Item 14: Overview of Revisions to SPP and MISO Coordination Plans

Nathan Bigbee
Assistant General Counsel

Board of Directors Meeting

ERCOT Public
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Background

- **January 2016**: ERCOT and Southwest Power Pool, Inc. (SPP) began discussions around new agreement as outgrowth of ERCOT Switchable Generation Resource (SWGR) policy review; renewed discussions in early 2018
- **April 2018**: ERCOT initiated discussions with Midcontinent Independent System Operator, Inc. (MISO) about new, bilateral coordination agreement
- **August–December 2018**: ERCOT, MISO, and SPP met jointly to discuss coordination principles and develop updated agreements
  - developed Switchable Generation Resource (SWGR) principles document
  - reached agreement in principle on draft coordination plan documents
- **Current status**: ERCOT, MISO, and SPP taking coordination plans through their respective internal processes
  - NPRR886 proposed to govern stakeholder review process in ERCOT

SPP Coordination Plan Highlights

- Removes language that addresses Market Participant obligations (e.g., SWGR modeling, outage coordination, COP status, voltage requirements)
  - Focus of agreement should be solely on bilateral coordination; regional rules will establish Market Participant duties
- Clarifies that plan is non-binding; avoids addition of language that would be needed if agreement were strictly enforceable
- Includes language describing emergency DC Tie operations and settlement of inadvertent energy flows instead of simply referring to the ERCOT DC Tie Operations Document
- Includes a list of all shared assets (i.e., all SWGRs, Block-Load Transfers (BLT), and DC Ties) in an exhibit to the plan

SPP Coordination Plan Highlights (cont'd)

- SWGR-specific changes:
  - Provides greater detail around use of SWGRs to address operating emergencies:
    - Authorizes Requesting Party to issue directives upon receiving notification of Release
    - Requires Controlling Party, during communication of Release, to notify SWGR operator that unit is needed to address Emergency Condition in Requesting Party's region
    - Allows Controlling Party to revoke release up until time unit has disconnected from Controlling Party's system
    - Allows denial of release if doing so would "cause or exacerbate" an Emergency Condition
  - To address possible simultaneous emergency scenario, assigns primary control right to system operator when SWGR capacity has been nominated to satisfy that operator's supply adequacy or capacity planning requirements
    - For ERCOT, CDR requirements (Protocols § 3.2.6.2.2) demonstrate that ERCOT considers SWGR capacity to be available for peak usage unless it has been designated as unavailable pursuant to Protocols §16.5.4.

MISO Coordination Plan Highlights

- Formulated as a bilateral plan affecting only ERCOT and MISO, consistent with SPP coordination plan
  - Removes unnecessary language addressing Market Participant obligations (e.g., day-ahead scheduling, outage coordination)
- Largely follows language of SPP coordination plan
  - Same provisions regarding SWGRs
  - Includes a list of all shared assets in an exhibit to the plan
- Now addresses BLTs
- No DC Tie language needed

Proposed Revisions Based on Comments

- Based on comments received from stakeholders, ERCOT will propose two revisions to the SPP coordination plan:
  - Exhibit B should be modified to reflect ERCOT as the Primary Party for Golden Spread's Antelope 3 unit in 2019, consistent with Golden Spread's submissions
  - Section 2.3 should be revised to recognize exemption from prior-notification requirement for certain non-modeled BLTs at distribution voltage

Next Steps

Subject to additional Board direction, ERCOT will negotiate final revisions with SPP based on comments received. Once these revisions are finalized and SPP and MISO have concluded all required internal review processes, ERCOT expects the parties will move forward with execution of the agreements.

ERCOT will issue a Market Notice following execution of each coordination plan. Final executed versions will be posted to ERCOT website.

Appendix

Appendix Summary

1. ERCOT- MISO Coordination Plan
2. ERCOT-SPP Coordination Plan
3. GSEC Comments on ERCOT-SPP Coordination Plan
4. Tenaska Comments on Coordination Plans
5. ERCOT's Responses to Coordination Plan Comments and Questions

1. ERCOT-MISO Coordination Plan

Coordination Plan

This Coordination Plan ("Plan") is created by Electric Reliability Council of Texas, Inc. ("ERCOT"), a Texas non-profit corporation, and Midcontinent Independent System Operator, Inc. ("MISO"), an Indiana non-profit corporation. ERCOT and MISO may be hereinafter referred to in this Plan individually as a "Party" and collectively as the "Parties."

MISO 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 terminates ERCOT's participation in the Dual Grid Operations of Tenaska Frontier Generation document ("Operating Document") made by and between the Parties on or about October 3, 2013. The Parties hereby acknowledge that effective immediately, ERCOT has withdrawn from and is no longer a party to the Operating Document.

