Operating Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Operating Agreement.

The Parties hereto have caused this Operating Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date written in Section 1.

**California Independent System Operator Corporation**

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Western Area Power Administration, Desert Southwest Region**

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

Name: \_\_\_\_\_

Title: \_\_\_\_\_

## **SERVICE SCHEDULE 1**

### **INTERCONNECTION**

#### **[Subsection 2.2.3]**

The Interconnection between the ISO and WALC is comprised of six (6) Interconnections comprised of five (5) 230 kV Interconnections, four (4) at the Mead Substation, and one (1) at the ~~Parker Generating Plant~~ Gene 230 kV Switchyard and one (1) 161 kV Interconnection at Blythe Substation. The Interconnections are with the following Transmission Owners.

#### **With SCE:**

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2 (WECC Path 58):

The Eldorado - Mead 230 kV Transmission Lines connect SCE's Eldorado Substation to the WALC Mead Substation.

ISO Terminal: Mead Substation

Participating Transmission Owner: SCE

WALC Terminal: Mead Substation

Point of Interconnection: Mead Substation

Blythe 161 kV Substation:

The Blythe 161 kV Substation connects SCE's Blythe 161 kV bus to WALC's Blythe 161 kV bus (WECC Path 59).

ISO Terminal: SCE Blythe 161 kV bus

Participating Transmission Owner: SCE

WALC Terminal: Blythe 161 kV bus

Point of Interconnection: WALC Blythe 161 kV Substation

#### **With The Metropolitan Water District (MWD):**

Camino - Mead 230 kV East and West Transmission Lines:

Connects MWD's Camino Substation to WALC's Mead Substation.

ISO Terminal: Mead Substation

Participating Transmission Owner: SCE

WALC Terminal: Mead Substation

Point of Interconnection: Mead Substation

Gene (MWD) - Parker 230 kV Transmission Line:

Connects MWD's Gene Pumping Plant to WALC's Parker Generating Plant.

ISO Terminal: Gene Pumping Plant 230 kV Switchyard

Participating Transmission Owner: SCE

Transmission Owner: MWD

WALC Terminal: Parker Generating Station

Point of Interconnection: Gene Pumping Plant 230 kV Switchyard

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

WALC has in service revenue quality metering at all Interconnection points. ISO has in service RTUs connected to revenue quality metering at all Interconnection points. WALC and ISO metering shall meet the standards as mutually agreed by the Parties. Meters are inspected and tested per existing agreements between WALC, ISO, and the respective Transmission Owner(s). WALC and the ISO shall be entitled to witness testing of the involved Interconnection metering. Any change or modification to such metering equipment by WALC or any other entity shall be coordinated between the Parties. WALC shall allow daily, once a day, read-only access by the ISO to direct poll revenue data from the Interconnection revenue metering in thirty (30) minute intervals with a future upgrade to five (5) minute intervals.

WALC and the ISO shall maintain arrangements that ensure that both Parties shall have access to real-time data from the points identified in this Service Schedule between their Balancing Authority Area Interconnections. The Parties understand that each Party wants to interrogate MW and MVAR data from Interconnection metering, which may include RTUs, at the points identified in this Service Schedule between their Balancing Authority Area Interconnections. The Parties agree to allow each other to directly poll real-time data from the other Party's identified substations and will work together to facilitate direct polling of real-time data from substations of other entities, as required, in a timely manner. 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.

### **Communication Facilities**

In accordance with NERC Reliability Standards, as may be revised from time to time, the ISO and WALC shall provide adequate and reliable telecommunications facilities internally and with other systems, such as Balancing Authority Areas, and Regions to assure the exchange of Interconnection information necessary to maintain reliability. These facilities shall be redundant and diversely routed as required by WECC.

**SERVICE SCHEDULE 2**  
**EXISTING CONTRACT PROVISIONS AND PROCEDURES**  
**[Subsection 3.1.2]**

**Existing Transmission Service Contracts:**

SCE, as the Participating Transmission Owner, is responsible for providing the ISO with this Service Schedule, outlining the instructions for WALC's existing contracts.

**SERVICE SCHEDULE 3**

**POINTS OF CONTACT**

**[Subsections 3.1.3, 10.2]**

**Privileged Material Redacted Pursuant  
To 18 C.F.R. § 388.112**

## SERVICE SCHEDULE 4

### RESPECTIVE JURISDICTION FOR OPERATIONAL CONTROL

#### [Subsection 3.2.1]

#### With SCE:

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2:

WALC Jurisdiction and Responsibility: Mead Substation is owned, and maintained by WALC. All of the line terminal equipment, busses, and associated controls at Mead Substation are under the switching and clearance jurisdiction of WALC. WALC will arrange for switching personnel at Mead. All routine and emergency disconnect switching will be directed by WALC. Isolating disconnects for the No. 1 transmission line are Nos. 7481 and 7585, and isolating disconnects for the No. 2 transmission line are Nos. 7187 and 7281.

