

June 3, 2011

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: *Southwest Power Pool, Inc., Docket No. ER11-_____*
(Amendment to Attachment AE of the Tariff)

Dear Secretary Bose:

Pursuant to section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Part 35 of the Regulations of the Federal Energy Regulatory Commission (“Commission”), 18 C.F.R. Part 35, Southwest Power Pool, Inc. (“SPP”), as authorized by its Board of Directors, submits amendments to Attachment AE of its Open Access Transmission Tariff (“Tariff”)¹ to facilitate the stakeholder-approved protocol to curtail Non-Dispatchable resources in the SPP Energy Imbalance Market (“EIS Market”) during periods of congestion. SPP requests an effective date of December 1, 2011 for the amendments, but requests that the Commission rule on this filing within 60 days so that SPP can commence the design of necessary software to implement the changes on the effective date.

¹ Southwest Power Pool, Inc., FERC Electric Tariff, Sixth Revised Volume No. 1 (“SPP Tariff”).

I. DESCRIPTION OF SPP

SPP is a Commission-approved Regional Transmission Organization (“RTO”). It is an Arkansas non-profit corporation with its principal place of business in Little Rock, Arkansas. SPP currently has 63 members in 9 states and serves more than 6 million households in a 370,000 square-mile area. Its members include 14 investor-owned utilities, 10 municipal systems, 12 generation and transmission cooperatives, 4 state agencies, 7 independent power producers, 10 power marketers, and 6 independent transmission companies.

As an RTO, SPP provides open access transmission service over more than 50,000 miles of transmission lines in 8 states – Arkansas, Kansas, Louisiana, Missouri, Nebraska, New Mexico, Oklahoma, and Texas. Relevant to this filing, SPP also administers the EIS Market in the SPP Region.

II. NEW NON-DISPATCHABLE RESOURCE DISPATCH PROTOCOL

The SPP stakeholders determined that it would be necessary for comparable transmission service to modify SPP’s Market Operations System (“MOS”) and Curtailment Adjustment Tool (“CAT”) to enable automatic curtailment instructions to Non-Dispatchable Resources² during periods of congestion. Currently, unlike other resources, Non-Dispatchable Resources are not dispatched automatically via SPP’s market tools (MOS and CAT) to relieve congestion. Rather, a directive must be issued

² Non-Dispatchable Resources are resources that are unable to follow dispatch instructions for various reasons, including the uncontrollable nature of the resource; uncontrollable output during unit testing; operating characteristics that prevent predictable resource operation; or conditions arising during startup and shutdown.

by phone to a Non-Dispatchable Resource to lower its output. Consequently, unscheduled output from Non-Dispatchable Resources is not treated in the same manner as other scheduled and reserved uses of the transmission system during periods of congestion and may not participate in relieving congestion.

Over the last three years, the amount of megawatt (“MW”) output from Non-Dispatchable Resources in the SPP footprint has substantially increased, as illustrated in the table below.

Year	Average Non-Dispatchable Output (MW)	Average Number of Non-Dispatchable Resources Online in Real-time
2008	2102	42
2009	2335	65
2010	2996	85

The MW output from Non-Dispatchable Resources is predicted to continue increasing. SPP anticipates the addition of at least seven to eight gigawatts of installed capacity of Non-Dispatchable Resources within the next three years.

The increase in Non-Dispatchable Resources has resulted in adverse economic and reliability impacts in the SPP Region relating to the dispatch of these resources. Because Non-Dispatchable Resources are not automatically dispatched, other resources and higher priority transmission schedules that are automatically dispatched through SPP market tools routinely are dispatched to resolve constraints that Non-Dispatchable Resources cause or to which they contribute. Non-Dispatchable Resources may or may

not be dispatched (i.e. curtailed) to relieve these constraints (and often are not). As a result of this dispatch approach, to relieve congestion, transmission service customers with higher priority uses of the transmission system are curtailed, resources located far from a constraint subject to automatic dispatch may be dispatched, higher-priced resources may be dispatched, and more megawatts may be uneconomically dispatched than would be necessary if the Non-Dispatchable Resource(s) instead had been included in the dispatch to relieve the constraint. This impacts not only the SPP markets, but also the reliability of the transmission system. Moreover, because Non-Dispatchable Resources currently are only manually dispatched, there is no systematic method for ensuring that *all* Non-Dispatchable Resources that contribute to a constraint are equitably dispatched to resolve congestion.³

