# **Coordination Plan**

This Coordination Plan ("Plan") is created by Electric Reliability Council of Texas, Inc. ("ERCOT"), a Texas non-profit corporation, and Southwest Power Pool, Inc. ("SPP"), an Arkansas non-profit corporation. ERCOT and SPP may be hereinafter referred to in this Plan individually as a "Party" and collectively as the "Parties."

SPP and ERCOT act as the Reliability Coordinators (RC) and Balancing Authorities (BA) for their respective RC and BA Areas, as those terms are defined in the North American Electric Reliability Corporation (NERC) Glossary of Terms and as used in the NERC Reliability Standards.

The Parties desire to establish mutually agreeable operational procedures with respect to the matters described herein.

This Plan supersedes that certain Coordination Agreement made by and between the Parties on February 28, 2014, which is hereby terminated by the Parties by mutual agreement effective immediately.

### **Purpose**

The purpose of this Plan is to establish mutually agreeable operational procedures with respect to switchable generation resources and block load transfers in connection with Emergency Conditions, and direct-current ties that impact operations in both the ERCOT and SPP regions. This Plan does not create any legal obligation for either Party, and the Parties hereby waive any right to seek enforcement of any term in this Plan. Either Party may cease participation in this Plan upon email or U.S. mail notice to the other Party's contact for legal notices identified in Exhibit A.

### **1. Switchable Generation Resources**

### 1.1 Definition of Switchable Generation Resource

For purposes of this Plan, a Switchable Generation Resource ("SWGR") is a generating unit that is capable of nonsimultaneous synchronization with both the Texas Interconnection and the Eastern Interconnection. SWGRs are listed in Exhibit B.

### 1.2 Controlling Party

Except following any Release as described in this Plan and for the duration of any Emergency Condition necessitating such Release, any SWGR that is synchronously connected to the SPP system will be understood to be under the operational control of SPP, and any SWGR that is synchronously connected to the ERCOT system will be understood to be under the operational control of ERCOT. The Party that is assigned operational control of the SWGR pursuant to this paragraph is the "Controlling Party" for purposes of this Plan.

### 1.3 Requesting Party

The Party requesting the transition of control of an SWGR to prevent or address an Emergency Condition is the "Requesting Party" for purposes of this Plan.

### 1.4 SWGR Switching

- 1.4.1 For purposes of this Plan, "SWGR Switching" or "Switch" means the disconnection of any SWGR from the SPP system or ERCOT system and the subsequent synchronization of the SWGR with the other system.
- 1.4.2 The following provisions apply to any Switch initiated by either Party:
  - 1.4.2.1 For purposes of this Plan, "Emergency Condition" is defined as any operating condition that poses a threat to the reliability of all or a portion of the Party's system, as determined by that Party. An Emergency Condition may be transmission-related or capacity-related.
  - 1.4.2.2 For purposes of this Plan, "Release" is defined as the Controlling Party notifying the operator of the SWGR that it is no longer subject to the operational control of the Controlling Party and that it is now subject to the operational control of the Requesting Party. Release shall not be construed to alter or waive any regulatory, compliance, or financial obligation or responsibility of any party, including SWGR owners and operators.
  - 1.4.2.3 If SPP determines that an SWGR operating in the ERCOT system would assist in mitigating an existing or anticipated Emergency Condition, SPP may contact ERCOT to request that ERCOT Release one or more SWGRs. Upon receiving such a request and completing any necessary studies, ERCOT will promptly Release the SWGR if ERCOT determines that doing so would not cause or exacerbate an Emergency Condition for the ERCOT system. In communicating the Release, ERCOT will notify the SWGR operator that SPP has requested Release of the SWGR to address an existing or anticipated Emergency Condition. Following issuance of the Release, ERCOT will promptly notify SPP that it has Released the SWGR. Upon receiving notification of the Release from ERCOT, SPP may issue Operating Instructions to the SWGR operator. ERCOT may revoke the Release under Section 1.4.2.6 or recall the SWGR under Section 1.4.2.7.
  - 1.4.2.4 If ERCOT determines that an SWGR operating in the SPP system would assist in mitigating an existing or anticipated Emergency Condition, ERCOT may contact SPP to request that SPP Release one or more SWGRs. Upon receiving such a request and completing any necessary studies, SPP will promptly Release the SWGR if SPP determines that doing so would not cause or exacerbate an Emergency Condition for the SPP system. In communicating the Release, SPP