ISO/SCE Jurisdiction and Responsibility: The Eldorado-Mead 230 kV Transmission Line Nos. 1 and 2 are under the switching and clearance jurisdiction of SCE Eldorado Switching Center operator and the operational control of the ISO.

Blythe 161 kV Substation:

ISO/SCE Jurisdiction: SCE Devers Switching Center has operating and maintenance jurisdiction of the Blythe-Eagle Mountain 161 kV Line, 161 kV transformer disconnect switch Nos. 1173, 1273, and 1373, transformer bus sectionalizing disconnect No. 1371, and the #1, #2, #3 161/33 kV transformer banks and the 33 kV switchrack.

Operational Responsibility: Coordinated with SCE, WALC, the ISO, and MWD.

WALC Jurisdiction: WALC has operating and maintenance jurisdiction over the 161 kV operating and transfer busses, including disconnect switch Nos. 371 and 375.

Interconnection Metering: Metering CT's are located on the bus work between SCE's banks #1, #2, #3, and WALC's Blythe 161 kV switchyard.

#### With MWD:

Camino - Mead 230 kV East and West Transmission Lines:

Jurisdictional Boundary: MWD owns ~~and has operational jurisdiction of the~~ transmission lines up to the Mead Substation bus and all of the facilities at Camino. WALC owns and has operational jurisdiction of the 230 kV bus work, breakers, and disconnects at Mead, East: Nos. 6387 and 6481 and West: Nos. 5881 and 5985.

ISO/SCE Switching Responsibility: SCE, in coordination with the ISO, will authorize MWD switching at Camino. WALC will arrange for personnel at Mead.

WALC Switching Responsibility: Switching and clearances on any of the points of Interconnection will be coordinated among WALC, the ISO, SCE, and MWD.

Operational Responsibility: Coordinated with SCE, MWD, WALC, and the ISO.

Maintenance Responsibility: MWD owns and has maintenance jurisdiction of the transmission line up to the Mead bus and all the facilities at Camino. WALC owns and has maintenance responsibility of the 230 kV bus work, breakers, and disconnects at Mead.

Gene (MWD) - Parker 230 kV Transmission Line:

Jurisdiction Boundary: WALC owns the transmission line to the Gene transmission line-side disconnects. SCE owns CB No. 207 and disconnects at Gene.

ISO/SCE Switching Responsibility: SCE authorizes MWD to perform switching at Gene.

WALC Switching Responsibility: All switching at Parker.

Operational Responsibility: Coordinated, WALC, SCE, MWD, and the ISO.

Maintenance Responsibility: WALC has maintenance responsibility at Parker.

**SERVICE SCHEDULE 5**  
**SWITCHING OPERATIONS**  
**[Subsection 3.2.2]**

The ISO will coordinate all switching on ISO controlled terminals for the following lines with the dispatch and switching centers indicated:

**With SCE:**

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2:

All routine switching and clearances on the Eldorado - Mead Transmission Line Nos. 1 and 2 will be handled by SCE's Eldorado Switching Center and WALC Dispatch Office in Phoenix, Arizona. Eldorado Switching Center and WALC Dispatch Office shall confer before issuing switching orders. Either party must obtain an intercompany clearance from the other party before a transmission line clearance is issued to station or field personnel.

Testing Instructions: See SOP.

Blythe 161 kV Substation;

All switching on the Blythe 161 kV transformer bus will be handled jointly by WALC and SCE Devers System operator. Each party will issue switching orders and clearances to station or field personnel under its jurisdiction.

An intercompany clearance will be issued by the other party to the party performing the work. Neither party will issue a clearance to its station for station or field personnel until it has obtained a clearance from the other party.

Line Restoration Instructions: Coordinated by WALC, SCE, MWD, and the ISO.

Testing Instructions: Coordinated by WALC, SCE, MWD, and the ISO.

Monitoring and Control Instructions: Coordinated by WALC, SCE, the ISO, and MWD.

**With MWD:**

Camino - Mead 230 kV East and West Transmission Lines:

Clearance/Switching Instructions: MWD and WALC issue intercompany clearances, coordinated with ISO and SCE.

Line Restoration Instructions: Coordinated by WALC, SCE, MWD, and the ISO.

Testing Instructions: Coordinated by WALC, SCE, MWD, and the ISO (See SOP).

Monitoring and Control Instructions: Coordinated by WALC, SCE, the ISO, and MWD.

Gene (MWD) - Parker 230 kV Transmission Line:

Clearance/Switching Instructions: ~~MWD-SCE~~ and WALC issue intercompany clearances, coordinated with ISO and MWD.

Line Restoration Instructions: Coordinated by WALC, SCE, MWD, and the ISO.

Testing Instructions: Coordinated by WALC, SCE, MWD, and the ISO (See SOP).

Monitoring and Control Instructions: Coordinated by WALC, SCE, the ISO, and MWD.