Simply put, the increase in Non-Dispatchable Resources has exacerbated the impact that manually dispatching these resources has on the SPP markets and transmission system reliability, thus necessitating the development of a more efficient and equitable process to manage Non-Dispatchable Resources during congested periods. To that end, the SPP stakeholders approved changes to the SPP Market Protocols that would facilitate software changes to the CAT and MOS to enable the calculation of the

³ Under manual dispatch, typically only the Non-Dispatchable Resource that is the largest contributor to a constraint is dispatched, while other contributing Non-Dispatchable Resources do not change their dispatch.

relief obligation for Non-Dispatchable Resources and automatically send to such resources dispatch instructions to adjust output for the relief obligation.⁴

Under the proposed approach, during SPP Congestion Management Events,⁵ Non-Dispatchable Resources will be directed to operate at or below an adjusted maximum output level (“curtailment level”). Specifically, when instructed, a Non-Dispatchable Resource will be required to operate at the lower of its (1) curtailment level or (2) actual net output. To determine the curtailment level of a Non-Dispatchable Resource, SPP will include the unscheduled portion of the output of Non-Dispatchable Resources in the CAT curtailment calculations and assign a pro rata relief obligation in a manner comparable to the obligations assigned to other impacting resources calculated by the CAT and NERC Interchange Distribution Calculator. SPP will determine a maximum output level for each affected Non-Dispatchable Resource based on the pro rata portion of the impacts of scheduled and unscheduled output. In the case of a non-dispatchable Qualifying Facility exercising its PURPA rights to deliver its net output to its host utility, unscheduled output will be curtailed proportionately at the equivalent of a NERC TLR level 3 priority.⁶ Except as discussed below, in the event that a Non-Dispatchable Resource does not

⁴ The SPP Markets and Operations Committee approved the Market Protocol and SPP Tariff revisions at its October 12-13, 2010 meeting. The SPP Board of Directors approved the revisions on October 26, 2010.

⁵ An SPP Congestion Management Event can be initiated through declaration of Transmission Load Relief or an activation of a constraint in MOS.

⁶ In accordance with the Commission’s regulations, a host utility’s obligation to purchase electric power from a Qualifying Facility may be relieved during a system emergency. 18 C.F.R. § 292.307(b).

follow the dispatch instructions during congested events, it will be subject to Uninstructed Deviation Charges under Attachment AE of the SPP Tariff.⁷

III. AMENDMENTS TO ATTACHMENT AE

While the details of the new rules regarding the dispatch of Non-Dispatchable Resources during congestion events appropriately are set forth in the Market Protocols,⁸ amendments to Attachment AE of the SPP Tariff are necessary to facilitate the implementation of these rules.

Attachment AE of the SPP Tariff provides procedures for the dispatch of resources made available to SPP for the provision of Energy Imbalance Service. It further imposes “Uninstructed Deviation Charges” in the event that a resource fails to

⁷ An “Uninstructed Deviation Charge” is defined in the SPP Tariff as “[a] Market Participant’s charge associated with a Resource that is determined to have operated outside an acceptable operating tolerance relative to dispatch instructions in accordance with procedures set forth in this Tariff.” SPP Tariff, Attachment AE § 1.1, Definitions U.

