

**Southwest Power Pool
GAS ELECTRIC COORDINATION TASK FORCE MEETING
April 23, 2015 9:00 a.m. – 12:00 p.m.
Conference Call/WebEx**

• Summary of Action Items •

NOTE: The list below includes the Item Number used in the GECTF Action Item list.

1. (107) Staff to determine if the IRC will submit comments on the FERC Order 206 (Gas Day) as a group.
2. (108) Staff to determine if there are changes to the timeline for DA Mkt actions and provide an update to the group for the Gas Day timeline discussion. (Include an SPP explanation of why the enhancements are needed for the timeline compression)

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• M I N U T E S •

Agenda Item 1 – Administrative Items (Jake Langthorn)

GECTF Chair Jake Langthorn called the meeting to order at 9:00 a.m.

See the attachment for attendance information.

Agenda Item 2 – Review Action Item List (Kathy Myhand)

The action item list of In Progress items were reviewed. Updated were added to the status column in the list.

The Emergency Operating Plan (EOP) is not intended for inclusion in the new Revision Request process.

#60. Committed to run, purchase gas, then don't run. The compromise was to say that SPP would commit in the MDRUC and they don't decommit except in emergency conditions. There weren't instances of conservative operations during the last winter. There is something going to FERC now that will cover this. CJ Brown said that we didn't get very close to implementing Conservative Operations this winter. SPP is typically capacity rich, barring any unforeseen outages. That will continue to get less and less rich based on load growth and planning margins. We expect to become less capacity rich as we move forward. We are approximately 1500 – 2000 MW above the anticipated max forecast with a margin now. Unpredicted weather pattern changes would possibly turn into conservative operations. If we had an instance where there was a min gen event, we may need to do conservative actions and possibly reverse commitment instructions.

See the GECTF Action Item list for information related to other action items; it was updated in the meeting.

Agenda Item 3 – FERC Order update (CJ Brown)

CJ Brown talked the group through the information that is needed based on the FERC Order (Gas Day changes) that was put out this week.

There was a change in the published meeting material information: NYISO timeline, on slide 9, 4 am to 10 am is the corrected information.

- PJM and MISO are planning to move their day ahead earlier to adjust the timeline similar to SPP. Amber Metzker asked if the IRC will be submitting joint comments. Jim Jacoby asked if there is any effort to standardize times. Is there any coordination? CJ Brown said we are somewhere in-between, we are aware of changes from other areas, but not specifically aligning the timelines. **Will**

there be joint comments submitted by the IRC? Sam Ellis to address either through email or in the next meeting.

- The information CJ Brown is receiving from Sam Ellis at the Inter-RTO/Gas Pipeline meeting, is that in order to keep in line with the other IRO timeline changes, it appears that we will need to make changes to the timeline.
- Jake Langthorn asked the group for opinions of moving the market timeline. Amber Metzker agreed that if others are shifting, SPP will need to shift too. Jim Jacoby agreed and others agreed as well. Rob Janssen suggested that there are pros and cons to a move in the timeline. Many of which have been documented already. He suggested we look at the full set of options. Rick Yanovich (OPPD) is concerned with the move not solving any price risk issues.
 - These options were discussed as possible responses:
 - MPRR 223
 - Move Day Ahead Timeline
 - Further Enhancements to multi day process
- Rob Janssen commented that there was a discussion last week related to solving problems at the regional level. Rob suggested that there is room for regional differences and delay for further study, it is not a problem for SPP now. Amber Metzker suggested that looking at the error associated with moving the timeline up could assist in quantifying the benefits.
- DA Mkt and RUC: SPP should bring back some load and wind forecast error estimates based on the changes in the timeline.
- Referring to the timeline of working group meetings; the process is normally MWG, ORWG, and then RTWG. A good plan could be to lay groundwork in May, then use June meetings for approvals. Rob Janssen suggested asking for an extension to November 1 instead of August 1. The discussion indicated that an August 1 request could be feasible based on the SPP Stakeholder process, a later date request may have some resistance.
 - Amber Metzker mentioned that the comment filing in November may put us into too much of a time crunch if SPP is expected to comply with the April 2016 gas scheduling effective date. Joe Ghormley commented that an extension may not be approved for something that is not the stakeholder process. From FERC's perspective, we have had time to prepare. Rob Janssen commented that the gas date of April 2016 shouldn't affect SPP and the gas timeline and that we should target November 2016 for timing of when reliability issues may occur. ECC is the true unknown on any changes to the timeline.
 - Jim Jacoby asked if we started now, could we meet the April 2016 implementation. Jodi Woods said other enhancements, including EEC would need to be postponed to meet the deadline.
 - Amber Metzker asked Joe Ghormley if other RTOs would be submitting their responses on time will that put us in a bad light? If we are the only one out, comments about SPP being unique are