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 in both the ERCOT and MISO 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 MISO system will be understood to be under the operational control of MISO, 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 MISO 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 MISO determines that an SWGR operating in the ERCOT system would assist in mitigating an existing or anticipated Emergency Condition, MISO 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 MISO has requested Release of the SWGR to address an existing or anticipated Emergency Condition. Following issuance of the Release, ERCOT will promptly notify MISO that it has Released the SWGR. Upon receiving notification of the Release from ERCOT, MISO 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 MISO system would assist in mitigating an existing or anticipated Emergency Condition, ERCOT may contact MISO to request that MISO Release one or more SWGRs. Upon receiving such a request and completing any necessary studies, MISO will

promptly Release the SWGR if MISO determines that doing so would not cause or exacerbate an Emergency Condition for the MISO system. In communicating the Release, MISO 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, MISO will promptly notify ERCOT that it has Released the SWGR. Upon receiving notification of the Release from MISO, ERCOT may issue Operating Instructions to the SWGR operator. MISO 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 Emergency Condition(s) 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. Notwithstanding the above, the ability of a Primary Party, as defined in Section 1.4.2.7, to recall a Release is governed by Section 1.4.2.7.

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 MISO 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. Additional Provisions

3.1 The Parties will communicate in accordance with good utility practice. For purposes of all real-time 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 4 of this Plan.

3.2 This Plan does not constitute a contract, partnership, joint venture, agency, or employment agreement between ERCOT and MISO, but represents the mutual understanding of the Parties concerning the issues identified herein.

3.3 This Plan may be amended only in writing if agreed by all Parties.

3.4 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.

4. Contact Information

4.1 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.

5. Updates to Exhibit B

5.1 The Parties shall review and update the information contained in Exhibit B as necessary in order to maintain the accuracy of Exhibit B.

[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.	Midcontinent Independent System Operator, Inc.
Signature:	Signature:
_____	_____
Printed Name: Woody Rickerson	Printed Name: [INSERT SIGNATORY]
Date: _____	Date: _____
Title: Vice President, Grid Planning and Operations	Title: [INSERT TITLE]

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]

Exhibit B

Switchable Generation Resources

Unit Name	ERCOT Unit Code	MISO Unit Code	Winter/Summer MW	Section 1.4.2.7 Primary Party
TENASKA FRONTIER STATION CTG 1	FTR_FTR_G1			ERCOT
TENASKA FRONTIER STATION CTG 2	FTR_FTR_G2			ERCOT
TENASKA FRONTIER STATION CTG 3	FTR_FTR_G3			ERCOT
TENASKA FRONTIER STATION CTG 4	FTR_FTR_G4			ERCOT
TENASKA FRONTIER STATION	FTR_FTR_UNAVAIL			MISO

Block Load Transfers

BLT LOCATION	ERCOT SUB	MISO SUB	MW
Roans Prairie BEPC (2401)	RPR		6.5
Roans Prairie BEPC (2403)	RPR		4.5
Bedias	BED		1.3
Crosby	BL_CS1		137
City of College Station ETI	BL_CSSWC		100/170

2. ERCOT-SPP Coordination Plan

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 real-time 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]

Exhibit B

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

3. GSEC Comments on ERCOT-SPP Coordination Plan

Legal Notice Comments

Legal Notice Number	M-B011419-01	Legal Notice Short Description	Notice of ERCOT's intent to execute coordination plans with Southwest Power Pool, Inc. ("SPP") and Midcontinent Independent System Operator, Inc. ("MISO").

Date	January 28, 2019

Submitter's Information	
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Market Segment	Cooperative

Comments

GSEC appreciates the effort that ERCOT and the SPP have put into developing the ERCOT-SPP Coordination Plan ("Coordination Plan") and appreciates ERCOT's willingness to consider comments from stakeholders. GSEC understands that the intent of the Coordination Plan is to address reliability coordination between ERCOT and the SPP and GSEC's comments are not intended to disregard this in any way. As such, GSEC has sought clarification from ERCOT to resolve two potential concerns with the Coordination Plan.

The first concern is that Exhibit B is ambiguous regarding the Primary Party designation in the ERCOT Switchable Generation Resource table of Exhibit B. GSEC's ANTELOPE ANT3/AEEC_ANTLP_3 ("Antelope 3") is listed as "0" for SPP in 2019, which is accurate. However, it is not listed in the ERCOT table. Per section 16.5.4(2) of the ERCOT Nodal Protocols, GSEC did not submit Antelope 3 as NOT available to ERCOT for the months of June through August of 2019. Previous ERCOT Seasonal Assessment of Resource Adequacy ("SARA") and Capacity Demand and Reserves ("CDR") reports have included Antelope 3 for capacity planning purposes in ERCOT, and as such, GSEC would have expected Antelope 3 to be included in the ERCOT table for 2019. GSEC understands that it is ERCOT's intent to be the Primary Party for Antelope 3 in 2019 and that ERCOT will work with the SPP to clarify this designation in Exhibit B.

The second concern is that Section 2.3 Block Load Transfers, in combination with Exhibit B, appears to be in conflict with Section 6.5.9.5.2(1) of the ERCOT Nodal

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Protocols. Section 6.5.9.5.2(1) states “For BLTs that are deployed in an emergency and are not modeled in the Network Operations Model, the responsible TSP shall notify ERCOT as soon as practicable after deployment,” whereas, the Coordination Plan states, “The Party transferring load will confirm the BLT availability with the Party accepting the load before any BLT implementation.” Many of the BLT loads listed in the Block Load Transfers table of Exhibit B of the Coordination Plan, would qualify for notification as soon as practicable after deployment under the ERCOT Nodal Protocols.

