



MARKETS AND OPERATIONS POLICY UPDATE TO BOARD

JANUARY 2023

ALAN MYERS, MOPC CHAIR

*Working together to responsibly and economically
keep the lights on today and in the future.*



SouthwestPowerPool



SPPorg



southwest-power-pool

RR SUMMARY TO MOPC – JANUARY 2023

Revision Requests Approved by MOPC

Primary Working Group	Title	Impacted Document						Estimated Cost	
		Tariff	ITP Manual	Business Practice	Planning Criteria	Operating Criteria	Market Protocols	Vendor Cost	Staff Hours
IRATF	RR 519 Annual resource real-time availability report (RPA 2.13, SIR223)					X		None	None
PCWG	RR 528 BP 7060 Reevaluation and Sections 11&13 change			X				None	None
RTWG	RR 522 Attachment AO Clarification	X						None	None
RTWG	RR 523 Attachment V Generator Interconnection Agreement Indemnification	X						None	None
MWG	RR 526 Minimum MW and Performance Requirements	X					X	None	None
MWG	RR 529 Annual Market Design Cleanup						X	None	None
SAWG	RR 536 Sufficiency Valuation Curve Method	X		X				None	None
SAWG	RR 537 Attachment AA Deficiency Payment Non-violation	X						None	None
TWG	RR 505 Remedial Action Scheme (RAS) Criteria				X			None	None
TWG	RR 525 Remove Obsolete Business Practices			X				None	None

Approval Implications

- Estimated Vendor Cost for submitted RRs \$0
- Estimated Staff Hours for submitted RRs is 0

JANUARY 17 BALLOT RECAP

99% average consensus

Approve the consent agenda as presented (11 items).	PASS	100%
Approve RR505 – Remedial action scheme (RAS) criteria	PASS	95%
Approve the 2024 Integrated Transmission Plan scope	PASS	100%
Defer action on RR536 and RR537 to a special MOPC meeting to be scheduled after the upcoming CAWG and SAWG meetings and prior to the RSC/BOD meetings.	PASS	100%
Accept the RCAR III Final Report as drafted and that the study has been completed as required by the SPP Tariff and under the methodology approved by the RARTF, MOPC and RSC	PASS	97%
Endorse the 2023 SPP Transmission Expansion Plan report as documentation of completion of the Attachment O STEP requirements	PASS	97%

JANUARY 27 BALLOT RECAP

99% average consensus

Approve RR536 as modified by CAWG, SAWG, RTWG with non-substantive terminology edits to tariff and business practices as described at Jan. 27, 2023 MOPC meeting.	PASS	98%
Approve RR537 (Attachment AA deficiency payment non-violation) as presented.	PASS	100%

PRIMARY DISCUSSION ITEMS

Revision Requests related to Planning Reserve Margin

- Delayed vote until after SAWG, RTWG and CAWG meetings due to tariff language changes
- Scheduled special MOPC meeting for Jan. 27 to vote on RRs

Joint Targeted Interconnection Queue

Winter storm Elliott operations review

Strategic and Creative Re-engineering of Integrated Planning update

Grid of the Future update

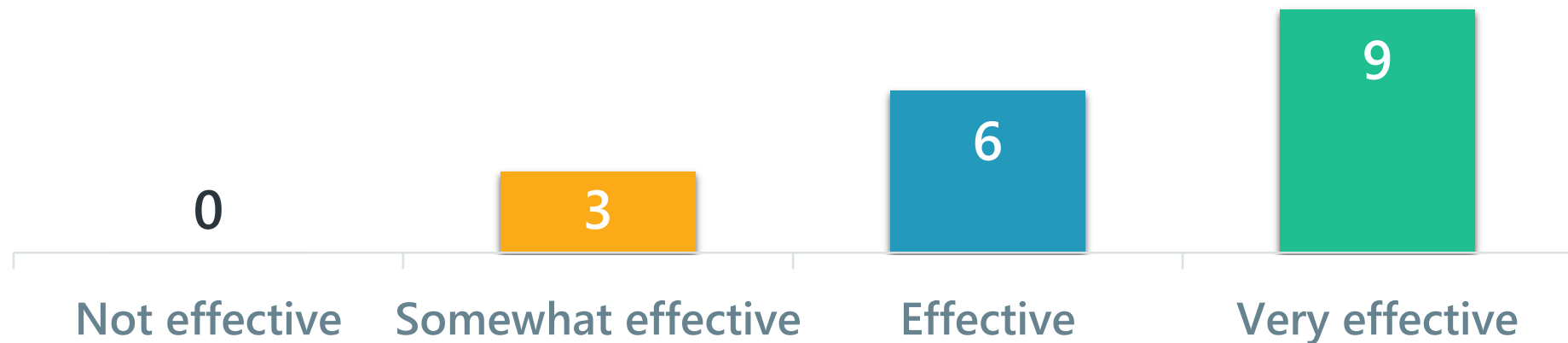
POST-MOPC SURVEY

CONTINUOUS IMPROVEMENT

Posting updates the night before MOPC wasn't "ideal" and there are "too many moving parts" and a "stumbling situation" with Planning Reserve Margin-related Revision Requests

A/V and other logistics were managed well

Being face-to-face again is valuable



MOPC recommends the Board:

Approve RR536 – Planning Reserve Margin sufficiency valuation curve

Approve RR537 – Deficiency payment non-violation

SOUTHWEST POWER POOL, INC.
Markets and Operations Policy Committee

RECOMMENDATION TO THE BOARD OF DIRECTORS

January 28, 2023

RR536 Sufficiency Valuation Curve Method

BACKGROUND

The purpose of this recommendation is to satisfy an SPP Board of Directors directive to develop an alternative, temporary, non-punitive, charge for Load Responsible Entity deficiency in the Resource Adequacy Requirement to address stakeholder concerns over the increase of the Planning Reserve Margin from twelve (12) percent to fifteen (15) percent.

ANALYSIS

This recommendation stems from an SPP Board of Directors directive to evaluate and address stakeholder concerns related to the Planning Reserve Margin increase approved in July of 2022 from twelve (12) to (15) percent. To address these concerns, a strike team was formed in December 2022 to develop an alternative charge for deficiency without damaging the incentives created by the current, punitive, deficiency charge. The strike team adopted a Sufficiency Valuation Curve. The curve, proposed by the independent Market Monitoring Unit is an adaptation from New York Independent System Operator's Capacity market.

This RR modifies section 14 of Attachment AA of the SPP tariff, and creates a new Business Practice. It contains new and modified tariff language that defines the sufficiency valuation curve, and how the alternative deficiency charge is calculated using this curve. It also contains the criteria a Load Responsible Entity must meet to be eligible for the alternative deficiency charge and the compensation and obligation to excess capacity for relieving the deficient entities. The new business practice contains verbiage and the calculation of the sufficiency valuation curve. It also includes verbiage and the calculation for the annual net cost of new entry, which is the monetary inflection-point of the curve.