⁸ The Commission has recognized that “[t]here are many areas where a tariff can deal with general matters and leave the specifics for the application process, the service agreement, or the operating procedures.” *Pennsylvania-New Jersey-Maryland Interconnection*, 81 FERC ¶ 61,257, at n.50 (1997); *see also Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271, at P 16 (2008) (“It is appropriate for Business Practice Manuals to contain implementation details, such as instructions, guidelines, examples and charts, which guide internal operations and inform market participants of how the CAISO conducts its operations under the MRTU tariff.”); *Midwest Indep. Transmission Sys. Operator, Inc.*, 123 FERC ¶ 61,164, at P 43 (2008) (“[N]ot all rules and practices related to transmission service, or planning activities in particular, need be codified in the transmission provider’s OATT.”). The revisions to the Market Protocols set forth the details of how SPP will instruct market participants (including Non-Dispatchable Resources) with respect to the dispatch of resources during congested intervals and are of the type that are appropriately included in business practices manuals (i.e. the Market Protocols).

follow dispatch instructions pursuant to Attachment AE.⁹ Currently, Section 4.1(e) of Attachment AE provides that such charges are not applicable to resources that are operating in Test Mode or Start up Mode or are intermittent resources. As these resources are now encompassed by a new definition of “Non-Dispatchable Resources,”¹⁰ which under the new rules will be subject to Uninstructed Deviation Charges during congested intervals, Section 4.1(e) is amended to clarify that only during “uncongested intervals,” Non-Dispatchable Resources will not be subject to Uninstructed Deviation Charges.

As a result of the proposed changes to SPP’s market rules and tools (CAT and MOS), Non-Dispatchable Resources now may be instructed through the market system software (rather than by phone) to reduce output during Congestion Management Events as are all other dispatchable resources. Therefore, consistent with the rules for other resources that receive dispatch instructions through CAT and MOS, Section 5.5 of Attachment AE is amended to provide that Non-Dispatchable Resources that fail to follow SPP’s dispatch instructions during such events will be subject to Uninstructed Deviation Charges. The only exception will be for Qualifying Facilities exercising their rights under PURPA to deliver all of their net output to their host utilities that refused to register in the EIS Market and that SPP therefore unilaterally registered pursuant to

⁹ SPP Tariff, Attachment AE § 4.1(e).

¹⁰ SPP proposes a new definitional section, which defines a “Non-Dispatchable Resource” as a “Resource meeting any of the following conditions: Intermittent Mode, Start-Up/Shutdown Mode, Test Mode, Qualifying Facilities, exigent conditions.”

Section 1.2.2(g) of Attachment AE.¹¹ This exception is consistent with the Commission's 2008 order in Docket No. ER09-149-000, in which it held that a Qualifying Facility exercising its rights under PURPA to deliver all of its net output to its host utility will not be subject to any deviation charges related to the EIS Market.¹²

Because the SPP Tariff revisions proposed herein are necessary to implement the new dispatch rules for Non-Dispatchable Resources, which will result in the more equitable and efficient dispatch of Non-Dispatchable Resources during congested periods, the Commission should accept the proposed revisions as just and reasonable.

IV. EFFECTIVE DATE AND WAIVER OF SECTION 35.3

SPP requests an effective date of December 1, 2011, for the amendments filed herein. To permit such an effective date, SPP further requests a waiver of the requirement in section 35.3(a)(1) of the Commission's regulations, 18 C.F.R. § 35.3(a)(1), that tariff changes be filed no more than 120 days prior to a proposed date. Good cause exists for such a waiver because SPP needs the extra time to develop the software tools necessary to implement the automated dispatch of Non-Dispatchable Resources. SPP requests that the Commission act within 60 days of the date of this filing to provide the necessary certainty to move forward with the software development and implementation.

¹¹ See SPP Tariff Attachment AE proposed § 5.5(f).

¹² *Sw. Power Pool, Inc.*, 125 FERC ¶ 61,314, at P 38 (2008), *order on compliance*, 127 FERC ¶ 61,041, at P 21 (2009).

V. ADDITIONAL INFORMATION

A. Information Required by the Commission's Regulations

1. Documents submitted with this filing:

In addition to this transmittal letter, SPP is submitting in electronic format clean and redlined versions of the proposed revisions.

2. Effective Date:

SPP requests that the Commission accept the proposed revisions to the SPP Tariff effective December 1, 2011.

3. Service:

SPP has served a copy of this filing on all its members and customers and affected state commissions. A complete copy of this filing will be posted on the SPP web site, www.spp.org.

