



**Southwest Power Pool, Inc.**  
**REPRESENTATIVES OF MWG, ORWG, RTWG**  
**Recommendation to the MOPC**  
**April 23, 2007**  
**External Generator Tariff Filing (PRR137)**

**Organizational Roster**

The following persons of the MWG, ORWG, and RTWG participated:

Gene Anderson, OMPA	Bary Warren, EDE
Gary Clear, OG&E	Charles Locke, KCPL
Terri Eaton, Xcel Energy	Gary Newell, Lafayette
Jason Atwood, Redbud Energy	Pat Bourne, SPP
Charles Locke, KCPL	Bernard Liu, SPS
Rick McCord, EDE	Mark Foreman, Tenaska
John Childs proxy for Tambda Offield, ETEC	Steve Massey, Westar
Tom Saitta, Aquila	Alan Klassen, Westar
Tom Stuchlik, Westar	Lanny Nickell, SPP
Richard Dillon, SPP	Dan Boezio, AEP
Grant Wilkerson, Westar	

**Background**

See Attachment

**Analysis**

See Attachment

**Recommendation**

The consensus of this group is to recommend that the MOPC accept PRR137 with the attached changes and:

- 1) Direct RTWG to work with SPP staff to prepare the tariff language incorporating PRR137, including the attached changes, for a May 2 Compliance Filing with the Federal Energy Regulatory Commission,
- 2) Direct the MWG to modify PRR137 for the attached changes,
- 3) Direct the ORWG to address the Criteria items in the attached changes.
- 4) Direct the BPWG to address Business Practice items in the attached changes.

**Approved:**                      Members of the MWG, ORWG, RTWG                      April 20, 2007  
    Consensus

**Action Requested:**      Approve Recommendation

**Southwest Power Pool, Inc.**  
**MARKET WORKING GROUP**  
**OPERATING RELIABILITY WORKING GROUP**  
**REGIONAL TARIFF WORKING GROUP**  
**Proposed Changes to External Generator Market Design (PRR 137)**  
**April 20, 2007**

**Proposal**

The energy market will implement external generator participation in the real-time energy market as discussed in Protocol Revision Request 137 (PRR137) and include the following modifications and clarifications to PRR137 and applicable documents:

- 1) Market Participants (MP) with external generators will register a sink Settlement Location within an SPP energy market Balancing Authority (BA). This sink Settlement Location will be used in the evaluation of Transmission Reservation requests. This sink Settlement Location will not have any energy market settlement charges.
- 2) Point-to-point Transmission Service within SPP must be utilized to schedule to a sink Settlement Location registered by the MP with external generation.
- 3) The Tariff will specifically exclude Non-firm Transmission Reservations for external generators from incurring Transmission Reservation Service charges.
- 4) Available Transmission Capability (ATC) is appropriately reduced, pursuant to Criteria 4, for those Transmission Reservations made to facilitate external generator participation in the energy market. In SPP's determination of these impacts, consideration will be given to historical usage of transmission service, thereby utilizing the lower of historical usage or the Transmission Reservation as per Criteria 4.
- 5) SPP Business Practices regarding the definition of competing requests for purposes of exercising preemption rules would be changed to define requests for Transmission Service to the same POD as competing. This allows for a higher priority Transmission Request to preempt a lower priority Transmission Request when there is insufficient ATC to accept both Requests for Transmission Service with similar impacts on flowgates.
- 6) SPP Criteria modifications will be requested, if determined necessary, to allow the request for assistance upon the loss of a non-firm schedule.
- 7) SPP will calculate the aggregate impact of the external generators on each BA NSI and include this information in updates to the BA.
- 8) The BA settlement agreement addresses recovery for a BA receiving penalties or sanctions resulting from SPP's actions or inactions.

**Background**

The Federal Energy Regulatory Commission (FERC) ordered SPP to file within two months of the energy market implementation the Tariff language necessary to permit participation in the energy market by external generation. FERC has granted an extension of the filing date to May 2, 2007. PRR137 was approved by the Market Working Group (MWG) in February 2007 and rejected by the Operating Reliability Working Group

(ORWG) in March 2007. In the meantime, the Regional Tariff Working Group (RTWG) crafted language based on PRR137 for inclusion in the SPP Tariff.