**SERVICE SCHEDULE 6**  
**REAL-TIME OPERATING LIMITS**  
**[Subsection 3.2.3.1]**

The ratings of the ISO-WALC Interconnections, as identified in Service Schedule 1, must consider the other facilities in or out of service, compensation levels, generation at Palo Verde, etc. The real-time ratings are established by the path operator(s) by application of appropriate procedures and Nomograms such as the Arizona Security Monitoring Manual or other operating procedures.

**SERVICE SCHEDULE 7**

**VOLTAGE CONTROL**

**[Subsection 3.2.5]**

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2  
Voltage Schedule: 220-240 kV  
MVAR Schedule: 0 MVAR

Blythe – Eagle Mountain 161 / 230 kV Transmission Line  
Voltage Schedule: 220-235 kV  
MVAR Schedule: 0 MVAR

Camino - Mead 230 kV East and West Transmission Lines  
Voltage Schedule: 220-235 kV  
MVAR Schedule: 0 MVAR

Gene (MWD) - Parker 230 kV Line  
Voltage Schedule: 220-235 kV  
MVAR Schedule: 0 MVAR

**SERVICE SCHEDULE 8**  
**INFORMATION EXCHANGE PROCEDURES FOR GRID OPERATIONS**  
**[Subsection 3.2.6]**

**Information Exchange:**

The ISO and the WALC shall coordinate, either directly or through their WECC Reliability Coordinators, the exchange of any information specified in subsection 3.2.6 concerning the Interconnection facilities and the status of the Balancing Authority Areas that may affect the operation of the Interconnection or either of the interconnected Balancing Authority Areas. Real-time information shall be communicated in the most efficient method possible through any shared electronic, voice, or facsimile media or via their respective WECC Reliability Coordinators. Such communication equipment may be common networked mass communication equipment in place and shared by WECC participants or regional transmission groups. Phone numbers are contained in Service Schedule 3. Service Schedule 9 lists information necessary for the reliable operation of the ISO, WALC, and WECC.

**SERVICE SCHEDULE 9**  
**INTERCONNECTION INFORMATION**  
**[Subsection 3.2.6.1]**

Information necessary for the reliable operation of the ISO, WALC, and the WECC shall include, but is not limited to, the following operational data:

1. Real-time data on the Interconnection, including instantaneous MW and MVAR outputs, bus kV, circuit breaker status and hourly net MWh outputs for each Interconnection point listed in Service Schedule 1, which data will be telemetered to the ISO and WALC over the existing ICCP data link subject to the need to transition to direct ISO and WALC interrogation of the substation RTU receiving the real-time MW and MVAR data in accordance with NERC operating data requirements. In addition, back-up outputs for each Interconnection's instantaneous MW and MVAR outputs will be telemetered to the ISO via either direct connection to the substation RTU or via a single back-up RTU, independent of and in addition to the data transmitted over the existing ICCP data link;
2. Major transmission Outages, planned or unplanned, as they occur or are effected;
3. Restoration of major transmission facilities after planned or unplanned Outages;
4. Loss or impairment of certain reactive equipment;
5. Loss of load or resources resulting in detectable frequency variation;
6. Detectable significant weather data and/or atmospheric conditions;
7. Significant conditions such as fires, floods, and earthquakes;
8. Activation or deactivation of RAS equipment;
9. Any planned or unplanned operation that can or will impair the availability or transfer capability of resources; and
10. Activation of Emergency Command Centers.

Additional information requirements including joint operating procedures may be added by mutual agreement between the ISO and WALC.

**SERVICE SCHEDULE 10**  
**JOINT OPERATING PROCEDURES**  
**[Subsection 3.2.7]**

**Blythe - Eagle Mountain 161 kV Transmission Line:**

The reliability and interconnected transfer capability of WALC 161 kV transmission system south of Parker may be jeopardized upon the loss of the 500/69 kV transformer at APS' North Gila Substation. Should this occur, WALC will notify the ISO of its intent to isolate the Blythe load on the SCE Blythe - Eagle Mountain 161 kV Transmission Line.

California ISO Procedure T-156, Path 59 (CAISO\_WALC Blythe Tie) will be followed to reliably operate Path 59 and to mitigate possible overloads on the Blythe – Eagle Mountain 161 kV Transmission Line.

From time to time, as needed, operating procedures will be developed and implemented.

**Gene - Parker 230 kV Transmission Line**

California ISO Procedure T-174 (Parker – Gene Overload Mitigation) will be followed to reliably operate and mitigate possible overloads on the Gene - Parker 230 kV Transmission Line.

## **SERVICE SCHEDULE 11**

### **INFORMATION EXCHANGE AND COORDINATION FOR INTERCHANGE SCHEDULING AND DISPATCH**

#### **[Subsection 5.1]**

**A. Preschedule Checkout Procedures:**

Day-Ahead Process: The ISO will confirm net interchange schedules with adjacent Balancing Authorities based on schedules submitted by Scheduling Coordinators within the parameters of the ISO's Day-Ahead market and accordance with any transmission limitations encountered by WALC. Interchange schedules will not be implemented unless accepted by both the ISO and WALC.