will notify the SWGR operator that ERCOT has requested Release of the SWGR to address an existing or anticipated Emergency Condition. Following issuance of the Release, SPP will promptly notify ERCOT that it has Released the SWGR. Upon receiving notification of the Release from SPP, ERCOT may issue Operating Instructions to the SWGR operator. SPP may revoke the Release under Section 1.4.2.6 or recall the SWGR under Section 1.4.2.7.

- 1.4.2.5 The Requesting Party will notify the Controlling Party and the SWGR operator when the conditions that prompted the request no longer exist.
- 1.4.2.6 At any time after a Party Releases a SWGR but before the SWGR disconnects from that Party's system, if that Party determines that the SWGR is needed to mitigate a previously unidentified actual or anticipated Emergency Condition, then the Party may revoke the Release by notifying the other Party that the Release is being revoked due to an Emergency Condition. After this notification, the revoking Party will promptly notify the SWGR operator of the revocation.
- 1.4.2.7 Where some or all of an SWGR's capacity has been nominated by the SWGR owner or operator to satisfy supply adequacy or capacity planning requirements in one Party's region, the Party for whose purposes the capacity has been nominated ("Primary Party") may recall the SWGR from the other Party ("Secondary Party") in the event the SWGR is operating in, or Switching to, the Secondary Party's region and the Primary Party experiences or anticipates an Emergency Condition. Upon notification from the Primary Party that the SWGR is needed in the Primary Party's region to address an existing or anticipated Emergency Condition, the Secondary Party will Release the SWGR as soon as possible, even if doing so would require controlled load shed by the Secondary Party. If the SWGR has not been nominated by the SWGR owner or operator to satisfy either Party's supply adequacy or capacity planning requirements, the Party to which the SWGR is connected has authority to approve or deny a requested Release based on a determination that the Release could cause or exacerbate an Emergency Condition, consistent with sections 1.4.2.3 and 1.4.2.4, above. Primary Party status is identified in Exhibit B.

### 2. Block Load Transfers

- 2.1 ERCOT and SPP will facilitate block load transfers ("BLTs") between their respective RC Areas as necessary, provided that BLTs do not cause an Emergency Condition in either RC Area. BLTs are identified in Exhibit B.
- 2.2 If either Party determines that a BLT may cause an Emergency Condition on its system, the Party may refuse to accept the BLT.
- 2.3 The Party transferring load will confirm the BLT availability with the Party accepting the load before any BLT implementation.
- 2.4 The Parties will coordinate the curtailment or termination of a BLT to mitigate any Emergency Condition on their respective systems that arises due to the BLT.

### **3.** Operation of Direct Current (DC) Ties

- 3.1 For the purposes of this Plan, the following terms shall have the following definitions:
  - 3.1.1 "Direct Current (DC) Tie" refers to either of the High-Voltage Back-to-Back Direct Current Ties described in Exhibit B of this Plan.
  - 3.1.2 "Inadvertent Energy" is defined as the net hourly difference between Actual Interchange and Scheduled Interchange for each DC Tie.
  - 3.1.3 "Scheduled Interchange" is defined as the total net interchange across a DC Tie, as reflected by all confirmed e-Tags in OATI WebTrans.
  - 3.1.4 "Actual interchange" is defined as the total physical net interchange across a DC Tie as established by the DC Tie operator's telemetry, ERCOT-Polled Settlement (EPS) meters at the DC Tie, or by mutual agreement of the Parties.
  - 3.1.5 "On-Peak Hours" are defined as Hours Ending 0700–2200 Central Prevailing Time every Monday through Saturday except federal holidays.
  - 3.1.6 "Off-Peak Hours" are defined as all hours that are not On-Peak Hours.
- 3.2 All transactions across the DC Ties will be conducted in accordance with the NERC Reliability Standards and North American Energy Standards Board (NAESB) Wholesale Electric Quadrant (WEQ) Business Practice Standard WEQ-004, Coordinate Interchange ("WEQ-004").
- 3.3 Except when an e-Tag cannot be timely submitted due to an Emergency Condition, the Parties understand that the DC Tie operator will use the aggregate NERC E-Tag energy profile to determine the appropriate magnitude and direction of power flow across each DC Tie.
- 3.4 Maintenance outages on each of the DC Ties are subject to each Party's outage coordination process.
- 3.5 Provision of Emergency Energy
  - 3.5.1 Whenever either Party experiences or anticipates an Emergency Condition, that Party may request that the DC Tie operator provide emergency energy across one or both DC Ties for the duration of the Emergency Condition. Before communicating the request to the DC Tie operator, the requesting Party will notify the other Party of the need for emergency energy.
  - 3.5.2 Any Party experiencing or anticipating an Emergency Condition may reject or curtail any e-Tag as it deems necessary to address the Emergency Condition, consistent with NERC Reliability Standards and WEQ-004.
  - 3.5.3 In the event both Parties experience a simultaneous Emergency Condition, the Parties recognize that no emergency energy may be available and that all e-Tags may be curtailed.