Resulting from the questions raised, and action taken, by the ORWG and further discussion of the MWG, the Market and Operating Policy Committee (MOPC) discussed concerns with the design proposed in PRR137 for participation by external generators in the real-time energy market. The MOPC directed the MWG, ORWG, and RTWG to meet, discuss the issues identified during the MOPC meeting (Attachment A), and report to the MOPC on April 23. The MOPC discussion also acknowledge the Compliance Filing deadline of May 2 for the Tariff modifications related to external generator participation in the real-time energy market.

The MWG, ORWG, and RTWG met in Tulsa, Oklahoma on April 16 to discuss resolution of the concerns and preparation of filing materials.

### **Analysis**

The April 16 meeting of the MWG, ORWG, and RTWG identified a list of requirements to be addressed in PRR137 changes (Attachment B) and discussed possible solutions to each item. The primary concerns can be grouped into the categories of (1) Barriers to participation, either financial or operational, (2) Impact upon Transmission Owners and Participants within the SPP geographic region, (3) Impact on Balancing Authority (BA) operations. The discussion identified a preference to establish SPP as both a BA and a sink for these types of transactions. After a brief review of actions necessary (waiver from the North American Electric Reliability Council – NERC, identification of the responsibilities assumed by SPP, construction of computer systems and personnel necessary to support the identified responsibilities, etc.) and an discussion that the establishment of SPP as a BA would likely delay external generator participation, the meeting participants agreed to move forward with this interim solution that would be re-evaluated to determine improvements in the market design in the following situations: (i) in connection with the establishment of SPP as a BA, as part of a more comprehensive discussion focused on the BA initiative, and/or (ii) if any external generator or other Market Participant requests improvements based on the good faith belief that the tariff provisions adopted to implement PRR 137 are not producing the intended result of allowing the integration of external generation on a non-discriminatory basis.

Identified as barriers to participation were Transmission Reservation charges and the ability of Load Serving Entities (LSE) Market Participants to unduly reject transaction requests (Tags) using the Transmission Reservations. In order to mitigate the Transmission Reservation charges, the meeting participants discussed filing in the Tariff or discounting 100% the charges to an amount of zero. The ultimate decision was that the Tariff would specify that external generators with non-firm Transmission Service would not be charged for the Transmission Service. This practice extends only to the Transmission Service under the SPP OATT. Although the use of discounting, rather than Tariff language, was discussed, the higher assurance through the Tariff language was preferred. The concern about unjustified rejection of Tags by LSEs was discussed and the resolutions included Tariff language that restricts an LSE from rejecting a Tag and establishment of SPP as a sink Settlement Location. The use of SPP as a sink Settlement Location would include approval by NERC and is discussed in the prior paragraph. The discussion of using restrictive Tariff language disclosed that rejection of a Tag for valid reasons would also be restricted. Therefore, the suggested solution is to have the Market Participant with external generation register a Settlement Location within one or more BA(s) to which they wish to arrange a Transmission Reservation. This Settlement Location would, for Transmission Reservation evaluation purposes, be identified to the same set of busses as the other BA load. For settlement purposes, the Settlement Location will be included in the statement for the Market Participant that registered the location. No charges from the energy market will be incurred for this sink Settlement Location. The Market Participant registering the Settlement Location will also register a TSIN entry in the NERC registry reflecting themselves as the Purchasing/Selling Entity (PSE). Under Tagging procedures, the BAs (Sink and Source BAs) have approval and rejection rights and PSEs on the Tag have rejection rights. Since the PSE is the Market Participant with external generation, the LSEs will not have rejection rights to the Tags.

The SPP Market Monitoring Unit will review all rejected Tags as requested by the Transmission Customer. If the MMU determines that such Tag was rejected for reasons other than as permitted by NERC standards, the MMU will refer the matter to FERC for appropriate action.