Hour-Ahead Process: The ISO will confirm hourly net interchange schedules with adjacent Balancing Authorities based on schedules submitted by Scheduling Coordinators within the parameters of the ISO's Hour-Ahead market and in accordance with any transmission limitations encountered by WALC. Interchange schedules will not be implemented unless accepted by both the ISO and WALC. Interchange schedules submitted by Scheduling Coordinators for existing contract rights-holders that retain rights to submit schedules after the close of the ISO's Hour-Ahead market parameters, will be accepted and the ISO will confirm net interchange schedules with the adjacent Balancing Authorities when the schedule is submitted.

**B. Real-Time Checkout Procedures:**

The ISO will confirm net interchange schedules with adjacent Balancing Authorities on a real-time basis, as required, to meet NERC and WECC Reliability Standards.

**C. After the Fact Checkout Procedures:**

The ISO will confirm actual and scheduled net interchange values (MW) with adjacent Balancing Authorities after the close of each settlement period (the scheduling hour, Hour Ending) as required to meet the obligations of inadvertent interchange energy accounting of prevailing NERC or WECC Reliability Standards.

**D. Monthly Meter Reading Adjustment Procedures:**

The ISO and WALC will coordinate adjustments to correct their respective EMSs to the actual flow accumulations as determined by monthly revenue meter reads in accordance with procedures and criteria developed by WECC.

**E. Inadvertent Correction Procedures:**

Inadvertent accumulation corrections shall be performed in compliance with NERC and WECC Reliability Standards.

**SERVICE SCHEDULE 12**  
**MAINTENANCE COORDINATION PROCEDURES**  
**[Subsection 6.1]**

**ISO Outage Coordination Principles:**

**The ISO Outage Coordination Office (OCO)** will coordinate Outage scheduling with the Participating Transmission Owners and the interconnected Balancing Authorities on the following types of equipment:

1. Interconnected transmission lines.
2. Interconnected transmission equipment including circuit breakers, transformers, disconnects, reactive devices, and wave traps.
3. Protection and control schemes, including RAS, SCADA, EMS, or AGC.
4. Facilities within either Balancing Authority Area that affect the transfer capability of the Interconnection.

In some cases it may be necessary for the Party requesting an Outage to submit procedures and diagrams to facilitate the switching for the Outage.

The preferred Outage coordination schedule for the ISO is developed in accordance with the following general schedule:

1. Each year near mid-October the ISO confers with other WECC entities in a long-range regional Outage coordination process. A similar conference occurs in April of each year.
2. Mid-Year: The ISO and WALC will meet to discuss and determine Outage coordination between the two entities with emphasis on long-term construction projects. The result of this meeting will be managed by the ISO and WALC's long-term Outage coordinators.
3. Quarterly Coordination: Each quarter (by the 15th of January, April, July, and October) the interconnected Balancing Authorities and Transmission Owners will coordinate long range Outage plans covering a rolling twelve-month period, beginning the first of the following quarter, and update, as needed, the existing and new Outage schedules with the ISO.
4. Outage Schedule Revisions: Requests for changes, additions, and cancellations to the annual/quarterly Outage schedule can be made at any time. However, the minimum notification for Outage request is governed by the process listed below.
5. Three Day Prior Confirmation/Notification: Any request to change the schedule of an Outage that may affect transfer capability must be submitted at least three (3) working days prior to the starting date of the scheduled Outage. This applies to facilities affecting the inter-Balancing Authority Areas operations, including the following:

- a. All 500 kV facilities
  - b. Any transmission line Outage
  - c. Any load transformer Outage
  - d. Any bus Outage
  - e. Relay protection Outages that reduce the transfer capability of a transmission line or path
  - f. Any Outage that requires coordination by two or more connected entities
  - g. Communication system Outages, including SCADA facilities
  - h. Any other Outage that will affect the transfer capability of any transmission line or path
6. **Final Approval:** Acknowledgement of receipt of the Outage request and any initial provision of a negative response to said Outage request between the ISO and WALC Outage Coordinators should occur the same day or the next day between the Outage Coordinators. Both ISO and WALC will consult with their Balancing Authority personnel to determine approval or denial of the scheduled Outage. If, due to current conditions, system reliability may be impaired by the scheduled Outage, either Balancing Authority may cancel the Outage at any time to commencement of removal switching.