4. Requisite Agreements:

The SPP Board of Directors approved the proposed revisions to the SPP Tariff on October 26, 2010. The proposed revisions do not require any other agreements.

5. Estimate of transactions and revenues:

Not applicable.

6. Basis of rates:

The basis for the proposed SPP Tariff revisions is explained above.

7. Comparison to rates for similar services:

Not applicable.

8. Specifically assignable facilities installed or modified:

There are none.

B. Communications

Correspondence and communications with respect to this filing should be sent to, and SPP requests the Secretary to include on the official service list, the following:

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VI. CONCLUSION

For the foregoing reasons, SPP requests that the Commission accept the amendments to Attachment AE of the SPP Tariff as just and reasonable, with an effective date of December 1, 2011.

Respectfully submitted,

/s/ Carrie L. Bumgarner
Barry S. Spector
Carrie L. Bumgarner

**Attorneys for
Southwest Power Pool, Inc.**

1.1 Definitions N

NERC Interchange Distribution Calculator (NERC IDC)

The mechanism used by Reliability Coordinators in the Eastern Interconnection to calculate the distribution of interchange transactions over specific flowgates.

Net Energy Imbalance Service Charge/Credit

The sum of a Market Participant's Settlement Location specific Energy Imbalance Service Charge/Credits in an hour.

Net Actual Interchange

The algebraic sum of all energy flowing into or out of a Settlement Area during a Settlement Interval.

Net Scheduled Interchange

The algebraic sum of all Energy Schedules into or out of a Control Area.

Non-Dispatchable Resource

Resource meeting any of the following conditions: Intermittent Mode, Start-Up/Shutdown Mode, Test Mode, Qualifying Facilities, exigent conditions.

4.1 Dispatch Process

- (a) Throughout the Operating Day, generally every 5 minutes, the Transmission Provider shall:
- (i) Perform a security constrained economic dispatch (SCED) for the SPP Region utilizing an optimization method to determine the least costly means of obtaining energy to serve the next increment of load based upon submitted Offer Curves, Resource operating data submitted as part of the Resource Plan, binding transmission constraints, forecasted SPP Region load and system conditions from the State Estimator; relaxation of operating limits (Violation Relaxation Limit or VRL).
 - (ii) Communicate to Market Participants dispatch instructions that specify the desired megawatt output of Dispatchable Resources based upon the security constrained economic dispatch solution;
 - (iii) Communicate to Market Participants dispatch instructions that specify the scheduled megawatt output of Self-Dispatched Resources based upon the sum of the Energy Schedules associated with that Self-Dispatched Resource as approved in accordance with Section 3.1(b);
 - (iv) Communicate Manual Dispatch Instructions to Market Participants that specify the desired output of Dispatchable Resources and/or Self Dispatched Resources only in Emergency Conditions where such Emergency Conditions can not be resolved through the process described under Section 4.3 of Attachment AE;
 - (v) Calculate an Adjusted Net Scheduled Interchange for each Control Area in the SPP Region to account for the Dispatchable Resource dispatch instructions, including any Manual Dispatch Instructions, reserve sharing schedules, and inadvertent interchange payback schedules and communicate this Adjusted Net Scheduled Interchange to the Control Areas for implementation.

Procedures for communication of dispatch instructions shall be specified in the Market Protocols.

