

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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IN THE MATTER OF THE INVESTIGATION)
OF THE REPORT OF EVENTS THAT LED TO)
CONTROLLED OUTAGES FEBRUARY 18, 2006) Docket No. 06I-118EG
- PUBLIC SERVICE COMPANY OF COLORADO)

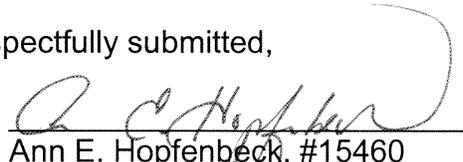
FURTHER RESPONSE OF PUBLIC SERVICE COMPANY OF
COLORADO TO STAFF'S INITIAL REPORT

Public Service Company of Colorado, through its undersigned counsel, hereby submits the attached responses to the recommendations made by the Staff in its Initial Report to the Colorado Public Utilities Commission regarding the controlled outages that occurred on February 18, 2006 as required by Decision No. C06-0821. This filing includes public responses to all ninety-five (95) of Staff's recommendations and three highly confidential attachments two of which have been submitted in response to Recommendation 16 and one in response to Recommendation 32.

Dated this 11th day of August, 2006.

Respectfully submitted,

By:



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ATTORNEYS FOR PUBLIC SERVICE
COMPANY OF COLORADO

CERTIFICATE OF SERVICE

I hereby certify that on this, the 11th day of August 2006, the original and seven (7) copies of the foregoing **FURTHER RESPONSE OF PUBLIC SERVICE COMPANY OF COLORADO TO STAFF'S INITIAL REPORT** were served via hand delivery on:

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PUC Report Recommendation Response:
Section 2; Page 23

Recommendation 1:

Provide for an additional staff resource to be activated during an emergency in Distribution Control who has the responsibility of ensuring accurate and timely information to the Customer Information Centers when a controlled outage (or any other type of emergency management activity) is required.

Response:

Provisions to provide additional staff during emergencies have been and continue to be in our procedures. Specifically, there is always a manager on call who will be called in to the Control Center during escalated operations. One of the responsibilities of this Duty Manager is to maintain accurate and timely communications between the Distribution Control Center (DCC) and the Customer Information Center during emergencies. The Duty Manager has the ability to over-ride the outage restoration information provided to the Customer Information Centers by the Outage Management System. This capability allows the DCC to provide more accurate and timely information to the Customer Information Centers.

On February 18, immediately following the initiation of the controlled outage event, the DCC was unable to make timely contact with personnel in the Customer Information Center. We have installed a dedicated line as recommended in Section 2, page 23 of the Staff report to address this issue.

The Company also has established procedures to ensure accurate and timely information is communicated to the Customer Information Centers. However, on February 18, 2006 errors were made by the on duty staff not adhering to established processes. For the future, a template, specifying the information that must be communicated orally and by means of the OCS, has been created to ensure accurate information is communicated to the call center. Refresher training for all affected DCC personnel has been completed.

The template below is a guide to what information is to be relayed to Customer Care Resource Management:

- Nature of the problem
- Time the event began or is anticipated to begin
- Time the event is anticipated to end, if known
- Time the event ended
- Approximate number of customers affected and anticipated duration of outages

- Frequency of anticipated outages, if known
- Cities affected by the event

Sponsored by: Tim Brossart

Date: July 27, 2006

PUC Report Recommendation Response:
Section 2; Page 23

Recommendation 2:

Implement the committed technology to address call overflow. Provide the PUC with a quarterly update on progress towards implementation, until such time as the base system is installed, tested, and fully functioning.

Response:

Senior management has approved the business case for and the Company is committed to implementing technology to address call overflow. A Project Team has been assembled and is conducting meetings with internal organizations (IT, Customer Care, Network Services) and vendors who will be involved in the project. The call handling objectives and requirements are currently being compiled and analyzed by the Company, so that the various technical options can be addressed and technical direction can be selected. Detailed discussions are being held with the selected vendor. The Company expects to have a full project schedule, including time lines for testing and installation, completed by September 31, 2006. The Company agrees to provide a quarterly progress update to the PUC until the system is installed tested and fully functioning.