not thought of as good, FERC would like us to all be the same. Jake Langthorn asked when the request will be made. Joe Ghormley said the next couple weeks would be good.

- Jodi Woods will review the DA Market timeline activities presentation to see if any of the information has changed and present an update in the May meeting. The update should include an explanation of the compression requirements included in the cost estimate.

Agenda Item 4 – Marketplace Timeline Cost Update (Jodi Woods)

Jodi Woods reviewed the presentation included in the meeting material.

Jim Jacoby asked if the cost estimate is only the vendor changes. Yes, only Alstom system market changes. This was based on the proposed timeline, Strawman version.

Some highlights from the presentation include the following:

- When analyzing where the DA Market timeline will be reduced, a high level estimate is 70% reducing the MCE run; 30% reducing manual system analysis time
- 1.4 Million dollar estimate for Market system enhancements
- 36% of this cost is an unknown due to the ECC project
- This takes into account the enhancement for the Day RUC to look ahead that just went through the stakeholder process
- Roughly 12-15 month implementation; assuming it has the highest priority over any other projects

Agenda Item 5 – Fuel Management Discussion (Jodi Woods)

Based on the discussion during the action item review, Jake Langthorn will discuss the creation of a Revision Request with John Rhea and provide information for the May meeting.

Agenda Item 6 – Redlined EOP Review (Kathy Myhand)

The redlined information with the yellow highlighted information indicating a change that was previously requested by the GECTF was reviewed. Additional information and requested changes were tracked in the document during the review. CJ Brown and Carl Stelly will discuss the feedback and provide information to the group in the May meeting.

Agenda Item 7 – Review New Action Items (Kathy Myhand)

See the action items in the list on page 1 of this report.

Agenda Item 8 – Next Meetings (Jake Langthorn)

5/12/2015, Face-to-face (Dallas), 8:00 am to 3:00 pm.

6/3/2015, Face-to-face (Dallas), 8:00 am to 3:00 pm

Agenda Item 9 – Adjourn (Jake Langthorn)

The meeting adjourned at 11:32 pm.

Respectfully Submitted,

Kathy Myhand
Secretary

Attachments:
Attendance
Action Item List Updates
Redline EOP changes

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Addending	First Name	Last Name	Member	Company
x	Amber	Metzker	M	Xcel Energy
	Amy	Jeffries	M	Public Service Company of Oklahoma
	Cody	VandeVelde	M	Westar Energy
x	Dirk	Dietz	M	Nebraska Public Power District
	Gary	Gottsch	M	Kansas City Power & Light Company
x	Jacob	Langthorn, IV	M	Oklahoma Gas and Electric Company
	Matt	Moore	M	Golden Spread Electric Cooperative, Inc.
x	Robert	Janssen	M	Dogwood Energy, LLC
x	Ryan	Davis	M	Basin Electric
x	CJ	Brown	S	Southwest Power Pool
x	Derek	Hawkins	S	Southwest Power Pool
x	Jodi	Woods	S	Southwest Power Pool
x	Joe	Ghormley	S	Southwest Power Pool
x	Kathy	Myhand	S	Southwest Power Pool
x	Les	Dillahunty	S	Southwest Power Pool
x	Patti	Kelly	S	Southwest Power Pool
x	Andy	Fry	G	
x	Bill	Nolte	G	Sunflower Electric Power Corporation
x	Brian	Hansen	G	MISO
x	Chris	Winburn	G	City of Independence
x	Dick	Kahle	G	Lincoln Electric System
x	Jim	Fort	G	The Energy Authority
x	Jim	Jacoby	G	American Electric Power
x	John	Boshears	G	SPRM
x	Kim	Sullivan	G	
x	Rick	Yanovich	G	Omaha Public Power District
x	Robert	Safuto	G	Customized Energy Solutions
x	Ronald	Thompson Jr.	G	Nebraska Public Power District