Impact on Transmission Owners (TOs) and LSEs included the lack of revenue for TOs from Transmission Reservation service and the utilization of ATC preventing LSEs from making arrangements to serve their load. After discussion of revenue and the utilization of NITS, the external generator using non-firm Transmission Service will not be charged for the service. Due to the special circumstances of certain Transmission Owners (e.g. Aquila), those paths were discussed as potentially being excluded from the discount. The potential hoarding of Transmission Reservations was discussed and decided that the SPP Market Monitor would be responsible for the monitoring for this type of activity. The concern regarding the utilization of ATC was also considered during the discussion resolving into two possible solutions: (1) Grant the reservation regardless of ATC and the Transmission Provider may deny the Tag in near real-time, (2) Allow the sale of additional non-firm Reservations based on evaluation of the actual historical usage of all non-firm Transmission Reservations. Solution 2 has the impact of expanding the potential for TLR from the over-subscription of Transmission Reservations beyond just the impact of external generator Reservations, but that impact is within reason and consistent with Criteria 4 requirements. Due to the potential “unduly discriminatory” impact of solution 1 and the extent of system changes to effect the solution, solution 2 is considered most viable. Transmission Customers should be aware that there is a potential for the non-firm TLR events. Criteria 4 section 4.5.5.3 discusses the use of historical scheduling against reservations for the calculation of Daily and Weekly ATC calculations. As an example in the calculation of ATC, if only 20% of the Transmission Reservations had been scheduled against across a specific flowgate, then the other 80% would be included as ATC. The BPWG has included discussion of usage of non-firm reservations versus scheduling has been across the entire SPP footprint about 20%. This should not be considered a guarantee of impacts on ATC.

Impact on BA activities were focused primarily on the ability to identify the impacts on Net Scheduled Interchange (NSI), ability to request reserve assistance, financial impacts from fines or deployment of reserves, and impact on Control Performance Standard (CPS) measurement. SPP will calculate the aggregate impact of the external generators on each BA NSI and include this information in updates to the BA. The Criteria language may require modifications to expand the ability to utilize reserves for the loss of a non-firm transaction and SPP will review the Criteria for these changes. The BA settlement agreement addresses recovery for a BA receiving penalties or sanctions because of SPP’s actions or inactions. The BA agreement in Section 7 deals with, and will address, costs on the sink BA resulting from the implementation of the EIS Market, including the impact of external generator activities. The deployment of reserves is already addressed in the FERC order regarding Reserve Sharing activities. The system design will include specific attention to any consequences on CPS.

**Cross Reference**

MOPC ISSUES	MEETING REQUIREMENTS	RESOLUTION SHORT DESCRIPTION
1 - schedule approval	4 – LSE unjustified rejection	MP for external generator registers sink location within an SPP BA. Rejection of a Tag subject to Market Monitor review and action
2 – physical vs. contracted path		Treatment is no different than for any other schedule injection
3 – SPP as a sink	3 – ATC impacts	External generator provisions will be reevaluated for improvements:

	4 – LSE unjustified rejection	(i) in connection with implementing SPP as a BA/sink; and/or (ii) good faith assertion that these provisions are not producing the intended result. ATC calculations will incorporate Criteria 4 requirements.
4 – potential fines	9 – impact on CPS	BA agreement with SPP is considering cost recovery. Design is evaluated for impact on CPS.
5 – DC Tie impacts		At this time, the ability to support and understand DC tie impacts will result in this being a future enhancement.
6 – loss responsibility		Treatment is no different than for any other schedule injection.
7 – transmission priority	1 – transmission charges 3 – ATC impacts	Transmission may be arranged. Point-to-point non-firm to a sink of an SPP OATT NITS BA has a transmission charge of zero and ATC is calculated in accordance with Criteria 4 requirements.
8 – financial impacts on BA/LSE	4 – LSE rejection of Tag 8 – reserve charges 9 – impact on CPS	See MOPC item 1 and 4. The Tariff already directs recovery of reserve charges.
9 – Transmission Service Charges	1 – transmission charges 2 – transmission costs	See MOPC item 7. Additionally, the zero charge paths exclude certain paths.
10 – ATC impacts	3 – ATC impact	See MOPC item 7.
11 – import limitations	9 – CPS violations	Discussed as potentially self-limiting due to Transmission Reservation requirements. Will be reassessed as part of CPS concerns.
12 – “temporary” solution	4 – LSE rejection of Tag 6 – Sink BA visibility 9 – CPS violations	External generator provisions will be reevaluated for improvements: (i) in connection with implementing SPP as a BA/sink; and/or (ii) good faith assertion that these provisions are not producing the intended result.