- (b) In performing the security constrained economic dispatch under Section 4.1, the Transmission Provider shall ensure that the energy dispatch of Dispatchable Resources does not conflict with any specified provision of Schedule 3, Schedule 5 and Schedule 6 Service associated with said Dispatchable Resources. To accomplish this, the Transmission Provider shall limit the dispatchable energy range of Dispatchable Resources to between the Resource's Economic Minimum Limit and Economic Maximum Limit. Details of the Dispatchable Resource dispatchable energy range adjustment shall be specified in the Market Protocols.
- (c) The Transmission Provider shall limit the dispatch instructions to External Resources so that i.) the total dispatch instructions of External Resources does not exceed the SPP Contingency Reserve Requirement for the Operating Day and ii.) the total dispatch instructions of External Resources sinking in an individual SPP Market Balancing Authority Area does not exceed the capacity of the largest Resource within that Balancing Authority Area.
- (d) An acceptable operating tolerance will be defined for Dispatchable and Self-Dispatched Resources. A Resource shall be considered as following a dispatch instruction in a Dispatch Interval if the actual output of that Resource is within the acceptable operating range. Resources whose actual output falls outside this operating tolerance shall be considered as failing to follow a dispatch instruction. A Resource's acceptable operating range shall be defined by a high and low tolerance level calculated as follows subject to a minimum range of 5 megawatts above or 5 megawatts below the expected output level and a maximum acceptable operating range of 25 megawatts above or 25 megawatts below the expected output level:

$$RH_i = \text{Max}(5 , \text{Min} ((\text{MaxMW}_i * \text{DBP}) , 25)) + \text{REGUP}$$

$$RL_i = \text{Max} (5 , \text{Min} ((\text{MaxMW}_i * \text{DBP}) , 25)) + \text{REGDN}$$

Where:

RH = Resource high operating tolerance or over generation limit (megawatt)

RL = Resource low operating tolerance or under generation limit (megawatt)

MaxMW = Maximum Capacity Operating Limit - Resource physical maximum sustainable output for each Operating Hour from Resource Plan.

DBP = Dead band percentage for all Resources is initially set to 10 %,

REGUP = Regulation up service being maintained on the Resource as indicated in the Ancillary Service Plan (MW) for the Operating Hour.

REGDN = Regulation down service being maintained on the Resource as indicated in the Ancillary Service Plan (MW) for the Operating Hour.

i = Dispatch Interval within Operating Hour.

Resources providing Schedule 5 and Schedule 6 services shall be considered following dispatch instructions during any Dispatch Interval in which these Services have been deployed.

- (e) To the extent that a Resource is determined by the Transmission Provider to have failed to follow the Transmission Provider's dispatch instructions, such failure to follow dispatch instruction determination in accordance with the procedures set forth under Section 4.1(d) of this Attachment AE, the Market Participant owner of that Resource shall be subject to an Uninstructed Deviation Charge. Resources shall not be subject to Uninstructed Deviation Charges for any Uninstructed Deviation Megawatts caused by: (1) Manual Dispatch Instructions; (2) redeployment by the Balancing Authority; (3) instances when a Resource trips or is derated after receiving dispatch instructions from the Transmission Provider; (4) Non-Dispatchable Resources during uncongested intervals; or (5) the dispatch instructions issued to a Resource were beyond the reported capabilities in the Resource Plan due to the application of a VRL.

In order to receive an Uninstructed Deviation Charge exemption for a Resource under (3) above, the Market Participant must immediately report the change in its Resource Plan, in accordance with Section 1.2.7 (c) of Attachment AE, specifying the Resource trip or deration and must submit an invoice dispute utilizing the process described under Section 6.3 of Attachment AE prior to Transmission Provider determination of the exemption under the Section 6.3 process.

- (f) The Transmission Provider may also waive Uninstructed Deviation Charges to the extent a Market Participant can demonstrate such deviation was caused solely by events or conditions beyond its control, and without the fault or negligence of the Market Participant. The Market Participant must provide the Transmission Provider with adequate documentation through the invoice dispute process described under Section 6.3 in order for the Market Participant to be eligible to avoid such Uninstructed Deviation Charges. The Transmission Provider shall determine through the Section 6.3 dispute process whether such Uninstructed Deviation Charges should be waived.
- (g) Uninstructed Deviation Charges shall be calculated by the Transmission Provider in accordance with Section 5.5 of this Attachment AE.
- (h) In the event of a system failure related to the SPP EIS Market systems or Market Participant systems providing data to SPP that impact Transmission Provider's ability to calculate dispatch instructions for a Resource or Resources, the Transmission Provider will suspend the calculation of dispatch instructions for such Resources and treat them as Self-Dispatched Resources until the calculations of dispatch instructions can be restored.