GSEC therefore requests either Exhibit B or Section 2.3 Block Load Transfers of the Coordination Plan be modified to be consistent with current ERCOT Nodal Protocols prior to the execution of this agreement by the SPP and ERCOT. GSEC’s Members do not switch BLT load between SPP and ERCOT often, and primarily do so when customers are without power due to weather events and expected to otherwise endure long power outages. The current protocol Section 6.5.9.5.2(1) has worked sensibly for GSEC’s Members to ensure prompt restoration of customer outages when a source to a delivery point is lost in one of the grids. Prior to the implementation of Section 6.5.9.5.2(1) of the ERCOT Nodal Protocols, GSEC’s Members experienced communication and timing issues associated with the switching of these small non-modeled loads, significantly delaying restoration to customers without power. These BLT loads are all served on 12.5 kV distribution systems where GSEC members have a distribution delivery point on each side of the ERCOT/SPP seam and come together through distribution at the seam with normally open isolating switches. The BLT loads are less than 5 MW in size (seasonally < 1MW) and have a negligible affect on the Bulk Electric System. The rationale for the creation of Section 6.5.9.5.2(1) is still relevant today and as such this protocol should not be changed nor be superseded by the Coordination Plan.

GSEC’s discussions with ERCOT indicated ERCOT’s willingness to resolve the concern. GSEC’s requested changes are not intended to undermine ERCOT’s nor the SPP’s ability to operate the grid in a reliable manner; to the contrary, GSEC is seeking changes for increased transparency and to reduce the potential impact of extended customer outages. GSEC appreciates any assistance to accomplish these objectives.

4. Tenaska Comments on ERCOT-SPP Coordination Plan

Tenaska, Inc.'s Comments on ERCOT's Proposed Coordination Plans with Southwest Power Pool, Inc. and Midcontinent Independent System Operator, Inc.

Tenaska, Inc. ("Tenaska") appreciates the opportunity to submit comments regarding ERCOT's revised coordination plans with Southwest Power Pool, Inc. ("SPP") and Midcontinent Independent System Operator, Inc. ("MISO") (collectively, the "Coordination Plans").

Overview

Tenaska owns three switchable generation resources ("SWGRs") that are capable of dispatching into ERCOT and SPP or MISO. It submits these comments to clarify its understanding regarding how the Coordination Plans change the dispatch of SWGRs during "Emergency Conditions," which are broadly defined as an existing or anticipated transmission or capacity-related "operating condition that poses a threat to the reliability of all or a portion of the Party's system, as determined by that Party."[1] It also submits these comments to identify questions raised by the Coordination Plans. Tenaska requests that ERCOT, MISO, and SPP consider these questions as they move forward with revisions to the Coordination Plans.

Changes to the Coordination Plans

ERCOT and MISO currently coordinate day ahead and real time operations of SWGRs pursuant to the "Tenaska Frontier Operating Guide," entered into on October 3, 2013. ERCOT and SPP currently coordinate day ahead and real time operations of SWGRs pursuant to the Coordination Agreement, executed on February 28, 2014. Once executed, the Coordination Plans will replace the existing agreements.

Tenaska understands the revised Coordination Plans to change the dispatch of SWGRs in three key ways:

1. Operator Recall Rights—During Emergency Conditions, a grid operator (e.g., ERCOT) can order a SWGR to disconnect and switch grids, if the other reliability coordinator (e.g., SPP or MISO) determines release of the SWGR will not cause or exacerbate an Emergency Condition on its grid. SWGR operators no longer have discretion to voluntarily respond to a grid switch request.[2]

2. Multiple System Operators; One "Primary Party" Operator—Notwithstanding the above, each SWGR will be designated an operator that is its "Primary Party." The Primary Party has a superior right to recall the SWGR to its grid during Emergency Conditions, even if doing so will cause firm load shed in the other grid. The Coordination Plans provide that, "when some or all of a SWGR's capacity has been nominated by the SWGR owner or operator to satisfy supply adequacy or capacity planning requirements" in a region, the grid for whose purposes the capacity has been "nominated" is the Primary Party. [3] The Coordination Plans provide no definition of

[1] Coordination Plans, Sec. 1.4.2.1.
[2] *See, e.g.,* Issuance of Bulletin No. 850 on May 31, 2018, which edited ERCOT's Operating Procedure Manual for Shift Supervisor Desk to remove the statement: "it is up to the QSE as to whether they want to switch."
[3] Coordination Plans, Sec. 1.4.2.7.

the word "nominate." However, it appears that, if a SWGR has a capacity contract in MISO or SPP, MISO or SPP is the designated Primary Party.[4] Conversely, if the SWGRs do not have a resource adequacy contract in the other grids and their capacity is in ERCOT's Capacity, Demand and Reserves ("CDR") report, the Reliability Coordinators designate ERCOT as the Primary Party. For example, according to the Sec. 1.4.2.7 Primary Party designation on Exhibit B to the Coordination Plans, ERCOT can order all of the capacity from the Kiowa and Gateway plants and a majority of the capacity from the Frontier plant to return to ERCOT during Emergency Conditions, even if doing so will cause load shed in SPP or MISO.[5]

3. Regulatory, Compliance, Financial Obligations of SWGR Owners and Operators— The Coordination Plans state: "[r]elease shall not be construed to alter or waive any regulatory, compliance, or financial obligation or responsibility of any party, including SWGR owners and operators." Thus, once the Coordination Plans are executed, the Reliability Coordinators may order a grid switch without settlement protocols in place that provide SWGR owners and operators compensation for the costs of recall.