**Forced Outages will be handled as follows:**

1. **Immediate Forced Outages:**  
Situations likely to result in a Forced Outage within the next twenty-four (24) hours unless immediate corrective action is taken should be communicated directly between WALC Transmission Dispatcher to the ISO Control Center. The ISO Control Center operators will work with the Participating Transmission Owner and/or the interconnected Balancing Authority to take actions as necessary.
2. **Imminent Forced Outages:**  
Situations not requiring a removal from service of transmission facilities until some time more than twenty-four (24) hours in the future should be communicated between WALC Outage Coordinator and the ISO OCO and will be scheduled for Outage. Time limits for notification will be waived and the request will be expedited by the ISO OCO and the WALC Outage Coordinator provided notice is given as soon as possible.

Switching for scheduled Outages will be coordinated by the ISO Control Center, interconnected Balancing Authority, the Participating Transmission Owner, and the Transmission Owner(s). Following approval to remove the facilities from service, the ISO Control Center will direct the Participating Transmission Owner(s) to work with the interconnected Balancing Authority to open the circuit breakers and then to perform necessary switching. The Transmission Owner will report to the ISO Control Center regarding the removal from service of the affected facilities.

Likewise, when returning facilities to service, following approval to return the facilities to service, the ISO Control Center will direct the Participating Transmission Owner to work with the interconnected Balancing Authority to perform necessary switching in preparation for closing circuit breakers and then the actual closing of the circuit breakers. The Transmission Owner will report to the ISO Control Center regarding the return to service of the affected facilities.

Clearances will be exchanged and appropriate records kept between the Transmission Owners and the interconnected Balancing Authorities. The ISO Control Center will also keep records of the Outages.

The ISO OCO will maintain a record of each Outage as it is implemented utilizing the ISO's logging and Outage data management application, utilizing the ISO's logging and Outage data management application, scheduling and logging system for the ISO of California (SLIC). Such records will be available for inspection by the owners of the facilities involved.

### **ISO Preferred Methods of Submitting Outage Requests**

The primary method of submitting Outage requests to the ISO is via the ISO's SLIC internet application (i.e., ISO's electronic Outage request tool). If that application is unavailable or an interface to other Balancing Authority applications has not been established, other methods may be used, including:

1. E-mail to:
2. Phone: **Privileged Material Redacted Pursuant**
3. Fax: **To 18 C.F.R. § 388.112**

### **WALC Outage Coordination Principles:**

For informational purposes, WALC has included the following Outage coordination procedures which may impact the ISO.

The WALC Outage Coordinator will coordinate Outage scheduling with the ISO, Participating Transmission Owners, and the interconnected Balancing Authorities on the following types of equipment:

1. Interconnected transmission lines.
2. Interconnected transmission or substation equipment including circuit breakers, transformers, disconnects, reactive or capacitive devices, and wave traps.
3. Protective relay and control schemes, including RAS, SCADA, EMS, or AGC.

In some cases, it may be necessary for the ISO, WALC, or a Transmission Owner to submit procedures and diagrams to facilitate switching for the Outage.

The WALC Transmission Dispatcher will monitor actual completion of switching in its Balancing Authority Area and advise the ISO of the completion of the switching procedures

Clearances will be exchanged between Transmission Owner and WALC. WALC will maintain a record of each Outage as it is implemented. Such records will be available for inspection.

**SERVICE SCHEDULE 13**  
**EMERGENCY ASSISTANCE ARRANGEMENTS**  
**[Subsection 7.1]**

To the extent possible and per NERC policies, the Parties will assist each other in an emergency by scheduling energy and/or capacity, or by making available transmission capacity to deliver emergency assistance from remote Balancing Authorities. 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. ISO and WALC operators will agree upon and log MW values, start and end times, ramp rates and times, and integrated MWH values for any emergency assistance provided.

The price paid for ISO emergency assistance will be at the ISO market price for energy and/or capacity, plus all applicable charges, as specified in the ISO Tariff. Such price may be estimated prior to delivery and finalized in the settlement process. The ISO will establish a Scheduling Coordinator account for WALC for the sole purpose of facilitating the settlement of such emergency assistance. Payment to the ISO for such emergency assistance will be made in accordance with the settlement process, billing cycle, and payment timeline set forth in the ISO Tariff.

The price paid for WALC emergency assistance will be at a price agreed upon by the Parties or a price established by WALC for such emergency assistance in advance, as may be applicable. Payment by the ISO for such emergency assistance will be made in accordance with the settlement process, billing cycle, and payment timeline set forth in the ISO Tariff.

## **SERVICE SCHEDULE 14**

### **INDEPENDENT OPERATION DUTIES AND RESPONSIBILITIES**

#### **[Subsection 7.3.1]**

Normally all switching operations are coordinated with all appropriate Balancing Authorities prior to performing any actual switching. In situations where the immediate personnel or public safety is an issue, switching may be accomplished without coordination with other Balancing Authority entities and notification provided afterwards, as stated in subsection 7.3.1

Beyond that included in the body of the agreement, no additional independent operation duties and responsibilities currently exist.