RECOMMENDATION

The MOPC recommends the SPP Board of Directors approve RR536.

Approved:

SAWG

1/24/2023

Passed [12 Yes, 0 No, 8 Abstentions]

CAWG 1/25/2023

Passed [10 Yes, 0 No, 1 Abstention]

RTWG 1/26/2023

Passed [14 Yes, 1 No, 6 Abstentions]

MOPC 1/27/2023

Passed [45 Yes, 1 No, 21 Abstentions]

Action Requested: Approve Motion



SOUTHWEST POWER POOL, INC.
Market and Operations Policy Committee

RECOMMENDATION TO THE BOARD OF DIRECTORS
January 31, 2023
RR537 - Deficiency Payment Non-Violation

BACKGROUND

The purpose of RR537 is to make it clear that an LRE that pays the Deficiency Payment pursuant to Section 14.2 of Attachment AA will be sufficient for this year's Resource Adequacy Requirement. Also, RR537 will make it clear that any entity that receives distribution pursuant to Section 14.4 of Attachment AA cannot subsequently contract to sell any of that excess capacity to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable Summer Season for the Revenue Distribution.

ANALYSIS

Currently, if a Load Responsible Entity ("LRE") is required to pay a Deficiency Payment under Section 14.2(3) Attachment AA of the Tariff, the LRE is still not relieved from the obligation to comply with the Resource Adequacy Requirement. The payment of the Deficiency Payment by the LRE should qualify the LRE as being sufficient capacity necessary to meet the Resource Adequacy Requirement, similar to obtaining sufficient capacity through any other allowable method under Attachment AA.

Additionally, there is no Tariff provision that requires those entities that receive Revenue Deficiency from Deficiency Payments to not sell those the excess capacity to another market. This RR will not allow any entity that receives distribution pursuant to Section 14.4 of Attachment AA to subsequently contract to sell any of that excess capacity to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable Summer Season for the Revenue Distribution.

RECOMMENDATION

The MOPC recommends that the SPP Board of Directors approve RR537.

Approved:

SAWG

1/24/2023

Passed [12 Yes, 0 No, 8 Abstentions]

CAWG 1/25/2023

Passed [10 Yes, 0 No, 1 Abstention]

RTWG 1/26/2023

Passed [17 Yes, 0 No, 4 Abstentions]

MOPC 1/27/2023

Passed [50 Yes, 0 No, 17 Abstentions]

Action Requested: Approve Motion



RR 536 - PLANNING RESERVE MARGIN SUFFICIENCY VALUATION CURVE

Date: 1/20/2023 Submitter name: Keith Collins, Casey Cathey Company: SPP MMU & SPP RTO
Email: kcollins@spp.org, ccathey@spp.org Phone: 501-842-2160, 501-614-3267

EXECUTIVE SUMMARY

RR objectives:

Describe the objective and end result

The objective of this Revision Request is to replace the current deficiency payment structure in some circumstances with a Sufficiency Charge that reflects the value of excess capacity for the pertinent period. The current approach attempts to incentivize long term capacity planning by assessing a penalty based on multiples of the Cost of New Entry (CONE) to Load Responsible Entities (LREs) that have not met their Planning Reserve Margin (PRM) requirement. However, past PRM changes have demonstrated that the deficiency payment does not necessarily incentivize LREs to prepare for PRM increases. The proposed modifications to the deficiency payment structure, instead, focuses on properly compensating entities with excess accredited capacity. The value of excess capacity is based on the level of regional accreditation relative to PRM and the sum of all non-coincident peak loads. This is not intended to be a replacement for a long-term planning incentive.

How RR addresses the objectives:

Describe how this RR addresses or solves the objectives

This Revision Request lays out a sufficiency valuation methodology that, in certain circumstances, replaces the current penalty framework with a Sufficiency Valuation Curve. This valuation curve starts at two-times CONE until regional accreditation reaches the sum of total non-coincident peak loads. The curve then slopes downward, reaching a value of net CONE when regional accreditation reaches the PRM. When accreditation exceeds the PRM, the curve slopes downward until reaching \$0 when regional accreditation reaches 1.15 times the PRM. By focusing on how valuable excess accredited capacity is to the market given the regional level of accredited capacity, this methodology shifts from a punitive approach to a tool that manages the current deficiency and properly rewards LREs with excess accredited capacity. The sufficiency valuation curve mimics the valuation curve used by New York Independent System Operator (NYISO) to value capacity in their annual capacity market.

Primary discussion points in stakeholder process:

Summarize the main points of discussion throughout the stakeholder process

SAWG - The SAWG had concerns about the following:

1. This RR will prevent LRE's and GO's from selling their capacity to others

- Language for 7 day notification is not included. Should this be added to the Business Practice or Tariff?

Benefits RR will provide (describe all that apply):

- Market benefits:
- Reliability benefits:
- Administrative benefits:
- Other qualitative or quantitative benefits:

Stakeholder process overview:

Group	Date	Action	Consensus
SAWG	1/24/2023	Motion Passed	12 - Yes 8 - Abstentions 0 - No
CAWG	1/25/2023	Motion Passed	10 - Yes 0 - No 1 - Abstention
RTWG	1/26/2023	Approved	14 - Yes 1 - No 6 - Abstain
MOPC			
RSC			
Board of Directors			

RR DETAILS

Needs Comprehensive Roadmap Prioritization? No Yes

If yes, provide SIR# and associated SIR#s: 508

Impact Analysis? No Yes

If yes, provide the following information:

Primary working group and priority rank:

Estimated vendor cost:

*Cost Categories: A>0-20k, B>20-60k, C>60-100k, D>100-300k, E>300k – 600k, F>600k – 1mm, *G>1mm*

**If greater than 1mm an upper limit will also be provided.*

Estimated implementation complexity:

Estimated implementation staff hours:

Estimated implementation time:

IMPACTED SPP DOCUMENTS

- Tariff** Section: Attachment AA, Section 14
- Market Protocols** Section: Version:
- Operating Criteria** Section:
- Planning Criteria** Section:
- Business Practice** Number: 8300
- Integrated Transmission Planning (ITP) Manual** Section:
- Minimum Transmission Design Standards for Competitive Upgrades** Section:
- Reliability Coordinator and Balancing Authority Data Specifications** Section:
- SPP Communications Protocols** Section:
- Revision Request Process** Section:

STAKEHOLDER PROCESS

Primary: Supply Adequacy Working Group	
Date	1/24/2023
Motion	Motion to approve RR536 and 537 as presented and edited, with request for staff to draft language in a business practice to define a seven day window from notification of deficiency capacity to allow for GO/LRE modifications.
Resource adequacy-related concerns	
Action	Motion Passed with 12 Yes votes
Abstained	Eight (8) - Heartland, GRDA, Nextera, AEP, Tenaska, Golden Spread, Dogwood, and KMEA
Opposed	Zero (0)
Reason for each abstention/opposition (if provided):	
<ol style="list-style-type: none"> 1. The draft language of the seven day window for notifications needs to be in the Tariff and not in the Business Practice. 2. The expedited RR process for these RR's. 3. There were changes made during the meeting today which companies did not have time to vet and bring back internal to their companies. 	
Secondary: Cost Allocation Working Group	
Date	1/25/2023
Motion	Move to recommend approval of RR536 to the Regional State Committee as modified at the 01/25/23 CAWG meeting.
Cost related concerns	
Action	Passed (10)
Abstained	1 (South Dakota)
Opposed	0
Reason for each abstention/opposition (if provided):	