Name: Lee Gabler

Date: August 11, 2006

PUC Report Recommendation Response:
Section 2; Page 23

Recommendation 3:

Implement the commitment to activate a dedicated, 2-way phone line (ring down line) and provide alternative contact mechanisms (mobile phones, pagers, dial-arounds) should a problem occur with dedicated access, to ensure smooth and accurate communication between Distribution Control and the Customer Information Centers at all times. Provide the PUC with a quarterly update on progress towards implementation, until such time as the line is installed, tested, and fully functioning.

Response:

A dedicated phone line between the Distribution Control Center and the Customer Information Centers was operational and in production on 7/24/06. The dedicated phone line has been tested on both ends when it was placed in service. The training has begun and will be completed 8/11/06.

Sponsored by: Tim Brossart

Date: July 27, 2006

PUC Report Recommendation Response:
Section 2; Page 23

Recommendation 4:

Establish a process for streamlining the Outage Management System (OMS) in a proactive controlled outage scenario that does not require manual entry of feeder breaker information, etc

Response:

Within the scope of the OMS Expansion Project, a one-way tie from the Supervisory Control and Data Acquisition (SCADA) system to the OMS will be established. We expect this tie to be completed in the first quarter of 2007. This will allow the operation of a feeder breaker (opening in SCADA) to automatically create an outage order in OMS, providing the potential to alleviate manual entry of feeder level outages in OMS.

Sponsored by: Tim Brossart

Date: July 27, 2006

PUC Report Recommendation Response:
Section 2; Page 23

Recommendation 5:

Provide training to staff on use of the emergency crisis communication's plan that has been documented and updated since the event. Provide the Commission with a quarterly update on progress until all impacted Xcel Energy and PSCo employees have been adequately trained.

Response:

The crisis communications plan that is being referred to in this recommendation is for the Corporate Communications department, however; the document will be incorporated with the overall Mission Mode training.

By: Tom Henley and Theresa Donnelly

Date: July 17, 2006

PUC Report Recommendation Response:
Section 2; Page 23

Recommendation 6:

Create and manage a policy that requires early notification to Customer Care management if there is the possibility of a service interruption, so they can begin preparing before an outage begins.

Response:

The Energy Alert Notification Guidelines document created by Corporate Communications outlines a fully integrated communications policy for all Xcel Energy personnel with operational, communications or customer responsibilities associated with an Energy Alert. This applies to Customer Care management.

By: Theresa Donnelly and Lee Gabler

Date: July 17, 2006

PUC Report Recommendation Response:
Section 2; Page 23

Recommendation 7:

Consider a reverse voice mail process for notifying customers of the possibility of controlled outages in their area. Even without details of exactly who will be impacted, a warning that a customer might be impacted allows the customer to plan ahead for unexpected complications.

Response:

The Company is investigating a solution as outlined in this recommendation. An outbound notification project is being conducted in parallel with the project for over flow call handling (as identified in Recommendation 2), utilizing the same vendor. The Company expects to make a final decision on this recommendation by October 31.

Name: Lee Gabler

Date: July 31, 2006

PUC Report Recommendation Response:
Section 2; Page 23

Recommendation 8:

Provide for a clear policy of who may craft and when a custom message should be placed on the Interactive Voice Response (IVR) system to address “non-traditional” customer situations and outages.

Response:

The Company has completed the technical design and testing of custom messaging, for “non-traditional” customer situations and outages, within the 800# carrier network. Custom messages will not be placed on the Interactive Voice Response (IVR); instead customers will hear the custom message before their call is routed to the IVR. Customer Care Resource Management has the authority to record and implement customer messages within the 800# carrier network. Policies and scripting templates for custom messages are currently in development with a targeted completion date of August 31, 2006. All Customer Care Resource Management employees will be trained on the applicable policies by September 30, 2006.

Name: Lee Gabler

Date: July 31, 2006

PUC Report Recommendation Response:
Section 2: Page 24

Recommendation 9:

Develop and implement a change management process that ensures that communication procedures are updated at least annually for all impacted departments and employees.

Response:

PSCo had determined that creating a position in the organization to track, monitor and effectuate change in the organization is necessary. This position as currently envisioned would be a direct report to the President and CEO of Public Service Company. One of the responsibilities of this position will be to ensure the change management necessary to maintain the improvements as result of this event occurs as outlined in these responses.

By: Mary Fisher

Date: August 7, 2006

PUC Report Recommendation Response:
Section 2; Page 27

Recommendation 10:

Revisiting the existing rating system to more heavily weight customer impacting events like controlled outages, to ensure adequate executive level and organizational attention before such outages are initiated.