Questions Raised by the Coordination Plans

Tenaska submits that the Coordination Plans raise the following questions to be considered by ERCOT, MISO and SPP.

1. Are the Coordination Plans consistent with Sections 210, 211 and 212 of the Federal Power Act and the Federal Energy Regulatory Commission ("FERC") order directing interconnection and transmission services for the Kiowa plant to ERCOT, which stated that regional planners "may need to take into account the fact that when relative economic conditions warrant, and subject to any contractual limitations, Kiowa may remove its capacity from one grid in order to sell into the other"?[6]

2. Is the definition of Emergency Conditions broader than necessary? Should it be limited to actual system emergencies that are capacity-related?

3. Do expansive conditions under which SWGRs can be recalled unnecessarily increase the risk of out-of-market instructions and uplift costs to market participants?

4. Is having multiple system operators and one "Primary Operator" consistent with North American Electric Reliability Corporation ("NERC") Reliability Standards?[7]

[4] See Exhibit B to the ERCOT-MISO Coordination Plan designating MISO as the Primary Party for the Tenaska Frontier Station.
[5] See Exhibit B of the Coordination Plans designating ERCOT as the Primary Party for Kiowa, Gateway and the majority of the Frontier plant.
[6] *Kiowa Partners, LLC*, 99 FERC ¶ 61,251 (2002).
[7] *See* NERC Reliability Standard IRO-001-4 ("Each … Generator Operator … shall comply with its Reliability **Coordinator's** Operating Instructions unless compliance with Operating Instructions cannot be physically implemented or unless such actions would violate safety, equipment, regulatory, or statutory requirements."). *See*

5. Does a SWGR's notice under ERCOT Protocol 16.5.4 "nominate" SWGR capacity to MISO or SPP? Conversely, does the absence of a notice under ERCOT Protocol 16.5.4 create a "nomination" of ERCOT as the Primary Party?

6. Are there any situations in which a SWGR will not have a Primary or Secondary Party operator?

7. Should the Reliability Coordinators implement settlement protocols that fully compensate SWGR owners and operators for the costs of an order to switch grids?[8] If so, what is the appropriate timing to implement such protocols?

* * * * *

Tenaska appreciates the opportunity to work with the Reliability Coordinators, regulators and stakeholders on matters related to these Coordination Plans.

Very truly yours,

s/ Todd Jonas

Todd Jonas
Senior Vice President, Operations
Tenaska Energy, Inc.

January 28, 2019

also NERC Standard IRO-001-1, R3 ("The Reliability Coordinator shall have clear decision-making authority to act and to direct actions to be taken by … Generator Operators … **within its Reliability Coordinator Area** to preserve the reliability and integrity of the Bulk Electric System.") (emphasis added).

[8] Settlement of SWGRs instructed to switch to ERCOT is currently pending in ERCOT Nodal Protocol Revision Request ("NPRR") 912.

5. ERCOT's Responses to Coordination Plans and Questions

Responses to Questions and Comments on Draft Coordination Plans

In order to update and clarify operating procedures concerning Switchable Generation Resources (SWGRs), Block Load Transfers (BLTs), and Direct Current Ties (DC Ties), ERCOT initiated discussions with SPP and MISO to conduct a thorough review the existing ERCOT-SPP and ERCOT-MISO coordination documents. The primary objective of the review was to ensure reliability-based actions involving shared assets are facilitated as reliably and expeditiously as possible in the event of Emergency Conditions. As a result of the review, ERCOT developed new, draft coordination plans with SPP and MISO. The coordination plans do not create any legal obligations, but instead establish mutually agreeable operational procedures with respect to shared assets.

In connection with Nodal Protocol Revision Request (NPRR) 886, Agreements between ERCOT and other Control Area Operators, ERCOT committed to notify its Market Participants, to the extent possible, prior to entering any agreement with another Control Area Operator concerning coordination of SWGRs, DC Ties, or BLTs. While NPRR 886 has yet to be approved, ERCOT provided notice to Market Participants in order to allow them time to review and comment on the draft coordination plans prior to their execution. In response, ERCOT received comments from Golden Spread Electric Cooperative, Inc. (GSEC) and Tenaska, Inc. As contemplated by NPRR 886, ERCOT considered the questions and comments received, and discussed them with the Technical Advisory Committee (TAC) on January 30, 2019. Consistent with NPRR 886, ERCOT submits these written responses to GSEC and Tenaska's questions and comments to the ERCOT Board for its information and consideration. For ease of review, ERCOT has reproduced the GSEC and Tenaska comments in their entirety below, with ERCOT's responses shown in blue, indented text.

Golden Spread Electric Cooperative, Inc.