Secondary: Regional Tariff Working Group

Date	1/26/2023
Motion	To approve RR 536 as modified during the January 26, 2023 RTWG meeting as satisfying the directive from the December 6, 2022 SPP Board of Directors/Members Committee meeting
Tariff-related concerns	The group discussed using already-defined terms for clarity and removing the “future-proofing” Winter Season applicability.
Action	Approved
Abstained	6 – AECC, AEP, ITC, KMEA, Tenaska, WFEC
Opposed	1 – GRDA

Reason for opposing:

GRDA: RR 536 would make significant revisions to how capacity-short LREs within SPP would compensate the remaining LREs members for that deficiency.

The Sufficiency Charge described in the RR would replace the CONE-based Deficiency Payment, which is the current mechanism used to economically incentivize LREs to meet their Resource Adequacy obligations. The RR indicates that “past PRM changes have demonstrated that the [current] deficiency payment does not necessarily incentivize LREs to prepare for PRM increases.” This may well be true; nevertheless, I saw neither evidence that the current CONE Deficiency Payment has been applied to any LRE without achieving the desired effect, nor other analysis from SPP staff demonstrating that the current CONE is indeed deficient, and should therefore be replaced with this superior Sufficiency Charge.

To be sure, the Sufficiency Charge described in RR 436 may well be a superior solution relative to the CONE Deficiency Payment. However, the membership cannot know that with certainty due to the cadence at which this RR is being shepherded through the approval process.

SPP staff argues in favor of the urgency by noting that the recent changes in PRM could cause certain LREs to become capacity short, and notes that these revisions are necessary to address the consequences of dealing with those shortfalls under the current OATT mechanisms. Nevertheless, it is unrefuted that the current CONE mechanism was in effect at the time that the RPM changes were adopted – in a process that was, itself, conducted in an expedited manner.

Next, SPP staff supports the urgency of this RR by indicating that the RR is the product of a SPP Board directive. To be sure, the SPP Board is vested with significant decision-making authority, and the scope and consequences of its decisions are vast. However, SPP members and stakeholders – including members of the RTWG – are also tasked with the significant and important duty to vote in approval or disapproval of Revision Requests like this one. Respectfully, if SPP is to be a stakeholder-driven organization, voting members cannot simply defer to the will of the Board.

In conclusion, this RR could very well represent a significant improvement to the current CONE. I appreciate and respect the effort that SPP staff has utilized to develop this RR. Nevertheless, the membership has not been afforded sufficient opportunity to conduct due diligence. Compromise and deliberation are important tools to facilitate discourse about important ideas; although sometimes inefficient, these processes lend themselves to the development of better policy. Unfortunately, the tenor of this review and approval process did not afford membership with that opportunity. Absent that opportunity, I respectfully vote against approving the RR.

Markets and Operations Policy Committee

Date	MM/DD/YY
Motion	<i>Motion from MOPC action:</i>
Action	<i>Approved, rejected, tabled:</i>
Abstained	<i>How many abstained and from which companies:</i>
Opposed	<i>How many opposed and from which companies:</i>
Reason for each abstention/opposition (if provided):	

Regional State Committee

Date	MM/DD/YY
Motion	<i>Motion from RSC action:</i>
Action	<i>Approved, rejected, tabled:</i>
Abstained	<i>How many abstained and from which companies:</i>
Opposed	<i>How many opposed and from which companies:</i>
Reason for each abstention/opposition (if provided):	

Board of Directors/Members Committee

Date	MM/DD/YY
Motion	<i>Motion from Board action:</i>

Action	<i>Approved, rejected, tabled:</i>
Abstained	<i>How many abstained and from which companies:</i>
Opposed	<i>How many opposed and from which companies:</i>
Reason for each abstention/opposition (if provided):	

SUMMARY OF COMMENTS

1. Date:
 Submitter:
 Summary of comments:
 Organizational group review results:
(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):

2. Date:
 Submitter:
 Summary of comments:
 Organizational group review results:
(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):

3. Date:
 Submitter:
 Summary of comments:
 Organizational group review results:
(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):

DOCUMENT REVISIONS

SPP OPEN ACCESS TRANSMISSION TARIFF

14.0 Resource Adequacy Assurance

14.1 Variables

The variables used in the calculations are as follows:

(1) Generator Owner Excess Capacity

The available Deliverable Capacity above the committed capacity of Generator Owner Resource(s) as reflected in its completed Workbook.

(2) LRE Deficient Capacity

Resource Adequacy Requirement less the sum of Deliverable Capacity and Firm Capacity, or zero if the sum of Deliverable Capacity and Firm Capacity is greater than or equal to the Resource Adequacy Requirement.

(3) LRE Excess Capacity

Deliverable Capacity and Firm Capacity less Resource Adequacy Requirement, or zero if the Deliverable Capacity and Firm Capacity is less than or equal to the Resource Adequacy Requirement.

(4) SPP Balancing Authority Area Planning Reserve

[(The sum of all LREs' Deliverable Capacity and Firm Capacity less the sum of all LREs' Summer Season Net Peak Demand) plus the sum of all Generator Owner Excess Capacity] divided by the sum of all LREs' Summer Season Net Peak Demand.

(5) Sufficiency Valuation Curve

A piecewise curve defined by four linear functions assessing the value of excess accredited capacity based on the relative magnitude of accredited capacity to the sum of non-coincident peak loads and PRM.

(6) Sufficiency Valuation Clearing Price

The intersection of the Sufficiency Valuation Curve and the Regional Accredited Value.

(7) Regional Accredited Value

The total capacity to meet the ~~PRM~~ Resource Adequacy Requirement plus the Generator Owned Excess Capacity and LRE Excess Capacity.

(8) Sufficiency Charge

LRE Deficient Capacity multiplied by the Sufficiency Valuation Clearing Price

Commented [MBC1]: 2023 01 26 – RTWG changed "PRM requirement" to the defined term "Resource Adequacy Requirement"

(9) Generator Owner Capacity Allocation

A pro rata allocation of Generator Owner Excess Capacity, as described in Section 14.4 of this Attachment AA, used to resolve any LRE Deficient Capacity.

Commented [MBC2]: 2023 01 26 – RTWG
grammatical edit

(10) LRE Capacity Allocation

A pro rata allocation of LRE Excess Capacity, as described in Section 14.4 of this Attachment AA, used to resolve any LRE Deficient Capacity.