Response:

An additional "trigger element" has been added to the rating system (Crisis Communications Plan, page 5), which serves as a guideline to deploy the Crisis Communications Plan. The trigger element weighs the potential or likelihood that an event could lead to significant customer impacts such as controlled outages. Energy Alerts and the potential for such events have also been added to the list of events that could trigger the CCP (pg. 2)

To better ensure adequate executive level and organizational attention to such events, the Director of Customer Care has been added as a named individual to the Crisis Communications Management Team (CCP, pg. 3) and the deployment of the Mission Mode is now indicated in several sections of the CCP as a tool to foster organizational attention to events.

By: Steve Roalstad

Date: August 4, 2006

PUC Report Recommendation Response:
Section 2; Page 27

Recommendation 11:

Updating the crisis communications process to include consideration for how to coordinate better with OMS and CRS tools where appropriate

Response:

The Crisis Communications Plan was revised in August 2006 to include individuals associated with the OMS and CRS systems within the Crisis Communications Management Team (Note: "Key on-scene managers" were listed in the original CCP and would normally include those associated with OMS). Because Corporate Communications does not manage the OMS and CRS systems, the CCP does not specifically name them, instead choosing to more generally mandate communications coordination between the business areas that manage them.

The Energy Alert Notification Guidelines set forth specific communications actions and responses during escalated operations and crisis events. The Guidelines have been updated as of Aug. 3, 2006 to reflect enhanced coordination with the Outage Management System and the Mission Mode tool by designating the Client Service Director or representative to provide on-site communications counsel at the LDC Distribution Control Center or control room during an Orange alert (Energy Alert Notification Guidelines 4.2.5). This response will ensure that communications messages relayed to stakeholders via both OMS and Mission Mode are consistent and timely. Call Center personnel use the CRS system as a means to enter customer-reported outages into the OMS system. Outage restoration information and updates are not relayed to the Call Center via CRS. The OMS tool is used for this purpose.

By: Theresa Donnelly, Steve Roalstad, Lee Gabler, Rodney Hunter

Date: August 4, 2006

PUC Report Recommendation Response:
Section 2; Page 27

Recommendation 12:

Updating crisis communications process so that it is initiated sooner than when the crisis becomes a reality to incorporate better preparation, more timely information flow, and a clearer communications across the organization of the impact of the problem, should it occur, rather than after it has occurred.

Response:

The Corporate Communications department has already integrated its crisis communications processes and procedures with the updated Energy Alert Notification Guidelines for the PSCo operating company. Corporate Communications has assigned specific roles and responsibilities for internal and external communications during a crisis. In addition, the Guidelines identify clear communications and responses across the organization so that other departments have a full understanding of how they will interact with each other during a crisis situation.

By: Tom Henley and Theresa Donnelly

Date: July 17, 2006

PUC Report Recommendation Response:
Section 2; Page 27

Recommendation 13:

Reviewing the crisis communications process (after updating) and perform training and practice walkthroughs to ensure full understanding of responsibilities and expectations during (and leading up to) a crisis.

Response:

The Corporate Communications department will complete training on the Energy Alert Notification Guidelines and its updated crisis communications process by Nov. 30, 2006.

By: Tom Henley and Theresa Donnelly

Date: August 4, 2006

PUC Report Recommendation Response:
Section 3; Page 30

Recommendation 14:

PSCo should commit to investigating the historical assumptions built into the load forecasting processes, and determine if there are more robust models that can be developed and applied, particularly to how the gas forecast is generated and maintained throughout the day.

Response:

The Company has previously reported that we are in discussions with NCAR to see if their high-resolution models can help us improve our ability to forecast temperature, wind speed and soil moisture. These discussions continue to be exploratory at this time. On March 23rd, a team of Xcel employees met with NCAR to discuss an expansion project with their data center. During this meeting there was a discussion of NCAR's modeling capabilities that led to a follow-up meeting on April 21 to further explore opportunities for Xcel and NCAR.

As the Commission is aware, the forecasting program the Company currently uses is called Pattern Recognition Technology ("PRT"). Prior to implementing PRT, the Company had used another weather forecasting software program that considered some of the additional weather variables such as humidity and cloud cover indicators that Staff has recommended should be taken into consideration as part of future forecasting. However, based on our experience with our former forecasting software, it is not clear that consideration of those inputs improved the accuracy of the forecast over what is produced by PRT.