> GSEC appreciates the effort that ERCOT and the SPP have put into developing the ERCOT-SPP Coordination Plan ("Coordination Plan") and appreciates ERCOT's willingness to consider comments from stakeholders. GSEC understands that the intent of the Coordination Plan is to address reliability coordination between ERCOT and the SPP and GSEC's comments are not intended to disregard this in any way. As such, GSEC has sought clarification from ERCOT to resolve two potential concerns with the Coordination Plan.
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> The first concern is that Exhibit B is ambiguous regarding the Primary Party designation in the ERCOT Switchable Generation Resource table of Exhibit B. GSEC's ANTELOPE ANT3/AEEC_ANTLP_3 ("Antelope 3") is listed as

"0" for SPP in 2019, which is accurate. However, it is not listed in the ERCOT table. Per section 16.5.4(2) of the ERCOT Nodal Protocols, GSEC did not submit Antelope 3 as NOT available to ERCOT for the months of June through August of 2019. Previous ERCOT Seasonal Assessment of Resource Adequacy ("SARA") and Capacity Demand and Reserves ("CDR") reports have included Antelope 3 for capacity planning purposes in ERCOT, and as such, GSEC would have expected Antelope 3 to be included in the ERCOT table for 2019. GSEC understands that it is ERCOT's intent to be the Primary Party for Antelope 3 in 2019 and that ERCOT will work with the SPP to clarify this designation in Exhibit B.

ERCOT's Response:

ERCOT agrees that Exhibit B should be clarified in order to specifically identify ERCOT as the Primary Party for the Antelope 3 unit during 2019, instead of simply referring to the unit as 0 MW in SPP for 2019, and 53.9 MW in SPP for 2020. While it is anticipated that Antelope 3 will be designated to SPP for supply adequacy purposes during 2020, the unit is designated for supply adequacy purposes in ERCOT during 2019. Accordingly, ERCOT has proposed to SPP that Exhibit B be revised to more clearly identify ERCOT as the Primary Party for 2019.

The second concern is that Section 2.3 Block Load Transfers, in combination with Exhibit B, appears to be in conflict with Section 6.5.9.5.2(1) of the ERCOT Nodal Protocols. Section 6.5.9.5.2(1) states "For BLTs that are deployed in an emergency and are not modeled in the Network Operations Model, the responsible TSP shall notify ERCOT as soon as practicable after deployment," whereas, the Coordination Plan states, "The Party transferring load will confirm the BLT availability with the Party accepting the load before any BLT implementation." Many of the BLT loads listed in the Block Load Transfers table of Exhibit B of the Coordination Plan, would qualify for notification as soon as practicable after deployment under the ERCOT Nodal Protocols.

GSEC therefore requests either Exhibit B or Section 2.3 Block Load Transfers of the Coordination Plan be modified to be consistent with current ERCOT Nodal Protocols prior to the execution of this agreement by the SPP and ERCOT. GSEC's Members do not switch BLT load between SPP and ERCOT often, and primarily do so when customers are without power due to weather events and expected to otherwise endure long power outages. The current protocol Section 6.5.9.5.2(1) has worked sensibly for GSEC's Members to ensure prompt restoration of customer outages when a source to a delivery point is lost in one of the grids. Prior to the implementation of Section 6.5.9.5.2(1) of the ERCOT Nodal Protocols, GSEC's Members experienced communication and timing issues associated with the switching of these small non-modeled loads, significantly delaying restoration to customers without power. These BLT loads are all served on

12.5 kV distribution systems where GSEC members have a distribution delivery point on each side of the ERCOT/SPP seam and come together through distribution at the seam with normally open isolating switches. The BLT loads are less than 5 MW in size (seasonally < 1MW) and have a negligible affect on the Bulk Electric System. The rationale for the creation of Section 6.5.9.5.2(1) is still relevant today and as such this protocol should not be changed nor be superseded by the Coordination Plan.

GSEC's discussions with ERCOT indicated ERCOT's willingness to resolve the concern. GSEC's requested changes are not intended to undermine ERCOT's nor the SPP's ability to operate the grid in a reliable manner; to the contrary, GSEC is seeking changes for increased transparency and to reduce the potential impact of extended customer outages. GSEC appreciates any assistance to accomplish these objectives.

ERCOT's Response:

ERCOT agrees that Section 6.5.9.5.2(a) of the ERCOT Protocols allows Transmission Service Providers (TSPs) like GSEC to notify ERCOT *after* implementing any of certain distribution-level non-modeled BLTs in an emergency. ERCOT also agrees that, in such a case, ERCOT would not be able to notify SPP *before* the BLT is implemented, as required by Section 2.3 of the ERCOT-SPP Coordination Plan.

While ERCOT believes there may be ways to read these provisions in harmony, it agrees with GSEC's suggestion that the ERCOT-SPP Coordination Plan should be clarified. Accordingly, ERCOT has proposed to SPP that the ERCOT-SPP Coordination Plan recognize a limited exception when ERCOT and/or SPP rules do not require notice to the system operator prior to the implementation of a BLT.

Tenaska, Inc.