Color-code indicators:

Complete	On Hold	In Progress	Past Due	Abandoned	No Work to date
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GECTF Action Log

No.	Action Item Description	Reference (CY items #, decision log #, other)	Assigned to	Est. Completion Date	Final status/ comments	Status	Closed Date
40	Update contact list to include gas contacts within their organization.	3/14/2014 Meeting	SPP Staff (Russell)		11/11/2014: Will be added to the 12/1 model and to the Customer Service process for updated. 1/22/15: Pending confirmation that this is complete. 2/27: Don Shipley will confirm complete with Russell, keeping open until this is complete.	In Progress	
51	CWG needs to capture the need for the configurable offer cap and the gas day on the system side for emergencies.	5/21/2014 Joint Meeting with MWG	SPP Staff		This item is on hold in the MWG. MMU options are needed, Tariff issue. Then through MWG.	On Hold	
60	Create an MPRR based on Rob Janssens comments for MPRR 189. (MPRR 223) (MPRR 214 is the detailed information)	7/31/2014 Meeting, modified in the 8/25/2014 Meeting	Rob Janssen		Proposed MPRR (223) on MWG agenda. Open item for MWG agenda. Winter experience will determine if 214 needs to be revisited. 2/27: Kathy/Don to discuss with MWG Secretary and Rob, has not been voted on yet per Amber.	On Hold	
70	Work with CWG/MWG to determine an estimate of cost for members to modify their systems to accommodate changes to the Marketplace timeline.	9/17/2014 Meeting	SPP Staff (Jodi)		SPP to provide analysis of expected cost implications and system changes in Q4, Information to be provided to Members for member cost analysis in Q1 2015. None at this time, reprioritized based on Pinnacle Project. 2/27: Don to discuss as separate agenda item.	In Progress	
79	Multi Day Reliability Assessment discussion for gas related issues.	9/17/2014 Meeting	SPP Staff (Sam)		RUC sessions and 12/4 session and EOP discussions are taking place. Maintain separation of reliability (EOP) and economics (MPRR) information. 1/29: Additional features may need this item to remain open. Such as Economic needs instead of just Reliability needs. 2/27: Change in the group responsible for DA Assessment (Casey and Jason Smith). Improvements are being discussed and will be provided by Casey at a later time. (Sam now owns this) Sam will update GECTF at next scheduled May meeting.	In Progress	
80	Discuss #49 (headroom) after RUC materials are out.	9/17/2014 Meeting	SPP Staff		1/29: The Capacity Margin decisions will impact this. If a new Capacity Margin is determined, there may be follow up actions needed for GECTF. Reserve capability for different types of resources may impact headroom. 4/23: Pending recommendation from CMTF.	On Hold	

Color-code indicators:

Complete	On Hold	In Progress	Past Due	Abandoned	No Work to date
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GECTF Action Log