MOPC Motion:

Direct the RTWG, ORWG, and MWG to have a meeting to work through PRR 137 protocols, tariff revisions, and outstanding issues next week to provide recommendations for a MOPC conference call on Monday April 23<sup>rd</sup> at 4PM to review and further discussion in advance of next BOD meeting.

Motion passed with 4 abstentions

Issues:

1. Ensure that the default sink LSE within a BA is the BA's affiliated LSE
  - 1.1. Obligation or not on a BA to serve as the Sink for an External Resource (SOLUTION: Add a new paragraph (g) to Section 2.2.2 which states that:
    - (a) a Balancing Authority may not refuse to accept a schedule provided by an External Resource unless the Balancing Authority determines (and the Transmission Provider confirms) that accepting the schedule would have a material adverse effect on the reliability of transmission operations;
    - (b) if a Balancing Authority refuses to accept a schedule from an External Resource for any other reason (or engages in undue delay in determining whether it will accept or reject a schedule), the matter will be referred to the SPP Market Monitoring Unit; and
    - (c) if the MMU finds that the Balancing Authority rejected the schedule without justification, it will refer the matter to FERC.)
  - 1.2. Obligation or not that a MP associated with a BA allow its sink to be utilized (SOLUTION: Same as for item 1.1?)
2. Physical versus contractual path and associated CAT and IDC impacts
3. Waiver that would permit SPP to designate the "SPP EIS Market" as a valid sink for scheduling and transaction tagging purposes.
4. NERC, FERC potential fines for CPS1 and CPS2 violations
5. DC Tie operational impacts
6. Responsibility for losses
7. Need for and priority of transmission service within the Market Footprint
8. Financial settlements on LSEs and BAs
9. Whether or not Transmission Service Charges apply to any SPP transmission reservation that must be represented within the SPP region to facilitate the External Resource. (SOLUTION: Add a sentence to the end of Section 2.2.2(f) which states that External Resources will not be charged for transmission service within the SPP EIS Market Footprint to implement a Dynamic Dispatchable Schedule for the purpose of participating in the EIS Market.)

10. Whether or not Transmission ATC is reserved on the system in association with the preceding item particularly if charges are not to be applied.
11. Limitations if any:
  - 11.1. Volume of External resources limited by the Operating Reserves? (SOLUTION: Add a sentence to Section 4.2 stating that a Dynamic Dispatchable Schedule submitted by an External Resource will be curtailed immediately if the SPP Reliability Coordinator determines that an IROL violation would otherwise result. Restoration of the schedule would be subject to any “deadband” on the IROL violation threshold that is adopted for Reserve Sharing Events.)
  - 11.2. DC Ties?
  - 11.3. Whether or not the External BA must agree to maintain schedule upon unit contingency of the external resource.
12. Do the tariff provisions to be considered at this time establish the “end state” solution for External Resources, or only a temporary solution pending further development?

## Must Haves:

1. Free Transmission or equal footing with internal generation
  - Fully discount the Transmission Reservation rates to SPP NITS POD
  - File in tariff that sinks to SPP or SPP NITS POD has a Transmission Reservation charge of zero
2. Pay for Transmission to non-Market SPP TO (allocate some transmission revenue)
  - Address in discounting policy (exclude certain paths) or address explicit recovery in the Tariff
3. Do not reduce ATC for transmission that is reserved for external generation and not charged
  - Reservation granted, but in near real-time Tag may be denied by Transmission Provider
  - Areva non-firm experience calculator
  - Increase TLR expectation or increase RNU
4. No LSE (PSE) undue rejection of Tag
  - MP for external generation registers both the source and a sink Settlement Location.
  - SPP is the sink Settlement Location
  - Tariff language restricts LSE from rejection of Tag
5. No external generator or LSE hoarding of Transmission Reservations
  - Market Monitor responsibility to monitor
  - Do not reduce ATC for transmission that is reserved for external generation and not charged
6. Sink BA visibility of external generator impacts (both in/out) – aggregate schedules
  - SPP explicitly identify external generator aggregate impacts on BA NSI
  - SPP is the sink “BA”
7. Sink BA ability to call for reserve assistance
  - Criteria change to allow contingencies for loss of non-firm schedules
8. No Fault to BA for impact of External Generators (regulation, reserves, etc.)
  - Tariff language to allow recover cost from external generator
9. Market and system design cannot reduce ability of sink BA to meet CPS requirements
  - Tariff language allowing recovery of fines directly related to the external generators
  - SPP is the sink “BA”