**SERVICE SCHEDULE 15**  
**RESTORATION COORDINATION**  
**[Subsection 7.4]**

WALC and the ISO will work in close cooperation to maximize the reliability of interconnected operations. The NERC and WECC Reliability Standards and WECC MORC and off-nominal frequency procedures will be utilized as applicable. As appropriate, priority will be placed by both parties on restoration of the Interconnection prior to restoration of native load. The Interconnection will be closed only on orders from the ISO and WALC.

Eldorado - Mead 230 kV Transmission Line Nos. 1 and 2

Should either or both Eldorado - Mead 230 kV Transmission Lines relay, the ISO, Eldorado Switching Center, and WALC will confer prior to re-energizing a relayed transmission line or reestablishing the Interconnection at Mead.

Should the ISO or WALC Balancing Authorities experience a system wide shutdown, blackstart, or islanded condition, the WALC system operator's highest priority is the provision of shutdown power for the Palo Verde Nuclear Generating Station. As Hoover generation and associated transmission is available and stable in the judgment of the WALC system operator, and with concurrence of the ISO and both Reliability Coordinators (CMRC and RDRC), a Mead interconnection using SCE's Transmission System will be closed. The supply of shutdown power for San Onofre Nuclear Generating Station will be routed through isolated portions of the SCE system as expeditiously as may be accomplished.

## **SERVICE SCHEDULE 16**

### **INTER-BALANCING AUTHORITY AREA REQUIREMENTS FOR SCHEDULING AND DELIVERING REGULATION SERVICE TO THE ISO**

#### **[Subsection 5.3]**

#### **1. General**

- 1.1 **Purpose.** This Service Schedule sets forth the requirements that must be satisfied by Western Area Power Administration, Lower Colorado (WALC) should it elect to support Scheduling Coordinators' requests for the certification, scheduling, and delivery of Regulation service into the ISO Balancing Authority Area. In supporting delivery of Regulation service into the ISO Balancing Authority Area under the provisions of this Service Schedule, WALC retains the right to separate, add, include, exclude, or substitute resources from any source, either individually or in aggregate as deemed appropriate by the WALC, provided that ISO and WALC operating requirements are satisfied.
- 1.2 **NERC/WECC Operating Standards Observed.** Nothing in this Service Schedule is intended to change, supercede, or alter either Party's obligations to abide by NERC and WECC Reliability Standards. This Service Schedule does not supersede pre-existing and effective power contracts or letter agreements to which either Party may individually be obligated.
- 1.3 **Applicable Standards.** This Service Schedule incorporates by reference, but is not limited to, the ISO's "*Standards for Imports of Regulation*" (Standards). The Standards document is available for viewing and can be also downloaded from the ISO internet home page: [www.caiso.com](http://www.caiso.com).
- 1.4 **Meaning of System Resource.** System Resource is defined in the ISO Tariff and, in the context of this Service Schedule, may include combinations of resources as described in the Standards. Specifically, System Resource may include any combination of resources, single resource or a portion of a resource located outside the ISO Balancing Authority Area, public or private, made available by the WALC, as the WALC deems appropriate, to provide for delivery of Regulation service by means of a dynamic schedule from WALC to the ISO Balancing Authority Area. In the event of a conflict between the ISO Tariff definition of System Resource and the definition in this Service Schedule, the definition in this Service Schedule shall apply.
- 1.5 **Meaning of Regulation.** The Regulation service to be delivered to the ISO Balancing Authority Area that is the subject of this Service Schedule is as defined in the ISO Tariff and shall have that meaning for purposes of this Service Schedule, subject to the terms of the Standards with regard to delivery of

Regulation service from a System Resource. Nothing in this definition shall be deemed contrary to the WECC and NERC definitions of Regulating Reserve and Regulation Service, respectively.

## **2. Telecommunications Requirements**

The ISO and WALC shall establish and maintain real-time, redundant, diversely routed, bi-directional, communications links between the ISO energy management system (EMS) and the WALC EMS, utilizing standard inter-company communications protocol (ICCP) or equivalent, mutually accepted, communications methods. For further details regarding telecommunications requirements, refer to the Standards.

## **3. Telemetry and Control**

3.1 Telemetry. For each operating hour for which a System Resource is scheduled to deliver Regulation service to the ISO Balancing Authority Area, WALC shall provide, via the ICCP communication links to the ISO EMS, all data for each System Resource represented by a dynamic schedule, as set forth in the Standards, while applying operating methodology consistent with WALC operating practices applicable to that resource, provided that such practices are coordinated with the ISO.

3.2 Control. The WALC EMS shall be able to receive control signals, in real-time, from the ISO EMS, via the ICCP communications links, causing the System Resource to vary its energy production or allocation level from the prescheduled preferred operating point by the specified amount. Refer to the Standards for detailed information regarding control requirements. In case of telemetry failures or computer malfunctions, the WALC shall manually override dynamic schedule control signals and the WALC real-time operators will advise the ISO real-time operators of that manual override.