No.	Action Item Description	Reference (CY items #, decision log #, other)	Assigned to	Est. Completion Date	Final status/ comments	Status	Closed Date
87	Update GECTF Charter for approval to be extended with the scope additions that reflect current work.	11/6/2014	SPP Staff	10/1/2015	Consider recommendation other than a Task Force. 1/22/15: Agenda Item for 1/29 Meeting; 1/29: Approval for extension has been obtained. Review at a later meeting.	On Hold	
98	Develop process with BAOC to track GECTF requested updates to the EOP to completion / Complete requested 2014 changes to the EOP.	1/29/2015 meeting	SPP Staff (Kim/Kathy)	5/12/2015	2/27: Kathy and Kim to track progress based on Action Items and the RMS process. Next step is item 101. 4/23: Review of requested items and redline items was performed with additional updates made to the EOP. More discussion is needed on this topic.	In Progress	
101	Determine if Revision Request type process can/should be implemented for the EOP or other similar documents.	2/27/2015 meeting	SPP Staff (Kathy)	3/27/2015	4/23: Discussions with Carl Stelly and the RR process owners indicated that the RR is only for the 3 main areas implemented. Carl does not believe there will be many changes once these initial changes are implemented.	Complete	4/23/2015
102	Create list of changes based on Alstom's Impact Assessment to SPP. This is for members to determine downstream impacts. This should include API/UI information	2/27/2015 meeting	SPP Staff (Jodi)		For review on 11/25	Complete	4/23/2015
103	SPP Staff to develop a bullet list for a discussion related to fuel management information that can be shared. a) Executive level, b) operational level	2/27/2015 meeting	SPP Staff (Sam)	in time (3/15) for discussion in 3/27/2015 meeting	4/23: Revision Request process may be needed for this. Staff can assist in the development of the RR information, but a member should submit it. Jake to update GECTF at next meeting.	In Progress	
104	John Rhea to discuss code of conduct potential issues with RCWG and provide information to GECTF.	2/27/2015 meeting	John Rhea	3/27/2015	4/23: John Rhea met with the RCWG, they formed a task force and he is the chair. Jake to update GECTF at next meeting.	In Progress	
106	Include in April MOPC meeting a status of the FERC Order related to the gas day with the information available at the time. Separate GECTF call if the Order is received in time.	2/27/2015 meeting	SPP Staff (Kathy)	April MOPC	4/23: The Order was not complete in time. GECTF provided a written report to MOPC.	Complete	4/17/2015
107	Determine if the IRC will submit comments on the FERC Order 206 (Gas Day) as a group.	4/23/2015 Meeting	SPP Staff (Sam)	5/12/2015	Discuss in the May GECTF meeting.	In Progress	
108	Determine if there are changes to the timeline for DA Mkt actions and provide an update to the group for the Gas Day timeline discussion. (Include an SPP explanation of why the enhancements are needed for the timeline compression)	4/23/2015 Meeting	SPP Staff (Jodi)	5/12/2015	Discuss in the May GECTF meeting.	In Progress	

EOP Redline Version and Requested Changes Comparison

This document contains screenshots from the Redline 4.5 version of the EOP updates and in some cases the requested information from a prior GECTF meeting. The yellow highlights indicate where the requested updates were made. The Requested information is included in red blocks for areas that may not have been updated as intended.

Contents

3.1 Policy and Guideline Statements	2
4.8 Stakeholder Communication	2
5.1 Fuel Supply and Inventory	3
5.1.2 Forecasted Fuel Limitation.....	4
5.1.3 Real-Time Fuel Limitations.....	5
5.1.4.1 Combustion Turbines	6
5.1.4.5 Gas-Fired Steam Units	7
5.3 Environmental Constraints	7
5.5 Notifying Operating Entities.....	8
6.2.3 Maximum Emergency Generation Alert	8
9.3 Optimize Fuel Supply	8

3.1 Policy and Guideline Statements

3.1 Policy and Guideline Statements

It is the policy of Southwest Power Pool (SPP) to maintain, at all times, the continued integrity of the SPP Balancing Authority Area. This includes providing the maximum amount of reasonable assistance to neighboring entities when a disturbance occurs that is external to the SPP Balancing Authority (BA). SPP will maintain interchange and balance resources and load in accordance with all applicable NERC Reliability Standards. Any action taken by SPP will be in accordance with Good Utility Practice, unless such actions would violate safety, equipment, regulatory or statutory requirements.