The PRT is a well-recognized forecasting tool that is used by many other utilities around the country. The Company believes that the current PRT load forecasting software is performing up to industry standards.

However, as part of our normal course of business the Company continues to evaluate products and software packages that may enhance our ability to improve the accuracy of the electric load forecast in the future. Since we have not identified a product that would improve our ability to serve our customers the Company will continue to utilize the current PRT tools.

For natural gas forecasting the Company is currently investigating a software package called "Forecaster" from Advantica to do short term (hourly to seven day ahead) natural gas load forecasts.

By: John Welch/Ken Buys

Date: 7/19/2006

PUC Report Recommendation Response:
Section 3; Page 30

Recommendation 15:

Separate the forecast into geographic areas so that local usage patterns can be reflected more accurately in the demand forecasts.

Response:

At this point in time, the Company does not believe that separating the load into geographic regions would notably improve the accuracy of the electric load forecast. The overwhelming majority of the electric demand resides in the Denver metro area in a common geographic locality. The weather variations within sub regions of the Company's service territory outside of the Front Range do not impact the overall electric load forecasts significantly. Therefore, utilizing more granular load inputs is unlikely to generate discernable improvements to the overall electric load forecast models.

Utilizing more granular load inputs is also unlikely to generate significant improvements to the gas load forecast for the Front Range. However, the variation in weather and availability of supply in certain geographic areas of the Company has indicated that separate gas load forecasts for three areas west of the Continental Divide improve the accuracy of the overall gas load forecast for the State. PSCo Gas Control currently uses gas load forecasts for the Front Range, as well as three distinct areas in the western half of the state.

By: John Welch/Ken Buys

Date: 7/19/2006

PUC Report Recommendation Response:
Section 3; Page 30

Recommendation: 16

- Take a weighted average of heating degree values by hour rather than only using high and low temperatures in the weather forecast.

Response: Accept

PSCo's procedures for forecasting the LDC gas requirements have been revised to utilize the average of the hourly RealFeel forecast for each hour in the Gas Day as published by AccuWeather on its website. The LDC Gas Purchasing Procedures have been revised to reflect this change and a copy of the revised procedures have been included as Highly Confidential Attachments 16.A1 and 16.A2, and training for all affected personnel will be completed by October 15, 2006.

By: Tim Carter

Date: August 3, 2006

Attachment 16.A1

Highly Confidential

Attachment 16.A2

Highly Confidential

PUC Report Recommendation Response:
Section 3; Page 30

Recommendation: 17

- Incorporate additional weather variables like wind, sunlight and humidity into the forecast process. (The Company has indicated that they have plans to incorporate AccuWeather's RealFeel® into their forecasts.)

Response:

PSCo's procedures drafted and implemented in response to the February 18th event for forecasting the LDC gas requirements and procuring supply for both the LDC and electric generation incorporate the use of Accuweather's RealFeel temperature forecast. Training for all affected personnel will be completed by October 15, 2006.

By: Tim Carter

Date: August 3, 2006

PUC Report Recommendation Response:
Section 3; Page 30

Recommendation 18:

Monitor the deviations from the expected value in temperatures at several gas and electric facility locations on an hourly basis and update demand forecasts accordingly.

Response:

For natural gas demand, Gas Control does its own forecast for LDC load and gas transportation customers. Gas Control procedures submitted to the CPUC as part of Commitments 14, 15 and 16 address the monitoring of actual versus forecast temperature, and planned actions in the case of any deviation.

By: Ken Buys

Date: 7/14/06

PUC Report Recommendation Response:
Section 3: Page 30

Recommendation 19:

Collaborate with Staff to conduct this type of investigation and report on the results.

Response:

PSCo in the responses to the other recommendations in this section has made commitments in regards to the forecasting issues. We believe that the company had made and will continue to make effort to consider changes and variations in the forecasting to improve overall performance in this area. We don't believe that an "investigation" at this time is warranted. Time is required to assess the effects of the improvements and processes that have been made. Certainly a review of these improvements should be conducted. Therefore, the Company, with the leadership of the person who will fill the new position focused on change management, will conduct a review of the progress and effectiveness of these changes in 6 months and will provide the results of its review to Staff.

By: Mary Fisher

Date: August 7, 2006

PUC Report Recommendation Response:
Section 3; Page 30

Recommendation 20:

Implement a more robust approach to dynamically assessing both the weather and load forecast against actual conditions. From that, define and use a process for raising concerns across Gas Control, Gas Supply, and Marketing when deviations reach a certain threshold.