## **4. Interchange Scheduling Requirements**

4.1 Dynamic Scheduling. WALC shall support Scheduling Coordinators' requests to arrange dynamic interchange schedules for the delivery of Regulation service to the ISO Balancing Authority Area, reflecting the System Resource's instantaneous energy production or allocation level as caused by real-time control signals issued by the ISO EMS/AGC and taking into account available transmission capacity. WALC reserves the right to seek reimbursement from Scheduling Coordinators requesting such support for expenses incurred when preparing for, and providing, support for delivery of Regulation service to the ISO Balancing Authority Area.

4.2 Treatment of Area Control Error. The WALC shall instantaneously compensate its AGC for the System Resource's variable energy output level such that System

Resource energy production or allocation changes, caused by the ISO EMS/AGC control signals, have an equal magnitude and opposite sign effect on the WALC's Area Control Error (ACE).

- 4.3 Integration of Dynamic Scheduling. For each operating hour during which Regulation service was dynamically scheduled for delivery to the ISO Balancing Authority Area, WALC shall compute an integrated amount of interchange based on the System Resource's integrated energy production, by integrating the instantaneous System Resource production levels. Such integrated MWH value shall be supplied by WALC hourly and used for the inter-Balancing Authority Area checkout of actuals with the ISO.
- 4.4 Delivery of Megawatts (MW). The ISO and WALC will share in the real-time deviations from the dynamic System Resources on a pro-rata basis. WALC will remain responsible for regulation obligation for the portion of the System Resource's output not dynamically scheduled into the ISO Balancing Authority Area, in accordance with NERC and WECC Reliability Standards.
- 4.5 Access to information. The Parties agree to exchange information related to control signals issued and telemetry received with respect to the delivery of Regulation service at the request of the other Party for purposes of after-the-fact interchange accounting.

## 5. Other

- 5.1 Losses. The ISO shall not be responsible for transmission losses caused by transmitting Regulation service within WALC for delivery to the ISO. WALC shall not be responsible for transmission losses caused by transmitting Regulation service over the ISO transmission system.
- 5.2 Certification. Only ISO-certified System Resource/WALC arrangements will be allowed to bid or self-provide Regulation service in the ISO's ancillary services market through an ISO-certified Scheduling Coordinator. Pre-existing arrangements supporting deliveries of Regulation service from WALC into the ISO Balancing Authority Area are deemed certified by the ISO.
- 5.3 No Guarantee of Award. Certification of a System Resource/WALC arrangement allows for bidding of Regulation service into the ISO market; it does not, however, guarantee selection of such bid.
- 5.4 Performance Assessment. The ISO will monitor and measure imported Regulation service, whether bid or self-provided, against the performance benchmarks described in the Standards. Other than as set forth in this Service Schedule and the Standards, WALC is not responsible or liable for maintaining

the Regulation import service standards set by the ISO. The ISO retains the right to curtail such Regulation service at any time, should the performance of such service become unacceptable. However, the ISO may not bill or penalize WALC for such perceived inadequate performance. The Performance Assessment shall not prevent delivery of Regulation and associated capacity and energy as agreed to in existing contracts predating ISO operations and performance standards.

- 5.5 Pre-Installation Data Point Check. The ISO and the WALC computer support personnel will confirm data points to be transmitted for this Regulation service. Additionally, the data flow and data path process shall be clearly established between the support personnel as the first stage of development. Both Parties must agree to the data point, data flow, and data path processing before programming efforts are to commence or are to be modified for future computer code modifications.

## SERVICE SCHEDULE 17

### INTER-BALANCING AUTHORITY AREA REQUIREMENTS FOR SCHEDULING AND DYNAMIC DELIVERY OF ENERGY, SUPPLEMENTAL ENERGY, AND ENERGY ASSOCIATED WITH NON-REGULATION ANCILLARY SERVICES TO THE ISO

#### [Subsection 5.4

#### 1. General

- 1.1 Purpose. This Service Schedule sets forth the requirements and processes that must be satisfied by an entity requesting the ability to schedule and deliver dynamic energy, supplemental energy, and energy associated with ancillary services (other than regulation service) into the ISO Balancing Authority Area (requesting entity) and that must be coordinated through WALC and the ISO should the requesting entity request to implement of a dynamic scheduling functionality and delivery of energy, supplemental energy, and energy associated with ancillary services (except regulation service) into the ISO Balancing Authority Area. The ISO requires the requesting entity to be represented by a Scheduling Coordinator in any associated ISO processes. The requirements encompass technical energy management system (EMS)/automatic generation control (AGC) and communications), interchange scheduling, telemetry, and aspects of interconnected Balancing Authority Area operations.
- 1.2 NERC/WECC Operating Standards Observed. Nothing in this Service Schedule is intended to change, supercede, or alter either Party's obligations to abide by NERC and WECC Reliability Standards and policies.
- 1.3 Applicable Standards. This Service Schedule incorporates, by reference, the ISO Tariff Dynamic Scheduling Protocol. WALC also has certain specific implementation requirements to ensure that NERC standards and WECC policies and criteria are satisfied, including the WECC RMS.
- 1.4 Meaning of System Resource. System Resource is defined in the ISO Tariff and, in the context of this Service Schedule, may include combinations of resources as described in the ISO Tariff Dynamic Scheduling Protocol.