This plan is aimed at maintaining reliable power system operation associated with the Bulk Electric System. The main focus is on preventing widespread or major power outages involving generating resources, transmission lines, and transmission substations that are critical to the supply of power and energy to major points of distribution. Although localized interruptions are considered beyond the scope of this document, it is important to recognize that parts of this plan will be of benefit in those situations.

This plan has included all components included in *Attachment 1-EOP-001, Elements for Consideration in Development of Emergency Plans*.

The Emergency Operation Plan is primarily directed toward providing the fundamental concepts that will be instrumental in mitigating emergencies as they arise. Although specific courses of action are prescribed for specific operating emergencies, the objective of this document is not to try and define every possible emergency situation. This keeps the plan dynamic and allows the Balancing Coordinator (BC) the ability to respond to any emergency situation that may arise.

Personnel utilizing this plan shall be familiar with its content. Furthermore, all personnel involved in these procedures shall have sufficient training to perform the intended tasks. It is intended that procedures set forth in this plan will be followed sequentially for defined conditions and for reasons listed. Due to the dynamic nature of power system operations, however, it may be necessary to deviate from this plan to meet system reliability.

Any information shared between SPP and Stakeholders from any source and in any form is strictly confidential. Additionally, SPP staff will carry out the duties wherein and perform them within the spirit and letter of the SPP Code of Conduct.

Should this be the FERC Code of Conduct? "Stakeholders" as a defined term? Not within the governing document. Does this mean SPP Members? "Members and relevant entities" instead or add a Stakeholder definition.

4.8 Stakeholder Communication

Redline

4.8 Stakeholder Communication Expected Methods

Stakeholders (GOP, TOP, LSE, MP) are required to communicate with SPP certain information, as detailed throughout this document, depending on the type of emergency situation. Stakeholders shall communicate the required information using the following modes, as applicable:

- Telephone call to the appropriate SPP operations desk
- Email to shiftsupervisor@spp.org
- CROW; updated with the outage and/or de-rates with the appropriate reason for status change
- ICCP
- Markets UI/API; updated to reflect any changes
- Monthly reliability call (restricted to TOPs only)

5.1 Fuel Supply and Inventory

Redline

5.1 Fuel Supply and Inventory

SPP requires adequate and reliable Resource fuel supply and inventory in order to reliably operate the SPP BA. SPP needs data related to limited fuel supplies, including those for switchable dual fuel generation resources. Changes in this information shall be communicated by GOPs or their designee appropriate entities to SPP by the 15th of the month for the subsequent month upon request by SPP and as soon as possible as-if conditions change subsequent to the initial request. When requested, the information should include, but not necessarily be limited to:

- Natural gas units will report any limitations to firm or spot fuel purchases or transportation for the next month.
- ~~Hydro~~ Hydro units will report limitations to hydro resources creating potential operational issues not already available to SPP, current and forecasted water volume or pool level that creates potential limitations.
- Wind units will report limitations to wind resources creating potential operational issues not already available to SPP.
- ~~Coal units:~~
- ~~should report changes in target or normal levels, in days at minimum output;~~
- ~~should will report when coal reserves drop below 230 days at maximum output, and~~
- ~~shall report when coal reserves drop below 20 days at minimum output~~
- Nuclear Units will report % percent of reactor core available
- Fuel oil for dual-fuel resources.

SPP requires that data regarding fuel supply impacted by seasonal changes be available submitted for all Resources in the Balancing Authority. On a forecasted and real-time basis, GOPs within the SPP BAA shall notify SPP via CROW and the Markets UI/API of any generation derates. These could result from Operational Flow Orders (OFOs) or Critical Notices or any other type of fuel delivery constraint. The parties submitting the information shall indicate when the derate is a result of an OFO, Critical Notices, or fuel delivery constraint and indicate which pipeline(s) or delivery constraints are impacting them. Entities can utilize more appropriate communication methods, as identified in Section 4.8, if needed.