## PRR Recommendation Report

<b>PRR Number</b>	137	<b>PRR Title</b>	External Resources in the SPP Market
<b>Timeline</b> (Normal or Urgent)	Urgent	<b>Recommended Action</b>	Approve
<b>Protocol Section(s) Requiring Revision</b> (include Section No., Title and Version)	Section 3.1, 4, 5, 6 and create a new section 7 named External Resources in the SPP EIS Market (Current section 7 will move to 8 and so on).		
<b>Revision Description</b>	Propose a solution for allowing External Resources to participate in the SPP Market within 3 months of market start.		
<b>PRR Recommendation (indicate whether all segments were present for the vote, and the segment of parties that voted no or abstained)</b>	Approved with 1 no vote (Westar) and 1 abstention (Xcel) in the February 6-7, 2007 MWG meeting.		
<b>RTWG Review</b>			
<b>ORWG Review</b>			
<b>MOPC Recommendation (indicate whether all segments were present for the vote, and the segment of parties that voted no or abstained)</b>			

Original Sponsor	
<b>Name</b>	SPP Staff
<b>Company</b>	Southwest Power Pool

Comments Received	
<b>Comment Author</b>	<b>Comment Description</b>

# PRR Recommendation Report

## Proposed Protocol Language Revision

### 3.1 Introduction

The Resource Plan is submitted by Market Participants with registered Resources to enable the SPP Market Operation System (MOS) to assess Resource and Ancillary Service adequacy for the SPP region, each SPP control area, and each Market Participant. The operator of the Control Area remains responsible for the balance of Load and Resources within the Control Area boundary. See Appendix 7 of SPP Criteria for requirements of data submission.

External Resources, participating in the SPP EIS Market, have the same requirements for submitting a Resource Plan as those Resources within the SPP Market Footprint, except as specified below. If an External Resource is a generating unit, all or a portion of the unit's capacity may be offered into the SPP Market. For such External Resource capacity as is offered into the SPP Market, (i) only status available to External Resources is "Available" or "Unavailable"; and (ii) the Min MW should be set to zero and the Max MW will be the amount offered into the SPP Market.

### 4.1 Introduction

Each MP submits its Ancillary Service Plan to enable the SPP Market Operation System to confirm each MP is satisfying its Ancillary Service obligations. The Ancillary Service Plan indicates transfers of Energy Obligations between MPs and, when self provided, which Resources are providing these services. Ancillary services are supplied and procured in accordance with the provisions of the SPP tariff and applicable SPP criteria.

MP's must indicate on the AS Plan Reserves and Regulation (Spin, Supp, Upreg, Downreg) sufficient to meet their Energy Obligations. MP's may also designate Reserves and Regulation in excess of their Energy Obligations for reliability purposes. It is recognized that in some instances a party may indicate capability being held for Regulation or Reserve service that is actually being reserved to indicate emergency operating capabilities or other operating capabilities and commercial limitations of the Resource.

External Resources, participating in the SPP EIS Market, will not be responsible for submitting Ancillary Service Plans.

# PRR Recommendation Report

## 5.1 Introduction

To submit an offer a Market Participant must have executed the service agreement as specified in Tariff Attachment AH. Offer Curves are submitted by Resource. Resources that offer energy into the SPP EIS market must specify an offer price. The price is specified using an Offer Curve. The Offer Curve allows Resources to offer multiple points at different prices. An Offer Curve is submitted for each Resource with up to ten monotonically increasing pairs of MWh and price. The price may be positive or negative and may be capped. See Section 11 for further details. Owners of Joint Owned Units may agree to register the units as separate Resources.