5.5 Uninstructed Deviation Charges

The Transmission Provider shall calculate Uninstructed Deviation Charges for each hour in which a Resource has been determined to have failed to follow the Transmission Provider's dispatch instructions. For all Resources, whether a Dispatchable Resource, Self-Dispatched Resource, or a Non-Dispatchable Resource (during congested intervals) that failed to follow dispatch instructions in accordance with the procedures set forth under Section 4.1(d) of this Attachment AE, the Transmission Provider shall calculate an Uninstructed Deviation Charge as follows:

- (a) For each Dispatch Interval in an Operating Hour, if a Resource's actual output is greater than $(\text{MaxMW} + \text{RH})$, then that Resource's Uninstructed Deviation Megawatt in that Dispatch Interval is equal to the actual output $- (\text{MaxMW} + \text{RH})$, where MaxMW and RH are as defined under Section 4.1(d) of this Attachment AE;
- (b) For each Dispatch Interval in an Operating Hour, if a Resource's actual output is less than $(\text{MaxMW} - \text{RL})$, then that Resource's Uninstructed Deviation Megawatt in that Dispatch Interval is equal to the actual output $- (\text{MaxMW} - \text{RL})$, where EOL and RL are as defined under Section 4.1(d) of this Attachment AE;
- (c) For each Dispatch Interval in the Operating Hour, if a Resource's actual output is within the acceptable operating range as defined in Section 4.1(d) that Resource's Uninstructed Deviation Megawatt in that Dispatch Interval is equal to zero;
- (d) For each Operating Hour, the Transmission Provider shall calculate an Hourly Uninstructed Deviation Megawatt for each Resource that is equal to the average of the absolute value of the Uninstructed Deviation Megawatts calculated for each Dispatch Interval for each Resource in that Operating Hour.
- (e) For each Operating Hour and for each Resource, the Transmission Provider shall calculate an Uninstructed Deviation Charge:

Uninstructed Deviation Charge = $(\text{Min} (\text{Hourly Uninstructed Deviation Megawatt}, 25) * 10 \% + (\text{Max} (0, \text{Hourly Uninstructed Deviation Megawatt} - 25) * 25 \%)) * \text{the absolute value of the Resource Locational Imbalance Price.}$

- (f) The Uninstructed Deviation Charge shall be zero for a Qualifying Facility exercising its rights under PURPA to deliver all of its net output to its host utility, has refused to register its Resource and that has been registered by the Transmission Provider as outlined in Section 1.2.2(g) of this Attachment AE.
- (g) For each Operating Hour, a Market Participant's Uninstructed Deviation Charge shall be equal to the sum of that Market Participant's Resources' related Uninstructed Deviation Charges.

1.1 Definitions N

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Non-Dispatchable Resource

Resource meeting any of the following conditions: Intermittent Mode, Start-Up/Shutdown Mode, Test Mode, Qualifying Facilities, exigent conditions.

4.1 Dispatch Process

- (a) Throughout the Operating Day, generally every 5 minutes, the Transmission Provider shall:
- (i) Perform a security constrained economic dispatch (SCED) for the SPP Region utilizing an optimization method to determine the least costly means of obtaining energy to serve the next increment of load based upon submitted Offer Curves, Resource operating data submitted as part of the Resource Plan, binding transmission constraints, forecasted SPP Region load and system conditions from the State Estimator; relaxation of operating limits (Violation Relaxation Limit or VRL).
 - (ii) Communicate to Market Participants dispatch instructions that specify the desired megawatt output of Dispatchable Resources based upon the security constrained economic dispatch solution;
 - (iii) Communicate to Market Participants dispatch instructions that specify the scheduled megawatt output of Self-Dispatched Resources based upon the sum of the Energy Schedules associated with that Self-Dispatched Resource as approved in accordance with Section 3.1(b);
 - (iv) Communicate Manual Dispatch Instructions to Market Participants that specify the desired output of Dispatchable Resources and/or Self Dispatched Resources only in Emergency Conditions where such Emergency Conditions can not be resolved through the process described under Section 4.3 of Attachment AE;
 - (v) Calculate an Adjusted Net Scheduled Interchange for each Control Area in the SPP Region to account for the Dispatchable Resource dispatch instructions, including any Manual Dispatch Instructions, reserve sharing schedules, and inadvertent interchange payback schedules and communicate this Adjusted Net Scheduled Interchange to the Control Areas for implementation.