Tenaska, Inc. ("Tenaska") appreciates the opportunity to submit comments regarding ERCOT's revised coordination plans with Southwest Power Pool, Inc. ("SPP") and Midcontinent Independent System Operator, Inc. ("MISO") (collectively, the "Coordination Plans").

Overview

Tenaska owns three switchable generation resources ("SWGRs") that are capable of dispatching into ERCOT and SPP or MISO. It submits these comments to clarify its understanding regarding how the Coordination Plans change the dispatch of SWGRs during "Emergency Conditions," which are broadly defined as an existing or anticipated transmission or capacity-related "operating condition that poses a threat to the reliability of all or a

portion of the Party's system, as determined by that Party."[1] It also submits these comments to identify questions raised by the Coordination Plans. Tenaska requests that ERCOT, MISO, and SPP consider these questions as they move forward with revisions to the Coordination Plans.

Changes to the Coordination Plans

ERCOT and MISO currently coordinate day ahead and real time operations of SWGRs pursuant to the "Tenaska Frontier Operating Guide," entered into on October 3, 2013. ERCOT and SPP currently coordinate day ahead and real time operations of SWGRs pursuant to the Coordination Agreement, executed on February 28, 2014. Once executed, the Coordination Plans will replace the existing agreements.

Tenaska understands the revised Coordination Plans to change the dispatch of SWGRs in three key ways:

1. Operator Recall Rights—During Emergency Conditions, a grid operator (e.g., ERCOT) can order a SWGR to disconnect and switch grids, if the other reliability coordinator (e.g., SPP or MISO) determines release of the SWGR will not cause or exacerbate an Emergency Condition on its grid. SWGR operators no longer have discretion to voluntarily respond to a grid switch request.[2]

ERCOT's Response:

ERCOT agrees that, as the grid operator, it may order any SWGR operating in a neighboring system to connect to the ERCOT system for reliability-based reasons. As a practical matter, ERCOT would only do so with the prior approval of the neighboring system operator, and only to address an actual or expected Emergency Condition. However, ERCOT's authority to order a resource to connect to the ERCOT system does not arise from the revised coordination plans. ERCOT has existing authority to issue reliability directives to SWGRs operating in a neighboring system based solely on the SWGR owner's decision to register with ERCOT, which subjects the unit owner to the duty to follow all ERCOT rules, including rules regarding Reliability Unit Commitment (RUC). There are no exceptions for units operating in a neighboring system.

[1] Coordination Plans, Sec. 1.4.2.1.

[2] *See, e.g.,* Issuance of Bulletin No. 850 on May 31, 2018, which edited ERCOT's Operating Procedure Manual for Shift Supervisor Desk to remove the statement: "it is up to the QSE as to whether they want to switch."

ERCOT notes the revisions to ERCOT's non-binding Operating Procedure Manual for theShift Supervisor Desk that were identified in Power Operations Bulletin No. 850, and referenced by Tenaska in footnote two, were made in part to align applicable control room procedures with ERCOT's existing authority to call upon SWGRs under applicable law and ERCOT rules.

2. Multiple System Operators; One "Primary Party" Operator— Notwithstanding the above, each SWGR will be designated an operator that is its "Primary Party." The Primary Party has a superior right to recall the SWGR to its grid during Emergency Conditions, even if doing so will cause firm load shed in the other grid. The Coordination Plans provide that, "when some or all of a SWGR's capacity has been nominated by the SWGR owner or operator to satisfy supply adequacy or capacity planning requirements" in a region, the grid for whose purposes the capacity has been "nominated" is the Primary Party.[3] The Coordination Plans provide no definition of the word "nominate." However, it appears that, if a SWGR has a capacity contract in MISO or SPP, MISO or SPP is the designated Primary Party.[4] Conversely, if the SWGRs do not have a resource adequacy contract in the other grids and their capacity is in ERCOT's Capacity, Demand and Reserves ("CDR") report, the Reliability Coordinators designate ERCOT as the Primary Party. For example, according to the Sec. 1.4.2.7 Primary Party designation on Exhibit B to the Coordination Plans, ERCOT can order all of the capacity from the Kiowa and Gateway plants and a majority of the capacity from the Frontier plant to return to ERCOT during Emergency Conditions, even if doing so will cause load shed in SPP or MISO.[5]

ERCOT's Response:

ERCOT generally agrees with Tenaska's characterization of the designation and roles of the "Primary Party" and "Secondary Party" as those terms are defined and utilized in the coordination plans.

The term "nominate" has its ordinary meaning here. In MISO and SPP, a nomination occurs when the unit owner has designated the

[3] Coordination Plans, Sec. 1.4.2.7.

[4] See Exhibit B to the ERCOT-MISO Coordination Plan designating MISO as the Primary Party for the Tenaska Frontier Station.

[5] See Exhibit B of the Coordination Plans designating ERCOT as the Primary Party for Kiowa, Gateway and the majority of the Frontier plant.

capacity for the purposes of meeting capacity or resource adequacy requirements in MISO or SPP. In ERCOT, the nomination occurs when the unit owner registers the unit to participate in the ERCOT market, so long as the unit owner has not reported that the unit is contractually obligated in another region in accordance with Section 16.5.4(2) of the ERCOT Protocols, and the unit has not otherwise suspended operations. This practice is appropriate because ERCOT's rules effectively authorize ERCOT to utilize a Resource's capacity except when a Resource has obtained approval for an outage (or suffers a forced outage), formally suspended operations, or is a SWGR that has indicated unavailability in a Notice of Unavailable Capacity for Switchable Generation Resources submitted under Section 16.5.4(2) of the ERCOT Protocols. This methodology is consistent with established practices utilized in developing the CDR.