Commented [MBC3]: 2023 01 26 – RTWG
grammatical edit

14.2 Deficiency Payment

(1) LREs will be subject to the following Deficiency Payment calculation except as provided under the alternative Deficiency Payment provisions described in 14.2 (2) of this Attachment AA.

Commented [BP4]: Modified during the SAWG meeting on 1/24/2023

(1A) Deficiency Payment =

LRE Deficient Capacity * CONE * CONE FACTOR

Removed the language
'unless they qualify for the alternative Deficiency Payment'

Added the language
'except as provided under the alternative Deficiency Payment provisions'

Where the CONE FACTOR shall be:

- (ai) 125% when the SPP Balancing Authority Area Planning Reserve is greater than or equal to the PRM plus 8%; or
- (bii) 150% when the SPP Balancing Authority Area Planning Reserve is greater than or equal to the PRM plus 3%, but less than the PRM plus 8%; or
- (eiii) 200% when the SPP Balancing Authority Area Planning Reserve is less than the PRM plus 3%.

(2B) An LRE that resolves its capacity deficiency for the purpose of meeting the Resource Adequacy Requirement by May 15th of the applicable year will be considered compliant.

(3C) An LRE that fails to obtain sufficient capacity to meet the Resource Adequacy Requirement by May 15th of the applicable year, or fails to correct its Workbook by May 15th of the applicable year, will be considered deficient for the upcoming Summer Season. The responsible Market Participant shall be subject to the Deficiency Payment and such payment shall not relieve the LRE's obligation to comply with the Resource Adequacy Requirement.

(4D) A Market Participant, or its LRE, that does not submit the Workbook to the Transmission Provider by May 15th of the applicable year will be considered one hundred percent (100%) deficient and in violation of the Resource Adequacy Requirement for the upcoming Summer Season and shall subject the responsible Market Participant to the Deficiency Payment for the entire Resource Adequacy Requirement. To calculate the LRE Deficient Capacity, the Transmission Provider shall set the Deliverable Capacity and Firm Capacity to zero and utilize the previous year's Summer Season Peak Demand.

(E) LRE Capacity Allocation and Generator Owner Capacity Allocation must not be ~~subsequently~~ contracted to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable ~~Winter Season or~~ Summer Season for the Revenue Distribution as described in Section 14.4 of this Attachment AA. ~~Within seven (7) ~~b~~Business ~~d~~Days after May 15th, the Transmission Provider shall notify LREs or Generator Owners the amount LRE Capacity Allocation and Generator Owner Capacity Allocation that shall not be subsequently contracted to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable ~~Winter Season or~~ Summer Season.~~

~~b(2)~~ LREs will be subject the following Deficiency Payment based on the following Sufficiency Valuation Curve, instead of the Deficiency Payment described in Section 14.2 (1) of this Attachment AA, when: (i) there is a PRM increase approved by the SPP Board of Directors within the previous two (2) calendar years; (ii) the LRE had not contracted to sell capacity to another entity external to SPP's Balancing Authority Area after the approval of the PRM change and had LRE Deficient Capacity; and (iii) LRE has demonstrated adequate capacity to meet the current applicable ~~Winter Season's or~~ Summer Season's Resource Adequacy Requirement based upon the PRM in effect prior to the increase approved by the SPP Board of Directors.

(A) Deficiency Payment based on the Sufficiency Valuation Curve = LRE Deficient Capacity multiplied by the Sufficiency Valuation Clearing Price

(i) Sufficiency Valuation Curve is defined piecewise as:

(a) 200% CONE when the total accredited capacity in the market is less than or equal to the sum of the non-coincident peak loads;

Commented [BP5]: Removed during the SAWG meeting on 1/24/2023

Commented [MBC6]: 2023 01 26 – RTWG removed "Winter Season or" since at this time the Deficiency Payment is only applicable to meeting the Resource Adequacy Requirement for the Summer Season

Commented [MBC7]: 2023 01 26 – RTWG grammatical edit

Commented [MBC8]: 2023 01 26 – RTWG grammatical edit

Commented [MBC9]: 2023 01 26 – RTWG removed "Winter Season or" since at this time the Deficiency Payment is only applicable to meeting the Resource Adequacy Requirement for the Summer Season

Commented [CAWG10]: Added at the 012523 CAWG meeting

Commented [MBC11]: 2023 01 26 – RTWG grammatical edit

Commented [CAWG12]: Changed at 01/25/2023 CAWG meeting

Commented [BP13]: Added during the SAWG meeting on 1/24/2023

Commented [MBC14]: 2023 01 26 – RTWG removed "Winter Season's or" since at this time the Deficiency Payment is only applicable to meeting the Resource Adequacy Requirement for the Summer Season

(b) Net CONE when accredited capacity equals the sum of the current ~~PRM~~Resource Adequacy ~~Requirement~~ for all LREs;

Commented [MBC15]: 2023 01 26 – RTWG changed “PRM requirement” to the defined term “Resource Adequacy Requirement”

(c) \$0 when accredited capacity equals or exceeds 115% times the sum of the current ~~PRM~~Resource Adequacy ~~Requirement~~ for all LREs; and

Commented [MBC16]: 2023 01 26 – RTWG changed “PRM requirement” to the defined term “Resource Adequacy Requirement”

(d) The capacity sufficiency valuation for all accreditation values above the sum of the non-coincident peak loads and below the sum of the current ~~PRM~~Resource Adequacy ~~Requirement~~ for all LREs will lie along a linear curve connecting (a) and (b).

Commented [MBC17]: 2023 01 26 – RTWG changed “PRM requirement” to the defined term “Resource Adequacy Requirement”

The capacity sufficiency valuation for all accreditation values above the sum of the current ~~PRM~~Resource Adequacy ~~Requirement~~ for all LREs and below 115% of that sum will lie along a linear curve connecting (b) and (c).

Commented [MBC18]: 2023 01 26 – RTWG changed “PRM requirement” to the defined term “Resource Adequacy Requirement”

(e) The calculation and methodology for the Sufficiency Valuation Curve Calculation are found in the Business Practices.

(B) An LRE that resolves its capacity deficiency for the purpose of meeting the Resource Adequacy Requirement by May 15th of the applicable year will be considered compliant.

(C) An LRE that fails to obtain sufficient capacity to meet the Resource Adequacy Requirement by May 15th of the applicable year, or fails to correct its Workbook by May 15th of the applicable year, will be considered deficient for the upcoming Summer Season. The responsible Market Participant shall be subject to the Deficiency Payment and such payment shall not relieve the LRE’s obligation to comply with the Resource Adequacy Requirement.

(D) A Market Participant, or its LRE, that does not submit the Workbook to the Transmission Provider by May 15th of the applicable year will be considered one hundred percent (100%) deficient and in violation of the Resource Adequacy Requirement for the upcoming Summer Season and shall subject the responsible Market Participant to the Deficiency Payment for the entire Resource Adequacy Requirement. To calculate the LRE Deficient Capacity, the Transmission Provider shall set the Deliverable Capacity and Firm Capacity to zero and utilize the previous year’s Summer Season Peak Demand.