#### 2. Telecommunications Requirements

The ISO Balancing Authority and WALC will establish and maintain real-time, redundant, diversely routed, communications links between the ISO EMS and the WALC EMS, with the primary link utilizing the standard inter-Balancing Authority Area communications protocol (ICCP) in accordance with the ISO Tariff Dynamic Scheduling Protocol and WALC protocols.

### **3. Telemetry**

For each operating hour for which a System Resource is scheduled to deliver energy, supplemental energy, and/or energy associated with any of the non-regulating ancillary services to the ISO Balancing Authority Area, WALC will provide, via the ICCP communication links to the ISO EMS, the data for each System Resource as set forth in the ISO Tariff Dynamic Scheduling Protocol and WALC protocols.

### **4. Interchange Scheduling Requirements**

- 4.1 Dynamic Scheduling. The WALC will support a requesting entity's application to arrange dynamic interchange schedules for the delivery of energy to the ISO Balancing Authority Area, reflecting the System Resource's instantaneous energy production or allocation level and taking into account available transmission capacity. All schedules need to be e-tagged in accordance with NERC and WECC requirements and practices, as provided in subsection 5.2 of this Service Schedule.
- 4.2 Treatment of Area Control Error (ACE). The WALC will instantaneously compensate its AGC for the System Resource's energy output that is generated or allocated for establishing the dynamic schedule to the ISO such that the System Resource energy production or allocation changes have an equal magnitude and opposite sign effect on the WALC's ACE.
- 4.3 Integration of Dynamic Scheduling. For each operating hour during which energy was dynamically scheduled for delivery to the ISO Balancing Authority Area, WALC will compute an integrated amount of interchange based on the System Resource's integrated energy production, by integrating the instantaneous System Resource production levels. Such integrated MWH value will be agreed to hourly by the real-time schedulers.
- 4.4 Delivery of Megawatts (MW). The ISO and WALC will share in the real-time deviations from the dynamic System Resources on a pro-rata basis. WALC will remain responsible for regulation obligation for the portion of the System Resource's output not dynamically scheduled into the ISO Balancing Authority Area, in accordance with NERC and WECC Reliability Standards.
- 4.5 Access to Information. The Parties agree to exchange information related to telemetry sent and received with respect to the delivery of energy at the request of the other Party for purposes of after-the-fact interchange accounting.

### **5. Other WALC Responsibilities**

- 5.1 Operational Authority. WALC will have, at a minimum, the level of operational authority over the System Resource and the associated dynamic schedule that NERC and WECC vest in WALC.
- 5.2 E-Tagging. WALC and the ISO Balancing Authority must support associated e-tagging as described in the ISO Tariff Dynamic Scheduling Protocol and deemed to be consistent with NERC and/or WECC requirements.
- 5.3 Real-Time Adjustments. WALC must have a means to manually override and/or otherwise adjust the dynamic signal in real-time, if needed.
- 5.4 Coordination with Other Balancing Authorities. WALC must provide the real-time instantaneous value of each dynamic schedule to every Intermediate Balancing Authority through whose systems such dynamic schedule may be implemented to the ISO.

**6. Other**

- 6.1 Losses. A requesting entity will be responsible for transmission losses caused by transmitting energy, supplemental energy, and energy associated with ancillary services, other than regulation service, within or across the WALC and ISO systems in accordance with the applicable ISO and WALC requirements.
- 6.2 Certification. Only a requesting entity meeting ISO-certified System Resource/WALC arrangements and separate applicable expanded WALC Balancing Authority requirements will be allowed to bid or self-provide ancillary services in the ISO's ancillary services market through an ISO-certified Scheduling Coordinator.
- 6.3 No Guarantee of Award. Certification of a System Resource/WALC arrangement allows for bidding of supplemental energy and/or certain ancillary services into the ISO market; it does not, however, guarantee selection of such bid.
- 6.4 Performance Assessment. The ISO will monitor and measure dynamically imported ancillary services, whether bid or self-provided, against the performance benchmarks described in the ISO Tariff Dynamic Scheduling Protocol.

**7. CONSENT TO IMPLEMENTATION OF DYNAMIC SYSTEM RESOURCES**

Each dynamically scheduled System Resource shall be permitted pursuant to this Service Schedule only upon written consent of both WALC and the ISO and only if the System Resource is subject to a Dynamic Scheduling Agreement for Scheduling Coordinators with the ISO. Such written consent may be communicated by e-mail.

## CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing documents upon all of the parties listed on the official service list for the referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 16<sup>th</sup> day of May, 2008.

  
Bradley R. Miliauskas  
Bradley R. Miliauskas