Procedures for communication of dispatch instructions shall be specified in the Market Protocols.

- (b) In performing the security constrained economic dispatch under Section 4.1, the Transmission Provider shall ensure that the energy dispatch of Dispatchable Resources does not conflict with any specified provision of Schedule 3, Schedule 5 and Schedule 6 Service associated with said Dispatchable Resources. To accomplish this, the Transmission Provider shall limit the dispatchable energy range of Dispatchable Resources to between the Resource's Economic Minimum Limit and Economic Maximum Limit. Details of the Dispatchable Resource dispatchable energy range adjustment shall be specified in the Market Protocols.
- (c) The Transmission Provider shall limit the dispatch instructions to External Resources so that i.) the total dispatch instructions of External Resources does not exceed the SPP Contingency Reserve Requirement for the Operating Day and ii.) the total dispatch instructions of External Resources sinking in an individual SPP Market Balancing Authority Area does not exceed the capacity of the largest Resource within that Balancing Authority Area.
- (d) An acceptable operating tolerance will be defined for Dispatchable and Self-Dispatched Resources. A Resource shall be considered as following a dispatch instruction in a Dispatch Interval if the actual output of that Resource is within the acceptable operating range. Resources whose actual output falls outside this operating tolerance shall be considered as failing to follow a dispatch instruction. A Resource's acceptable operating range shall be defined by a high and low tolerance level calculated as follows subject to a minimum range of 5 megawatts above or 5 megawatts below the expected output level and a maximum acceptable operating range of 25 megawatts above or 25 megawatts below the expected output level:

$$RH_i = \text{Max}(5 , \text{Min} ((\text{MaxMW}_i * \text{DBP}) , 25)) + \text{REGUP}$$

$$RL_i = \text{Max} (5 , \text{Min} ((\text{MaxMW}_i * \text{DBP}) , 25)) + \text{REGDN}$$

Where:

RH = Resource high operating tolerance or over generation limit (megawatt)

RL = Resource low operating tolerance or under generation limit (megawatt)

MaxMW = Maximum Capacity Operating Limit - Resource physical maximum sustainable output for each Operating Hour from Resource Plan.

DBP = Dead band percentage for all Resources is initially set to 10 %,

REGUP = Regulation up service being maintained on the Resource as indicated in the Ancillary Service Plan (MW) for the Operating Hour.

REGDN = Regulation down service being maintained on the Resource as indicated in the Ancillary Service Plan (MW) for the Operating Hour.

i = Dispatch Interval within Operating Hour.

Resources providing Schedule 5 and Schedule 6 services shall be considered following dispatch instructions during any Dispatch Interval in which these Services have been deployed.

- (e) To the extent that a Resource is determined by the Transmission Provider to have failed to follow the Transmission Provider's dispatch instructions, such failure to follow dispatch instruction determination in accordance with the procedures set forth under Section 4.1(d) of this Attachment AE, the Market Participant owner of that Resource shall be subject to an Uninstructed Deviation Charge. Resources shall not be subject to Uninstructed Deviation Charges for any Uninstructed Deviation Megawatts caused by: (1) Manual Dispatch Instructions; (2) redeployment by the Balancing Authority; (3) ~~operating a Resource in Test Mode; (4) operation of a Resource in Start-up Mode or Shut-down Mode, or of each generating unit individually if multiple generating units are registered collectively as a single Resource, as indicated in the Resource Plan; (5)~~ instances when a Resource trips or is derated after receiving dispatch

instructions from the Transmission Provider; ~~(64) the Non-Dispatchable Resources during uncongested intervals is an Intermittent Resource;~~ or ~~(75)~~ the dispatch instructions issued to a Resource were beyond the reported capabilities in the Resource Plan due to the application of a VRL. In order to receive an Uninstructed Deviation Charge exemption for a Resource under (53) above, the Market Participant must immediately report the change in its Resource Plan, in accordance with Section 1.2.7 (c) of Attachment AE, specifying the Resource trip or deration and must submit an invoice dispute utilizing the process described under Section 6.3 of Attachment AE prior to Transmission Provider determination of the exemption under the Section 6.3 process.