3. Regulatory, Compliance, Financial Obligations of SWGR Owners and Operators—The Coordination Plans state: "[r]elease shall not be construed to alter or waive any regulatory, compliance, or financial obligation or responsibility of any party, including SWGR owners and operators." Thus, once the Coordination Plans are executed, the Reliability Coordinators may order a grid switch without settlement protocols in place that provide SWGR owners and operators compensation for the costs of recall.

ERCOT's Response:

ERCOT disagrees. ERCOT's position is that it has existing authority to issue reliability directives to SWGRs operating in a neighboring system based on the SWGR owner's decision to register with ERCOT, regardless of whether a coordination plan has been executed. If ERCOT were to commit a SWGR via RUC today, existing RUC settlement rules would provide the same compensation to a SWGR as it would to any other Generation Resource. ERCOT notes that NPRR 912, Settlement of Switchable Generation Resources (SWRs) Instructed to Switch to ERCOT, has been proposed in order to facilitate a stakeholder discussion about whether additional compensation may be appropriate when SWGRs are instructed to switch from a neighboring system to ERCOT. If NPRR912 is approved, it will take effect without regard to the effective date of the coordination plans.

Questions Raised by the Coordination Plans

Tenaska submits that the Coordination Plans raise the following questions to be considered by ERCOT, MISO and SPP.

1. Are the Coordination Plans consistent with Sections 210, 211 and 212 of the Federal Power Act and the Federal Energy Regulatory Commission ("FERC") order directing interconnection and transmission services for the Kiowa plant to ERCOT, which stated that regional planners "may need to take into account the fact that when relative economic conditions warrant, and subject to any contractual limitations, Kiowa may remove its capacity from one grid in order to sell into the other"?[6]

ERCOT's Response:

Broadly speaking, Sections 210, 211, and 212 of the Federal Power Act (FPA) grant FERC the power to issue orders concerning interconnection and transmission services. The coordination plans are not inconsistent with the jurisdictional grants of Sections 210, 211, and 212 of the FPA, and Tenaska has not explained what conflict could exist with these provisions.

Nor are the coordination plans inconsistent with FERC's May 31, 2002 order directing interconnection and transmission services for the Kiowa plant to ERCOT. *See Kiowa Partners,* LLC, 99 FERC ¶ 61,251 (2002) (the "Kiowa Order"). The Kiowa Order does not impose any obligations on Reliability Coordinators (RCs) with respect to SWGRs, nor does it grant SWGRs any new rights.

The language quoted by Tenaska, which appears in Paragraph 39 of the Kiowa Order, was part of a brief, general discussion of reliability impacts, which simply noted that Kiowa's SWGRs could complicate resource planning because the units presumably would not always be located in one region or the other. The provision was certainly not essential to the relief granted by FERC, and the issue of whether SWGRs have discretion to choose whether to follow a reliability-based directive was not before FERC. Notably, in the Kiowa Order, FERC *did* approve the parties' proposed Offer of Settlement, which included the Kiowa-Oncor Interconnection Agreement, and that agreement expressly required Kiowa to comply with all ERCOT rules, which would include those regarding RUC.

It should be noted that on at least one occasion, FERC has acknowledged ERCOT and SPP's practice of coordinating SWGR operations to address emergency conditions. FERC did so when it disclaimed plenary jurisdiction in connection with transmission and interconnection facilities that would deliver power from GSEC's Antelope Elk Energy Center to the ERCOT Region and confirmed

[6] *Kiowa Partners, LLC*, 99 FERC ¶ 61,251 (2002).

that GSEC may operate the proposed SWGR. *See Golden Spread Electric Cooperative, Inc.*, 149 F.E.R.C. ¶ 61,015 at P 8 (2014) ("Petitioners state these resources will be available to either SPP or ERCOT to address emergency conditions pursuant to an emergency coordination agreement between SPP and ERCOT that specifies how each of the switchable resources will be coordinated between the regions during emergency conditions.").

2. Is the definition of Emergency Conditions broader than necessary? Should it be limited to actual system emergencies that are capacity-related?

ERCOT's Response:

No. "Emergency Condition" is defined in Section 1.4.2.1 of the coordination plans 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." ERCOT believes the scope of the definition of is appropriate because ERCOT's reliability mandate is broader than just capacity-related issues. The mandate extends to any number of issues that could adversely impact reliability, and a broad definition allows ERCOT (and each other RC) flexibility to utilize SWGRs in order to address them. Like all other Generation Resources, SWGRs have been and continue to be subject to ERCOT's RUC authority, which may be exercised to address Transmission Emergencies, among other conditions. The definition of Emergency Condition in the coordination agreements does not expand ERCOT's existing reliability authority with respect to SWGRs. The definition should therefore not be limited to capacity-related emergencies.