- (E) For the purposes of calculating the Sufficiency Valuation Clearing Price, the Regional Accredited Value must not contain accredited capacity that is contracted to any entity external to the SPP Balancing Authority Area.
- (F) LRE Capacity Allocation and Generator Owner Capacity Allocation must not be subsequently contracted to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable ~~Winter Season or~~ Summer Season for the Revenue Distribution as described in 14.4 of this Attachment AA. ~~Within seven (7) business days after May 15th,~~ the Transmission Provider shall notify LREs or Generator Owners the amount LRE Capacity Allocation and Generator Owner Capacity Allocation that shall not be subsequently contracted to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable ~~Winter Season or~~ Summer Season.

Commented [BP19]: Removed during the SAWG meeting on 1/24/2023

Commented [MBC20]: 2023 01 26 – RTWG removed "Winter Season or" since at this time the Deficiency Payment is only applicable to meeting the Resource Adequacy Requirement for the Summer Season

Commented [MBC21]: 2023 01 26 – RTWG grammatical edit

Commented [MBC22]: 2023 01 26 – RTWG grammatical edit

Commented [MBC23]: 2023 01 26 – RTWG removed "Winter Season or" since at this time the Deficiency Payment is only applicable to meeting the Resource Adequacy Requirement for the Summer Season

Commented [CAWG24]: Added at the 01/25/23 CAWG meeting

14.4 Revenue Distribution

Revenues from Deficiency Payments collected by the Transmission Provider shall be distributed to Market Participant(s) for its LRE(s) with LRE Excess Capacity or Generator Owner(s) with Generator Owner Excess Capacity on a *pro rata* basis according to the following:

- (1) In the event that the sum of all LRE Excess Capacity is greater than or equal to the sum of LRE Deficient Capacity then:

(a) LRE revenue =

$(\text{individual LRE Excess Capacity} / \text{sum of all LRE Excess Capacity}) * \text{sum of the Deficiency Payment(s)}$; ~~and~~

(b) LRE Capacity Allocation =

$(\text{individual LRE Excess Capacity} / \text{sum of all LRE Excess Capacity}) * \text{sum of the LRE Deficient Capacity}$

- (2) In the event that the sum of all LRE Excess Capacity is less than the sum of LRE Deficient Capacity, then the allocation of revenues shall be distributed according to the following steps:

(a) LRE revenue =

$[(\text{individual LRE Excess Capacity} / \text{sum of LRE Deficient Capacity}) * \text{sum of the Deficiency Payment(s)}]$;

Commented [MBC25]: 2023 01 26 – RTWG clarification edit

(b) LRE Capacity Allocation = the entirety of that LRE's LRE Excess Capacity; and

(bc) Any remaining revenues not allocated pursuant to Section 14.4(2)(a) of this Attachment AA will be allocated to Generator Owner(s) in accordance with each Generator Owner's submitted completed Workbook in the following manner:

- (i) In the event that the sum of all LRE Excess Capacity and all Generation Owner Excess Capacity is greater than or equal to the sum of Deficient Planning Reserve(s) then:

(a) Generator Owner revenue =

[(sum of LRE Deficient Capacity – sum of all LRE Excess Capacity) / sum of LRE Deficient Capacity] * (individual Generator Owner Excess Capacity / sum of all Generator Owner Excess Capacity) * sum of Deficiency Payment(s); and

Commented [MBC26]: 2023 01 26 – RTWG clarification edit

(b) Generator Owner Capacity Allocation =

[(sum of LRE Deficient Capacity – sum of all LRE Excess Capacity) / sum of LRE Deficient Capacity] * (individual Generator Owner Excess Capacity / sum of all Generator Owner Excess Capacity) * sum of LRE Deficient Capacity]; or

- (ii) In the event that the sum of all LRE Excess Capacity and all Generator Owner Excess Capacity is less than the sum of Deficient Planning Reserve(s) then:

(a) Generator Owner revenue =

[(individual Generator Owner Excess Capacity / sum of LRE Deficient Capacity) * sum of Deficiency Payment(s)];

(b) Generator Owner Capacity Allocation =

the entirety of that Generator Owner's Generator Owner Excess Capacity; and

(bc) All remaining revenue not allocated in Section 14.4(2)(bc)(ii)(a) of this Attachment AA will be allocated to each LRE that has met its Resource Adequacy Requirement, without paying a Deficiency Payment or a waiver

of the obligation to pay a Deficiency Payment, on a load ratio share based on Summer Season Net Peak Demand:

$$\begin{aligned} \text{LRE revenue} = & \\ & [(\text{sum of LRE Deficient Capacity} - \text{sum of all LRE Excess Capacity} - \text{sum of all Generator Owner Excess Capacity}) / \\ & \text{sum of LRE Deficient Capacity}] * (\text{individual LRE Summer Season Net Peak Demand} / \text{sum of LRE Summer Season Net Peak Demand(s) that have met the Resource Adequacy Requirement}) * \text{sum of Deficiency Payment(s)} \end{aligned}$$

- (3) The Transmission Provider shall not be liable to an LRE for any revenues collected and distributed pursuant to this Attachment AA, or for damages arising out of or relating to any act or omission, performance, or failure to perform of a Market Participant with respect to such revenues or distribution thereof. It is the responsibility of each Market Participant to distribute such revenues that it receives pursuant to Section 14.4 of this Attachment AA to its eligible LREs.

SPP BUSINESS PRACTICES

8300 Sufficiency Valuation Curve Calculation

The Sufficiency Valuation Curve (SVC) (as defined in OATT Section AA Attachment 14.1) is a piecewise curve defined by four linear functions assessing the value of excess accredited capacity based on the relative magnitude of that capacity to the sum of non-coincident peak loads and the PRM. These four equations are:

$$f(x) = \begin{cases} 2 * CONE, & x < NCP \\ \frac{(Net\ CONE - (2 * CONE))}{(PRM - \Sigma NCPL)} * Accredited\ MW + b, & PRM > x \geq NCP \\ \frac{(0 - Net\ Cone)}{((1.15 * PRM) - PRM)} * Accredited\ MWs + b', & PRM * 115\% > x \geq PRM \\ 0, & x \geq PRM * 115\% \end{cases}$$

where b is the y-intercept calculated as

$$2 * CONE - \left(\frac{(Net\ CONE - (2 * CONE))}{(PRM - \Sigma NCPL)} \right) * \Sigma NCPL$$

and b' is the y-intercept calculated as

$$Net\ CONE - \left(\frac{(0 - Net\ Cone)}{((1.15 * PRM) - PRM)} \right) * PRM$$

Methodology

CONE: Cost of New Entry, as defined in Attachment AA Section 13 in the OATT.

Fixed O&M: An estimate of power plant operations and maintenance costs incurred regardless of operation. These include maintenance and monitoring.