- (f) The Transmission Provider may also waive Uninstructed Deviation Charges to the extent a Market Participant can demonstrate such deviation was caused solely by events or conditions beyond its control, and without the fault or negligence of the Market Participant. The Market Participant must provide the Transmission Provider with adequate documentation through the invoice dispute process described under Section 6.3 in order for the Market Participant to be eligible to avoid such Uninstructed Deviation Charges. The Transmission Provider shall determine through the Section 6.3 dispute process whether such Uninstructed Deviation Charges should be waived.
- (g) Uninstructed Deviation Charges shall be calculated by the Transmission Provider in accordance with Section 5.5 of this Attachment AE.
- (h) In the event of a system failure related to the SPP EIS Market systems or Market Participant systems providing data to SPP that impact Transmission Provider's ability to calculate dispatch instructions for a Resource or Resources, the Transmission Provider will suspend the calculation of dispatch instructions for such Resources and treat them as Self-Dispatched Resources until the calculations of dispatch instructions can be restored.

5.5 Uninstructed Deviation Charges

The Transmission Provider shall calculate Uninstructed Deviation Charges for each hour in which a Resource has been determined to have failed to follow the Transmission Provider's dispatch instructions. For ~~each~~all Resources, whether a Dispatchable Resource ~~or~~or Self-Dispatched Resource, or a Non-Dispatchable Resource (during congested intervals) that failed to follow dispatch instructions in accordance with the procedures set forth under Section 4.1(d) of this Attachment AE, the Transmission Provider shall calculate an Uninstructed Deviation Charge as follows:

- (a) For each Dispatch Interval in an Operating Hour, if a Resource's actual output is greater than (MaxMW + RH), then that Resource's Uninstructed Deviation Megawatt in that Dispatch Interval is equal to the actual output - (MaxMW + RH), where MaxMW and RH are as defined under Section 4.1(d) of this Attachment AE;
- (b) For each Dispatch Interval in an Operating Hour, if a Resource's actual output is less than (MaxMW - RL), then that Resource's Uninstructed Deviation Megawatt in that Dispatch Interval is equal to the actual output - (MaxMW - RL), where EOL and RL are as defined under Section 4.1(d) of this Attachment AE;
- (c) For each Dispatch Interval in the Operating Hour, if a Resource's actual output is within the acceptable operating range as defined in Section 4.1(d) that Resource's Uninstructed Deviation Megawatt in that Dispatch Interval is equal to zero;
- (d) For each Operating Hour, the Transmission Provider shall calculate an Hourly Uninstructed Deviation Megawatt for each Resource that is equal to the average of the absolute value of the Uninstructed Deviation Megawatts calculated for each Dispatch Interval for each Resource in that Operating Hour.
- (e) For each Operating Hour and for each Resource, the Transmission Provider shall calculate an Uninstructed Deviation Charge:

Uninstructed Deviation Charge = (Min (Hourly Uninstructed Deviation Megawatt, 25) * 10 % + (Max (0 ,Hourly Uninstructed Deviation Megawatt - 25) * 25 %)) * the absolute value of the Resource Locational Imbalance Price.

(f) The Uninstructed Deviation Charge shall be zero for a Qualifying Facility exercising its rights under PURPA to deliver all of its net output to its host utility, has refused to register its Resource and that has been registered by the Transmission Provider as outlined in Section 1.2.2(g) of this Attachment AE.

(fg) For each Operating Hour, a Market Participant's Uninstructed Deviation Charge shall be equal to the sum of that Market Participant's Resources' related Uninstructed Deviation Charges.