### 3.6 Inadvertent Energy

- 3.6.1 The Parties will separately maintain an interim Inadvertent Energy account balance for On-Peak Hours and Off-Peak Hours. Each day after midnight, ERCOT will verify with the DC Tie operator and SPP all the schedules and real-time aggregated SCADA flows for the DC Ties. Any discrepancies will be resolved immediately to the extent possible.
- 3.6.2 Seven days after each operating day, ERCOT will upload EPS meter data for the DC Ties to the ERCOT OATI WebTrans system and will email the data to SPP. The EPS data supersedes the initial SCADA values approved by the DC Tie operators for purposes of Inadvertent Energy settlement.
- 3.6.3 No earlier than the first business day occurring on or after the seventh day following the end of each month, and no later than 14 days after the end of each month, ERCOT will email SPP a report describing the total net Scheduled Interchange and Inadvertent Energy for each DC Tie for each operating day during that month and the total net Inadvertent Energy for the month for both DC Ties. Within five business days, SPP will send ERCOT an email either approving the report or identifying any concerns with the report. The Parties will work in good faith to resolve any discrepancy regarding any data reflected in the report. Each Party agrees to provide the other Party all relevant documentation supporting the Party's position. The Parties will regard the agreed monthly interchange data as final for purposes of Inadvertent Energy payback and external reporting.
- 3.6.4 At any time the Inadvertent Energy balance reaches 1000 MWh, the Parties will endeavor to agree on a schedule by which the Party that was the net recipient of Inadvertent Energy will pay back the energy in kind to the other Party, with the aim of achieving payback as soon as reasonably possible and consistent with good utility practice. The Inadvertent Energy that was transferred during On-Peak Hours will be paid back during On-Peak Hours, and Inadvertent Energy that was transferred during Off-Peak Hours will be paid back during Off-Peak Hours. Inadvertent Energy will be paid back by directing the DC Tie operator to bias the DC Tie in the appropriate direction.

### 4. Additional Provisions

- 4.1 The Parties will communicate in accordance with good utility practice. For purposes of all realtime operational communications under this Plan, each Party will use the "On-Shift RC Desk Telephone" number provided by the other Party in accordance with Section 5 of this Plan.
- 4.2 This Plan does not constitute a contract, partnership, joint venture, agency, or employment agreement between ERCOT and SPP, but represents the mutual understanding of the Parties concerning the issues identified herein.
- 4.3 This Plan may be amended only in writing if agreed by all Parties.
- 4.4 This Plan is made solely for the benefit of the Parties hereto and their successors and permitted

assigns, and no other person, including but not limited to member organizations of the Parties, shall have any rights, interest, or claims hereunder, or otherwise be entitled to any benefits under or on account of this Plan as third party beneficiary or otherwise.

### 5. Contact Information

5.1 The Parties will complete and exchange the contact information set forth in Exhibit A immediately upon execution of this Plan. Each Party will promptly update its contact information with the other Party as necessary by sending an email with the updated information to the designated shift supervisor contact for the other Party. The other Party will confirm receipt of the updated contact information.