3. Do expansive conditions under which SWGRs can be recalled unnecessarily increase the risk of out-of-market instructions and uplift costs to market participants?

ERCOT's Response:

No. As an initial matter, ERCOT does not perceive any new "expansive conditions" in the coordination plans. The coordination plans cannot broaden ERCOT's authority under the ERCOT Protocols with respect to RUC or any other matter. Further, ERCOT does not believe that asserting the right to RUC SWGRs operating in another region to address an Emergency Condition in ERCOT is "unnecessar[y]" when, in the very limited situations where this authority would be used, the capacity would by definition be *needed* to address a reliability condition. While the use of RUC always results in some allocation of the cost of an out-of-market commitment, there are valid reasons to exercise that authority in this case.

4. Is having multiple system operators and one "Primary Operator" consistent with North American Electric Reliability Corporation ("NERC") Reliability Standards?[7]

ERCOT's Response:

Yes. As an initial matter, "Primary Party" is narrowly defined in the coordination plans. The designation is only potentially applicable in the event of dual emergencies that arise after a switch takes place. The term should not be interpreted as having any broader meaning or application. The NERC Reliability Standards do not expressly address priority among system operators in the event of dual emergencies. Accordingly, ERCOT is unaware of any conflict between the coordination plans, including the designation of a "Primary Party" in the limited circumstances contemplated therein, and the NERC Reliability Standards. ERCOT believes the coordination plans are consistent with its obligation under NERC Reliability Standard IRO-001-4, which requires ERCOT "act to address the reliability of its Reliability Coordinator Area via direct actions or by issuing Operating Instructions."

5. Does a SWGR's notice under ERCOT Protocol 16.5.4 "nominate" SWGR capacity to MISO or SPP? Conversely, does the absence of a notice under ERCOT Protocol 16.5.4 create a "nomination" of ERCOT as the Primary Party?

ERCOT's Response:

Mere submission of the notice required by Section 16.5.4 does not vest another system operator with Primary Party status. That notice may be submitted for reasons of a contractual obligation with some party other than a system operator. Depending on the particular statements in the notice, ERCOT may need to coordinate further with MISO or SPP in order to determine whether a Primary Party exists, and if so, which entity has that status. ERCOT does not perceive that the notice has any impact on the "nomination" process utilized in MISO or SPP, but believes the submission or lack of submission of notice under Section 16.5.4(2) will be consistent with the

[7] *See* NERC Reliability Standard IRO-001-4 ("Each … Generator Operator … shall comply with its Reliability **Coordinator's** Operating Instructions unless compliance with Operating Instructions cannot be physically implemented or unless such actions would violate safety, equipment, regulatory, or statutory requirements.". *See also* NERC Standard IRO-001-1, R3 ("The Reliability Coordinator shall have clear decision-making authority to act and to direct actions to be taken by . . . Generator Operators . . . **within its Reliability Coordinator Area** to preserve the reliability and integrity of the Bulk Electric System.") (emphasis added).

designation and/or nomination processes utilized by other regions. With respect to ERCOT, in the absence of a notice under Section 16.5.4(2) of the ERCOT Protocols, ERCOT would consider itself to be the "Primary Party" for purposes of the coordination plans.

6. Are there any situations in which a SWGR will not have a Primary or Secondary Party operator?

ERCOT's Response:

Yes. The coordination plans contemplate this scenario. Under Section 1.4.2.7 of the coordination plans, "[i]f 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 . . . ." In this instance, there is no Primary Party or Secondary Party.

ERCOT relies on an SWGR's Notice of Unavailable Capacity for Switchable Generation Resources required under section 16.5.4(2) of the ERCOT Protocols in order to determine which region is the Primary Party with respect to a particular SWGR. If a SWGR owner has indicated that its capacity has a contractual requirement in a non-ERCOT Control Area, ERCOT would need to further coordinate with the neighboring region regarding the issue of whether such capacity has been nominated or otherwise designated to satisfy supply adequacy or capacity planning requirements. To the extent the capacity is not nominated or designated to satisfy supply adequacy or capacity planning requirements, there is no Primary Party or Secondary Party.

7. Should the Reliability Coordinators implement settlement protocols that fully compensate SWGR owners and operators for the costs of an order to switch grids?[8] If so, what is the appropriate timing to implement such protocols?

ERCOT's Response:

ERCOT agrees that the Protocols should appropriately compensate SWGR owners and/or operators. What level of compensation is appropriate for SWGRs is the subject of NPRR912. This compensation may not ultimately include recovery of all costs that the SWGR operator or owner may claim are attributable to the RUC

[8] Settlement of SWGRs instructed to switch to ERCOT is currently pending in ERCOT Nodal Protocol Revision Request ("NPRR") 912.

instruction. Certain liquidated damages payments, for example, may not be appropriately compensable. ERCOT has urged stakeholders to target approval of the NPRR by the ERCOT Board of Directors in April 2019, consistent with PUC direction. For any RUC commitment of a SWGR today, ERCOT would settle the SWGR under current RUC rules.

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Tenaska appreciates the opportunity to work with the Reliability Coordinators, regulators and stakeholders on matters related to these Coordination Plans.