External Resources, participating in the SPP EIS Market, have the same requirements for submitting an Offer Curve as those Resources with-in the SPP Market Footprint.

## 6.1 Introduction

Energy schedules are submitted reflecting bilateral and Self-dispatched activities. Source and sink information on the energy schedules must match the NERC Registry. Schedules that source or sink within the SPP Market will be rejected if they are submitted without an appropriate SPP source and/or sink mapped to a Settlement Location. SPP requires all scheduled injections to equal scheduled withdrawals plus losses. Although scheduling of all Load is not required, principles observed are (1) Market Participants will not be paid (due to under-scheduling) for providing counterflow when serving firm Energy Obligation (Resources providing energy that serves their firm Energy Obligation), and (2) Market Participants will not be allowed to profit from submitting schedules in excess of their firm Energy Obligations.

The External Resource may obtain any type of Transmission Service (firm or non-firm, of an duration) sourcing at the Resource and Sinking at a BA within the SPP EIS Market footprint. The Market Participant will submit Dynamic Dispatchable Schedules and SPP will communicate the dispatched generation values for the Dynamic Dispatchable Schedules to the Source BA in real time for their incorporation in the Source BA NSI.

The integrated final schedule values would be utilized only for check-out and as the metered actuals of the External Resource for settlement purposes. The integrated final Schedule values will not be included in the Schedule totals of the Sink location for EIS purposes.

SPP will adjust the NSI for the Sink BA (internal to SPP market footprint) for the Deployment signal to the External Resource. SPP will dispatch those External Resources with valid Dynamic Dispatchable Schedules economically for imbalance purposes.

7 External Resources (move sections down to insert this section)

# PRR Recommendation Report

## 7.1 External Resources in the SPP Market

The owner of an External Resources that wishes to participate in the SPP EIS Market, with that Resource must register with SPP as a Market Participant. The External Resource, if not currently modeled, will be modeled at an external node based upon the physical flow characteristics or a location that is electrically equivalent. Once an External Resource is adequately modeled and can feasibly participate, that Resource can be offered into the SPP EIS Market, or held out of the SPP EIS Market to participate in another market, as that Resource chooses. These Resources will not be required to provide ICCP and Settlement Meter data. The LIP calculated for the External Resource Settlement Location is the product of (i) the estimated distribution of modeled energy flows across specific interface points between SPP and adjacent Balancing Authorities and (ii) the Locational Imbalance Price at each interface point.

These External Resources will be responsible for submitting Resource Plans and Offer Curves and must follow the same timelines and procedures as outlined in these Market Protocols. The External Resource may utilize any type of Transmission Service (firm or non-firm, of any duration) sourcing at the External Resource and sinking at a BA within the SPP EIS Market footprint. The Market Participant will submit Dynamic Dispatchable Schedules and SPP will communicate the real-time dispatched values for the Dynamic Dispatchable Schedules to the Source BA in real time for their incorporation in the Source BA's NSI. The integrated final schedule values would be only utilized for check-out and as the metered actuals for settlement purposes. As a result all energy from an External Resource using this provision is considered imbalance energy. The integrated final Schedule values will not be included in the Schedule totals of the Sink location for EIS purposes.

SPP will adjust the NSI for the Sink BA (internal to SPP market footprint) for the Deployment signal to the External Resource. SPP will economically dispatch those External Resources with valid Dynamic Dispatchable Schedules for imbalance purposes. This solution will result in the potential reduction in uplift charges due to real-time deployment and allow participation of entities within and beyond SPP's 1<sup>st</sup> tier.

In the event of a curtailment of the Dynamic Dispatchable Schedule from the External Resource, the Sink BA is able to utilize RSS under an "Other Extreme Conditions" category, if necessary, when the Dynamic Dispatchable Schedule is curtailed. As a result, the recovery of the RSS costs would be under the FERC order process from the Market Participant with the Resource.

If the Source BA does not curtail the Schedule, then the Reserve Energy Deployment and any associated cost recovery is the responsibility and concern of the external Source BA.