### 6. Updates to Exhibit B

- 6.1 The Parties shall review and update the information contained in Exhibit B as necessary in order to maintain the accuracy of Exhibit B.
- 6.2 The table in Exhibit B regarding SWGRs contains ERCOT's representations regarding capacity nominated to ERCOT as described in Section 1.4.2.7 and SPP's representations regarding capacity nominated to SPP as described in Section 1.4.2.7. Neither Party has verified the other Party's representations regarding nominated capacity. Therefore, neither Party's execution of this Plan constitutes certification of the other Party's representations regarding nominated capacity.

[Signature Page Follows]

# In witness whereof, the signatories hereto have caused this Plan to be executed by their duly authorized officers.

Electric Reliability Council of Texas, Inc.	Southwest Power Pool, Inc.
Signature:	Signature:
Printed Name: Woody Rickerson	Printed Name: Bruce Rew
Date:	Date:
Title: Vice President, Grid Planning and Operations	Title: Vice President, Operations

# **Exhibit A – CONTACT INFORMATION TEMPLATE**

### **Operations Notices**

Operations Main Telephone: [TELEPHONE] On-Shift RC Desk Telephone: [TELEPHONE] On-Shift RC Fax: [FAX] On-Shift RC E-mail: [EMAIL]

Primary Shift Supervisor: [NAME] Shift Supervisor Telephone: [TELEPHONE] Shift Supervisor Email: [EMAIL]

### Secondary Shift Supervisor: [NAME]

Shift Supervisor Telephone: [TELEPHONE] Shift Supervisor Email: [EMAIL]

### Manager of Systems Operations: [NAME]

Manager of System Operations Telephone: [TELEPHONE] Manager of System Operations Email: [EMAIL]

### Legal and Other General Notices

Email:

Mailing Address:

[NAME] [TITLE] [COMPANY] [ADDRESS] [CITY, STATE ZIP]

Telephone: [TELEPHONE]

# <u>Exhibit B</u>

# **Switchable Generation Resources**

# SPP:

SPP Unit Code	ERCOT Unit Code	SPP Nominated MW	Section 1.4.2.7 Primary Party
ANTELOPE ANT1	AEEC_ANTLP_1	54.2	SPP
ANTELOPE ANT2	AEEC_ANTLP_2	53.9	SPP
ANTELOPE ANT3	AEEC_ANTLP_3	2019: 0 2020: 53.9	SPP
TUCO ELK1	AEEC_ELK_1	195.4	SPP
TUCO ELK2	AEEC_ELK_2	190.5	SPP

# **ERCOT:**

ERCOT Unit Code	SPP Unit Code	ERCOT Winter/Summer MW	Section 1.4.2.7 Primary Party
KMCHI_1CT101	KIOWA GT11	178/153	ERCOT
KMCHI_1CT201	KIOWA GT12	180/155	ERCOT
KMCHI_1ST	KIOWA ST1	307/315	ERCOT
KMCHI_2CT101	KIOWA GT21	178/153	ERCOT
KMCHI_2CT201	KIOWA GT22	180/155	ERCOT
KMCHI_2ST	KIOWA ST2	307/315	ERCOT
TGCCS_CT1	GATEWAY2 GT1	162/156	ERCOT
TGCCS_CT2	GATEWAY2 GT2	179/135	ERCOT
TGCCS_CT3	GATEWAY2 GT3	178/153	ERCOT
TGCCS_UNIT4	GATEWAY2 ST1	389/402	ERCOT

## **Direct Current Ties**

Name	CONNECTING SUB	ERCOT SUB	SPP SUB	MW
North (DC_N)	Oklaunion	OKLA	Oklaunion	220
East (DC_E)	Monticello	MNSES	Welsh	600

# **Block Load Transfers**

BLT LOCATION	ERCOT SUB	SPP SUB	MW
Childress AEP	CHIL		10
Quanah/Lake Pauline	QUAN		10
Estelline/Turkey	ESTELLIN		10
SNTX1	SNTX1		4
MECPLNVW	MECPLNVW		4
Turkey Lighthouse	TURL		0.1
Gail Sub	GAILS		1.8
Lamesa (Punkin Center)	LMESA		2.7
Welch	WELCH		5