Wind unit bullet, only when in some type of conservative operations? Amber Metzker. "during conservative operations" otherwise this is a big data requirement.

5.1.2 Forecasted Fuel Limitation

Redline

5.1.2 Forecasted Fuel Limitation

Reference the Operations of ~~Fuel-limited~~ ~~Strapped Resources~~ section [\(Section 5.1.4\) below](#) for additional information on notification requirements for entities that have, or expect to have, ~~Fuel-limit~~ ~~Strapped~~ resources. In the event that a Generation Operator or Market Participant is anticipating, is experiencing, or otherwise has concerns regarding a fuel limitation for some future point in time, ~~one or more of the~~ following actions will be taken:

~~SPP Stakeholder~~ [GOP \(or their designee\)](#) Actions:

- Contact SPP Balancing Coordinator desk with the status of units and fuel. This discussion includes the maximum generation levels and needs or requirements.
- ~~If applicable,~~ update CROW and Markets UI/API with outage and/or de-rates with the appropriate reason for status change.

Actions the SPP BA may take, but are not limited to:

-
- Make an assessment on the SPP BA capacity requirements in relation to EEA levels.
 - Balancing Coordinator shall monitor the generation-to-load conditions. If adjustments are needed, BC notifies the appropriate personnel with the new limitations.
 - If appropriate, requests the SPP RC issue an EEA notification.
 - Notify SPP member entities of any potential actions they may be required to take to resolve the situation.
 - EEA notification could include making public appeals for load conservation measure. Refer to section 6.3.2.4., Public Appeals (EEA 2) for more information.

5.1.3 Real-Time Fuel Limitations

Redline

5.1.3 Real-Time Fuel Limitations

In the event that a Stakeholder is anticipating, is experiencing, or otherwise has concerns regarding a fuel limitation with real-time impact, the following actions will be taken. Refer to the *Operation of Fuel Limited Resources* section ([Section 5.1.4](#)) below for additional information on notification requirements for entities that have, or expect to have, fuel limited resources.

SPP Stakeholder ~~GOP (or their designee)~~ Actions:

- Contacts SPP RUC desk to inform them a unit can no longer provide cleared energy or operating reserves, due to fuel limitations.
- If applicable, update CROW and Markets UI/API with outage and/or de-rates with the appropriate reason for status change.

Actions the SPP BA will take, but are not limited to:

- Disqualify unit for contingency reserves, as appropriate
- Gen Dispatch notifies RTBM and RUC operators of the new resource limitations.
- BC to request an EEA Alert Level be issued by the SPP RC, if appropriate.

5.1.4 Operations of Fuel-limited Resources

Resources offered into the SPP Integrated Marketplace that are experiencing a limited fuel situation are to adhere to the following guidelines if ~~requested by SPP BA as part of operating in~~ Conservative Operations. In the context of this document, the term "Fuel-limited Resources" should include those generating resources that have fuel limitations as defined and underlined in the sub-sections below. The appropriate actions, if applicable, include:

Remove second "is".

5.1.4.1 Combustion Turbines

Requested

5.1.4.1 Combustion Turbines

Place available Combustion Turbines in Reliability Status and update any applicable offer parameters in the Markets UI/API. Units in Reliability Status are reserved for emergency conditions when their medium term (48 hour) fuel supply is expected to last less than 16 hours at rated output.



Don Shipley

This may be too restrictive as related to the DA Mkt

Redline

5.1.4.1 Combustion Turbines

Place available Combustion Turbines in Reliability Status and update any applicable offer parameters in the Markets UI/API. Units in Reliability Status are reserved for

emergency conditions when their medium term (48 hour) fuel supply is expected to last less than 16 hours at rated output.

- The concept of 16 hours is predicated on the fuel being available during the two day period and operating the resource equal to four 4-hour peak load periods over a 2-day period. Depending on the situation, Resources may be forced out of service (full or partial) prior to these guidelines in order to protect plant equipment or for future system needs.