Fixed O&M comes from Table 1 of the Cost and Performance Characteristics of New Energy Technologies from the EIA Annual Energy Outlook (also known as table 8.2)

(https://www.eia.gov/outlooks/aeo/assumptions/pdf/table_8.2.pdf)

Variable O&M: An estimate of the costs incurred related to generating power, not including fuel costs.

Variable O&M comes from Table 1 of the Cost and Performance Characteristics of New Energy Technologies from the EIA Annual Energy Outlook (also known as table 8.2)

(https://www.eia.gov/outlooks/aeo/assumptions/pdf/table_8.2.pdf)

Net Revenue: An estimate of the expected margin for a power plant per megawatt-year. SPP will calculate net revenue on an annual basis. Net Revenue will use data from the prior 12 months. Net Revenue will be calculated by taking the maximum of a) the hourly day-ahead implied heat rate multiplied by the most current forward gas price at Southern Star for the corresponding month minus fuel and variable O&M costs; and b) 0; for each day and summing across the entire period. To prevent extreme events from unduly influencing the revenue estimate, the average day-ahead LMP from SPP's South Hub for the prior 12 months will be substituted for any LMPs greater than 2 standard deviations away from the mean (positive or negative).

The net revenue per megawatt-year equation is represented by in the following equation:

$$\frac{Net\ Revenue}{MWy} = \sum_{h=1}^n Max[(Forward\ Gas\ Price * Implied\ Heat\ Rate_h - (Forward\ Gas\ Price * Heat\ Rate + VOM)), 0] + Ancillary\ Services\ Revenue$$

Where:

- Implied Heat Rate is the average hourly day-ahead LMP at SPP's South Hub divided by the daily gas spot price at Southern Star as published by Platts.

- Heat Rate is the estimated heat rate published in Table 1 of the Cost and Performance Characteristics of New Energy Technologies from the EIA Annual Energy Outlook (also known as table 8.2).

(https://www.eia.gov/outlooks/aeo/assumptions/pdf/table_8.2.pdf)

- The Forward Gas Price is the Platts forward gas price for Southern Star published at the time of the calculation for each corresponding month. For example, for February 19, 2022, the Platts monthly forward price for February 2023 as published at the time of calculation will be used;
- Variable O&M comes from EIA data estimating the average variable O&M for the unit type currently used to calculate CONE in Attachment AA Section 13 in the OATT;
- Ancillary Services Revenue is the total ancillary services revenue earned per megawatt-year by the unit type currently used to calculate CONE in Attachment AA Section 13 in the OATT, for the prior 12 months.

Net CONE: The Cost of New Entry, as defined in Attachment AA Section 13 in the OATT, ~~plus~~ Fixed O&M, less Net Revenue, per megawatt-year

$$Net\ CONE = CONE + Fixed\ O\&M - Net\ Revenue$$

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grammatical edit

Commented [CAWG28]: Changed per 01/25/23
CAWG.



RR 537 - DEFICIENCY PAYMENT NON-VIOLATION

Date: 1/20/2023 Submitter name: Casey Cathey Company: Southwest Power Pool, Inc.

Email: ccathey@spp.org

Phone: 501-614-3267

EXECUTIVE SUMMARY

RR objectives:

Describe the objective and end result

Currently, if a Load Responsible Entity ("LRE") is required to pay a Deficiency Payment under Section 14.2(3) Attachment AA of the Tariff, the LRE is still not relieved from the obligation to comply with the Resource Adequacy Requirement. The payment of the Deficiency Payment by the LRE should qualify the LRE as being sufficient capacity necessary to meet the Resource Adequacy Requirement, similar to obtaining sufficient capacity through any other allowable method under Attachment AA.

Additionally, there is no Tariff provision that requires those entities that receive Revenue Deficiency from Deficiency Payments to not sell those the excess capacity to another market. This RR will not allow any entity that receives distribution pursuant to Section 14.4 of Attachment AA to subsequently contract to sell any of that excess capacity to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable calendar year for the Revenue Distribution.

How RR addresses the objectives:

Describe how this RR addresses or solves the objectives

This RR makes clear that an LRE that pays the Deficiency Payment pursuant to Section 14.2 of Attachment AA will be sufficient for this year's Resource Adequacy Requirement. Additionally, this RR will make clear that any entity that receives distribution pursuant to Section 14.4 of Attachment AA cannot subsequently contract to sell any of that excess capacity to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable calendar year for the Revenue Distribution.

Primary discussion points in stakeholder process:

Summarize the main points of discussion throughout the stakeholder process

SAWG - The SAWG had concerns about the following:

1. This RR will prevent LRE's and GO's from selling their capacity to others
2. Language for 7 day notification is not included. Should this be added to the Business Practice or Tariff?

Benefits RR will provide (describe all that apply):

- Market benefits:
- Reliability benefits:
- Administrative benefits:
- Other qualitative or quantitative benefits: Reduces LRE burden and administrative costs by efficiently complying with the current year's RAR, without requiring a subsequent tariff waiver request.

Stakeholder process overview:

Group	Date	Action	Consensus
SAWG	1/24/2023	Motion Passed	12 - Yes 8 - Abstentions 0 - No
CAWG	1/25/2023	Motion Passed	10 - Yes 0 - No 1 - Abstention
RTWG	1/26/2023	Approved	17 - Yes 0 - No 4 - Abstain
MOPC			
RSC			
Board of Directors			

RR DETAILS

Needs Comprehensive Roadmap Prioritization? No Yes

If yes, provide SIR# and associated SIR#s: 543

Impact Analysis? No Yes

If yes, provide the following information:

Primary working group and priority rank:

Estimated vendor cost:

Cost Categories: A>0-20k, B>20-60k, C>60-100k, D>100-300k, E>300k – 600k, F>600k – 1mm, *G>1mm
*If greater than 1mm an upper limit will also be provided.

Estimated implementation complexity:

Estimated implementation staff hours:

Estimated implementation time:

IMPACTED SPP DOCUMENTS

- Tariff** Section: Attachment AA, Section 3.2, 5.1, 9.0, 14.1, 14.2, 14.3 and 14.4
- Market Protocols** Section: Version:
- Operating Criteria** Section:
- Planning Criteria** Section:
- Business Practice** Number:
- Integrated Transmission Planning (ITP) Manual** Section:
- Minimum Transmission Design Standards for Competitive Upgrades** Section:
- Reliability Coordinator and Balancing Authority Data Specifications** Section:
- SPP Communications Protocols** Section:
- Revision Request Process** Section:

STAKEHOLDER PROCESS

Primary: Supply Adequacy Working Group	
Date	1/24/2023

Motion	Motion to approve RR536 and 537 as presented and edited, with request for staff to draft language in a business practice to define a seven day window from notification of deficiency capacity to allow for GO/LRE modifications.
Resource adequacy-related concerns	
Action	Motion Passed with 12 Yes votes
Abstained	Eight (8) - Heartland, GRDA, Nextera, AEP, Tenaska, Golden Spread, Dogwood, and KMEA
Opposed	Zero (0)
Reason for each abstention/opposition (if provided): 1. The draft language of the seven day window for notifications needs to be in the Tariff and not in the Business Practice. 2. The expedited RR process for these RR's. 3. There were changes made during the meeting today which companies did not have time to vet and bring back internal to their companies.	
Secondary: Cost Allocation Working Group	
Date	1/25/2023
Motion	Move to recommend approval of RR537 to the Regional State Committee as modified at the 01/25/23 CAWG meeting.
Cost-related concerns	
Action	Motion Passed - 10
Abstained	1 (South Dakota)
Opposed	0
Reason for each abstention/opposition (if provided):	
Secondary: Regional Tariff Working Group	
Date	1/26/2023

Motion	To approve RR 537 as modified during the January 26, 2023 RTWG meeting as satisfying the directive from the December 6, 2022 SPP Board of Directors/Members Committee meeting
Tariff-related concerns	The group discussed removing the “future-proofing” Winter Season applicability.
Action	Approved
Abstained	4 – AECC, AEP, ITC, WFEC
Opposed	0

Reason for each abstention/opposition (if provided):

Markets and Operations Policy Committee

Date	MM/DD/YY
Motion	<i>Motion from MOPC action:</i>
Action	<i>Approved, rejected, tabled:</i>
Abstained	<i>How many abstained and from which companies:</i>
Opposed	<i>How many opposed and from which companies:</i>

Reason for each abstention/opposition (if provided):

Regional State Committee

Date	MM/DD/YY
Motion	<i>Motion from RSC action:</i>
Action	<i>Approved, rejected, tabled:</i>
Abstained	<i>How many abstained and from which companies:</i>
Opposed	<i>How many opposed and from which companies:</i>

Reason for each abstention/opposition (if provided):

Board of Directors/Members Committee	
Date	MM/DD/YY
Motion	<i>Motion from Board action:</i>
Action	<i>Approved, rejected, tabled:</i>
Abstained	<i>How many abstained and from which companies:</i>
Opposed	<i>How many opposed and from which companies:</i>
Reason for each abstention/opposition (if provided):	

SUMMARY OF COMMENTS

1. Date:
 Submitter:
 Summary of comments:
 Organizational group review results:
(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):
2. Date:
 Submitter:
 Summary of comments:
 Organizational group review results:
(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):
3. Date:
 Submitter:
 Summary of comments:
 Organizational group review results:
(e.g. Reviewed and accepted, reviewed but not accepted, reviewed with partial acceptance; provide details to explain):

DOCUMENT REVISIONS

SPP OPEN ACCESS TRANSMISSION TARIFF

3.2 Market Participant and Load Responsible Entity

...

- (7) The Market Participant is responsible for any deficient capacity needed to be sufficient for the applicable year's Resource Adequacy Requirement through a Deficiency Payment ~~Deficiency Payment(s)~~ incurred by the LRE(s) it represents.

5.1 The Resource Adequacy Requirement is equal to the LRE's Summer Season Net Peak Demand plus its Summer Season Net Peak Demand multiplied by the PRM.

- (1) The LRE is responsible to meet the Resource Adequacy Requirement for the Summer Season or ~~failure to comply shall result in a Deficiency Payment pay for~~ any deficient capacity needed to be sufficient for the applicable year's Resource Adequacy Requirement through a Deficiency Payment as calculated in accordance with Section 14.2 of this Attachment AA.

9.0 Resource Adequacy Timeline

...

- (6) No later than five (5) calendar days after February 15th, the Transmission Provider shall provide notice to all Market Participants, LREs, and Generator Owners that have not submitted a Workbook by the deadline. Such notice shall include the communication that the Market Participant may need to pay for any deficient capacity needed to be sufficient for the applicable year's Resource Adequacy Requirement through a Deficiency Payment ~~be subject to a Deficiency Payment~~ if such deficiency is not cured.

...

- (10) No later than June 15th of each year, the Transmission Provider shall post its final report on the status of each LRE's compliance with the Resource Adequacy Requirement for the upcoming Summer Season and whether the respective Market Participant must pay for any deficient capacity needed to be sufficient for the

~~applicable Resource Adequacy Requirement through a Deficiency Payment is subject to the Deficiency Payment.~~

- (11) On or before June 30th of each year, and after the posting of the final report, the Transmission Provider shall calculate and assess the Deficiency Payment for any deficient capacity needed by an LRE to be sufficient for the applicable Resource Adequacy Requirement in accordance with the provisions contained in Sections 14.2 and 14.3, respectively, of this Attachment AA.

...

14.1 Variables

The variables used in the calculations are as follows:

(1) Generator Owner Excess Capacity

The available Deliverable Capacity above the committed capacity of Generator Owner Resource(s) as reflected in its completed Workbook.

(2) LRE Deficient Capacity

Resource Adequacy Requirement less the sum of Deliverable Capacity and Firm Capacity, or zero if the sum of Deliverable Capacity and Firm Capacity is greater than or equal to the Resource Adequacy Requirement.

(3) LRE Excess Capacity

Deliverable Capacity and Firm Capacity less Resource Adequacy Requirement, or zero if the Deliverable Capacity and Firm Capacity is less than or equal to the Resource Adequacy Requirement.

(4) SPP Balancing Authority Area Planning Reserve

[(The sum of all LREs' Deliverable Capacity and Firm Capacity less the sum of all LREs' Summer Season Net Peak Demand) plus the sum of all Generator Owner Excess Capacity] divided by the sum of all LREs' Summer Season Net Peak Demand.

(5) Generator Owner Capacity Allocation

A pro rata allocation of Generator Owner Excess Capacity, as described in Section 14.4 of this Attachment AA, used to resolve any LRE Deficient Capacity.

(6) LRE Capacity Allocation

A pro rata allocation of LRE Excess Capacity, as described in Section 14.4 of this Attachment AA, used to resolve any LRE Deficient Capacity.

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grammatical edit

Commented [MBC2]: 2023 01 26 – RTWG
grammatical edit

14.2 Deficiency Payment

(1A) Deficiency Payment =

LRE Deficient Capacity * CONE * CONE FACTOR

Where the CONE FACTOR shall be:

- (a) 125% when the SPP Balancing Authority Area Planning Reserve is greater than or equal to the PRM plus 8%; or
 - (b) 150% when the SPP Balancing Authority Area Planning Reserve is greater than or equal to the PRM plus 3%, but less than the PRM plus 8%; or
 - (c) 200% when the SPP Balancing Authority Area Planning Reserve is less than the PRM plus 3%.
- (2B) An LRE that resolves its capacity deficiency for the purpose of meeting the Resource Adequacy Requirement by May 15th of the applicable year will be considered compliant.
- (3C) An LRE that fails to obtain sufficient capacity to meet the Resource Adequacy Requirement by May 15th of the applicable year, or fails to correct its Workbook by May 15th of the applicable year, ~~will be considered deficient for the upcoming Summer Season. The responsible Market Participant~~ shall be subject to the Deficiency Payment for any deficient capacity needed by an LRE to be sufficient for the applicable Resource Adequacy Requirement. An LRE will be sufficient for Resource Adequacy Requirement with its payment of the Deficiency Payment, and such payment shall not relieve the LRE's obligation to comply with the Resource Adequacy Requirement.
- (4D) A Market Participant, or its LRE, that does not submit the Workbook to the Transmission Provider by May 15th of the applicable year will be considered one hundred percent (100%) deficient and in violation of the Resource Adequacy Requirement for the upcoming Summer Season and shall subject the responsible Market Participant to the Deficiency Payment for the entire Resource Adequacy Requirement. To calculate the LRE Deficient Capacity, the Transmission Provider

shall set the Deliverable Capacity and Firm Capacity to zero and utilize the previous year's Summer Season Peak Demand.