Carl Stelly

For example, over the next 48 hour nom cycle, supply is expected to last less than 16 hours.

Exclude DA Mkt from the Reliability Status requirement. (The GOPs know when this is applicable, which may be outside of this documented requirement.) You have to offer in to RUC and RTBM. It has meaning in the processes. SPP may have less generation available because they are in the Reliability Status; they could still be committed, this just moves them lower in the selection stack of units. (CJ can help with this wording).

Rated output = max output ?? Pipeline issues may limit to “ratable takes”; may be more applicable to CCs.

5.1.4.5 Gas-Fired Steam Units

Redline

5.1.4.5 Gas-Fired Steam Units

Place available Gas-fired Steam units, including combined cycle, in Reliability Status and update any applicable offer parameters in the Markets UI/API. Units in Reliability Status are reserved for emergency conditions when their fuel supply is expected to last less than 16 hours at rated output.

- The concept of 16 hours is predicated on the fuel being available during the two day period and operating the resource equal to four 4-hour peak load periods over a 2-day period. Depending on the situation, Resources may be forced out of service (full or partial) prior to these guidelines in order to protect plant equipment or for future system needs.

Same issue as with CTs above for most units with the 16 hour continuous run times. When does SPP need to know about it? Limitations based on pressure constraints could lower the output but not the number of hours. Available normal, available with limitation, or unavailable are the options.

SPP wants to know if there any availability for any length of time as it may be needed in an emergency. (CJ to help with wording and flexibility for these sections)

5.3 Environmental Constraints

Redline

5.3 Environmental Constraints

If generating units within the SPP BA are constrained due to environmental reasons during a Capacity and/or Energy Emergency, SPP will ask the appropriate entities (MP or GOP, for example) if a temporary waiver of these constraints is possible to enable SPP to respond to the emergency situation. Stakeholders shall update their resource offers in the Markets UI/API with the appropriate operational limits, if a waiver is obtained.

Types of Environmental Constraints include, but are not limited to:

- Hot water discharge temps above the limit
 - Opacity readings above the limit
 - Intake water levels below minimum requirements
-
- Annual limits on operating resource (maximum number of hours annually, for instance)

5.5 Notifying Operating Entities

Redline

5.5 **Notifying Operating Entities**

The SPP BC will communicate with its neighboring BAs, the SPP member entities (TOP, GOP, MP, LSE), and the SPP RC as EOP Sections are implemented, ~~as needed and/or the SPP BA operations returns to normal.~~

6.2.3 Maximum Emergency Generation Alert

Redline

6.2.3 **Maximum Emergency Generation Alert**

The purpose of the Maximum Emergency Generation Alert is to provide an early alert that the Day Ahead commitment study indicates a need for emergency capacity to ensure system reliability. It is implemented when Resources that are not intended for economic commitment (units in Reliability Status, for example) are needed, or may be needed, in the SPP BAA to ensure system reliability.

- The SPP BA issues a Maximum Emergency Generation Alert to ~~member entities~~ using the notifications, as defined in Section 4.7, including an estimated end time or duration.

9.3 Optimize Fuel Supply

Redline

9.3 **Optimize Fuel Supply**

In the event of a fuel shortage that could potentially impact the ability of the SPP BA to meet the forecasted demand, SPP will initiate a fuel optimization call to GOPs (or ~~their designated entities~~). SPP will communicate data needs from individual GOP and will coordinate to ensure the Market Participant will update resource offers in the Markets UI/API to reflect any directed conservation of fuel supply. Entities may utilize other communication methods identified in Section 4.8, if more appropriate.

Actions taken to optimize fuel supply will include, but are not limited to:

- Conserve fuel in short supply by de-committing resources and coordinating equipment outages
 - Update CROW schedules and commitment statuses in the Markets UI/API to reflect these changes, as needed.
-
- Appeals to Stakeholders to use alternative fuels
 - Optimize hydro operations for availability of generation
 - Optimize units that have limited operations hours (i.e. some combustion and peaking units)