(E) LRE Capacity Allocation and Generator Owner Capacity Allocation must not be subsequently contracted to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable ~~Winter Season or~~ Summer Season for the Revenue Distribution as described in Section 14.4 of this Attachment AA. Within seven (7) ~~to~~ Business ~~at~~ Days after May 15th, the Transmission Provider shall notify LREs or Generator Owners the amount LRE Capacity Allocation and Generator Owner Capacity Allocation that shall not be subsequently contracted to any other entity internal or external to SPP's Balancing Authority Area at any point during the applicable ~~Winter Season or~~ Summer Season.

Commented [BP3]: Removed during the SAWG meeting on 1/24/2023

Commented [MBC4]: 2023 01 26 – RTWG removed "Winter Season or" since at this time the Deficiency Payment is only applicable to meeting the Resource Adequacy Requirement for the Summer Season

Commented [MBC5]: 2023 01 26 – RTWG grammatical edit

Commented [MBC6]: 2023 01 26 – RTWG grammatical edit

Commented [MBC7]: 2023 01 26 – RTWG removed "Winter Season or" since at this time the Deficiency Payment is only applicable to meeting the Resource Adequacy Requirement for the Summer Season

Commented [CAWG8]: Added at the 01/25/23.

14.3 Billing Procedures

On an annual basis, the Transmission Provider shall calculate the Deficiency Payment amounts to be assessed against a Market Participant pursuant to Section 14.2 of this Attachment AA needed by the LRE to be sufficient for the applicable year's Resource Adequacy Requirement. On or before June 30th of the applicable calendar year, the Transmission Provider shall submit an invoice to the Market Participant as a charge for the Deficiency Payment amount. The invoice shall be paid by the Market Participant within seven (7) calendar days of receipt. All payments shall be made in immediately available funds payable to the Transmission Provider, or by wire transfer to a bank named by the Transmission Provider. In the event of a dispute between the Transmission Provider and the Market Participant related to the calculation and assessment of a Deficiency Payment, the Market Participant shall pay the amount in dispute, and the Transmission Provider shall deposit into an escrow account the portion of the invoice in dispute, pending resolution of such dispute.

14.4 Revenue Distribution

Revenues from Deficiency Payments collected by the Transmission Provider shall be distributed to Market Participant(s) for its LRE(s) with LRE Excess Capacity or Generator Owner(s) with Generator Owner Excess Capacity on a *pro rata* basis according to the following:

(1) In the event that the sum of all LRE Excess Capacity is greater than or equal to the sum of LRE Deficient Capacity then:

(a) LRE revenue =

$(\text{individual LRE Excess Capacity} / \text{sum of all LRE Excess Capacity}) * \text{sum of the Deficiency Payment(s)}$; and

Commented [MBC9]: 2023 01 26 – RTWG clarification edit

(b) LRE Capacity Allocation =

$(\text{individual LRE Excess Capacity} / \text{sum of all LRE Excess Capacity}) * \text{sum of the LRE Deficient Capacity}$

(2) In the event that the sum of all LRE Excess Capacity is less than the sum of LRE Deficient Capacity, then the allocation of revenues shall be distributed according to the following steps:

(a) LRE revenue =

$[(\text{individual LRE Excess Capacity} / \text{sum of LRE Deficient Capacity}) * \text{sum of the Deficiency Payment(s)}]$;

(b) LRE Capacity Allocation = the entirety of that LRE's LRE Excess Capacity; and

(c) Any remaining revenues not allocated pursuant to Section 14.4(2)(a) of this Attachment AA will be allocated to Generator Owner(s) in accordance with each Generator Owner's submitted completed Workbook in the following manner:

(i) In the event that the sum of all LRE Excess Capacity and all Generation Owner Excess Capacity is greater than or equal to the sum of Deficient Planning Reserve(s) then:

(a) Generator Owner revenue =

$[(\text{sum of LRE Deficient Capacity} - \text{sum of all LRE Excess Capacity}) / \text{sum of LRE Deficient Capacity}] * (\text{individual Generator Owner Excess Capacity} / \text{sum of all Generator Owner Excess Capacity}) * \text{sum of Deficiency Payment(s)}$; and

Commented [MBC10]: 2023 01 26 – RTWG clarification edit

(b) Generator Owner Capacity Allocation =

$[(\text{sum of LRE Deficient Capacity} - \text{sum of all LRE Excess Capacity}) / \text{sum of LRE Deficient Capacity}] * (\text{individual Generator Owner Excess Capacity}$

/ sum of all Generator Owner Excess Capacity) * sum of LRE Deficient Capacity]; or

- (ii) In the event that the sum of all LRE Excess Capacity and all Generator Owner Excess Capacity is less than the sum of Deficient Planning Reserve(s) then:

(a) Generator Owner revenue =

[(individual Generator Owner Excess Capacity / sum of LRE Deficient Capacity) * sum of Deficiency Payment(s)];

(b) Generator Owner Capacity Allocation =

the entirety of that Generator Owner's Generator Owner Excess Capacity; and

~~(b)~~ (c) All remaining revenue not allocated in Section 14.4(2)(~~b~~c)(ii)(a) of this Attachment AA will be allocated to each LRE that has met its Resource Adequacy Requirement, without paying a Deficiency Payment or a waiver of the obligation to pay a Deficiency Payment, on a load ratio share based on Summer Season Net Peak Demand:

LRE revenue =

[(sum of LRE Deficient Capacity – sum of all LRE Excess Capacity – sum of all Generator Owner Excess Capacity) / sum of LRE Deficient Capacity] * (individual LRE Summer Season Net Peak Demand / sum of LRE Summer Season Net Peak Demand(s) that have met the Resource Adequacy Requirement) * sum of Deficiency Payment(s)

~~(2)~~(3) The Transmission Provider shall not be liable to an LRE for any revenues collected and distributed pursuant to this Attachment AA, or for damages arising out of or relating to any act or omission, performance, or failure to perform of a Market Participant with respect to such revenues or distribution thereof. It is the responsibility of each Market Participant to distribute such revenues that it receives pursuant to Section 14.4 of this Attachment AA to its eligible LREs.