Response:

Real-time dispatch management is working closely with IT to establish and prioritize a list of development requests focused on recording the electric load forecast at specific time intervals and storing the information in a database. Isolating this data and preserving it in the form of a "point in time reference" would enable the Company to more efficiently analyze deviations between the actual and forecast electric load. Further, the Company is considering whether additional systems or tools could be put in place to alarm and notify the operations staff if the deviation exceeds a predetermined threshold. Combined, these envisioned tools would permit load deviations to be more dynamically assessed and provide means to automatically trigger alarms that may help head off and correct errors in electric load forecasts before they become an issue.

Gas Control has developed and implemented procedures to monitor natural gas load deviations. These procedures contain specific actions to take when load deviations reach pre-determined levels and contain a list of the personnel to be alerted when such deviations occur. The Company believes that these procedures address the issues raised in this recommendation. These procedures were submitted to the CPUC as part of Commitments 14, 15 and 16 in the June 15, 2006 report.

By: John Welch/Ken Buys

Date: 7/19/2006

PUC Report Recommendation Response:
Section 4; Page 36

Recommendation 21:

“The electric department must be treated as a gas customer. An operational flow order (OFO) needs to be called even if it appears that the electric generation is the one party that is experiencing overruns. Because Gas Control does not have the ability to see what the LDC is burning, its focus must be to protect the LDC system for all parties when unanticipated events occur. There needs to be an operating and balancing agreement between the gas department and the electric generation department and a greater understanding of gas availability by electric generation.”

Response:

The Electric Department is already “treated as a gas customer” in that the Electric Department is required to comply with the restrictions set forth in an OFO and to cure any and all imbalances created on the LDC system. Public Service will continue these current practices and procedures.

Public Service will change its procedures such that, when conditions on the LDC system exist that warrant the calling of an OFO, an OFO will be called regardless of whether it appears that the Electric Department is over burning. This change in existing procedure will be effective immediately.

PSCo also believes that there needs to be improved understanding as to the operating requirements between the gas department and electric generation department and availability of gas for electric generation on the LDC system by the Electric Department. Public Service has already commenced additional training and internal meetings to ensure that electric generation has a complete understanding of the circumstances under which Gas Control will make a Reliability Call. The policy on when a Reliability Call will be made was provided to the Commission in June 2006 in response to Commitment No. 14.

By: Ken Buys

Date: 8/7/06

PUC Report Recommendation Response:
Section 4; Page 36

Recommendation 22:

Gas Control should monitor as many real-time gas flow indications as possible to monitor any imbalances on the system, including transportation balances. If imbalances are occurring there needs to be standard operating protocols such that an OFO will be called early enough to give parties time to correct imbalances and to not place the LDC system at risk.

Response:

PSCo is already monitoring all the real time gas flow indications that exist on its system to determine imbalances. Based on the relatively few load points for which PSCo has the necessary facilities installed to monitor real time transportation loads and electric generation loads, and the fact that imbalances are incurred by comparing gas transportation loads and nominations aggregated on a contractual basis, there is no practical way to monitor transportation imbalances on a real-time basis without significant investment in additional facilities.

Standard operating protocols in Gas Control, which have been submitted to the CPUC as part of Commitments 14, 15 and 16, specify criteria used in Gas Control to monitor imbalances and respond to them earlier, including the use of such tools as calling an Operational Flow Order.

By: Ken Buys

Date: 7/31/06

PUC Report Recommendation Response:
Section 4: Page 36

Recommendation 23:

PSCo should fully investigate the outages that occurred in the Todd Creek and Eagle Shadow Subdivisions to determine the cause of the outage and pressure loss across the regulators. PSCo has begun investigation of these outages and should be required to file a report with the Commission on the findings of its investigation to report the specific cause of the outages and to explain the solution employed to remedy the problem.

Response:

PSCo's timeline to complete the initial investigation into the Todd Creek and Eagle Shadow outages is end of the third quarter. We will provide a report at that time, detailing the investigation procedures as well as the results and a repair timeline.

By: Cheryl Campbell

Date: July 29, 2006

PUC Report Recommendation Response:
Section 4; Page 36

Recommendation 24:

As reliance on natural gas fueled power plants has increased, PSCo should conduct an annual review of operating procedures to ensure that there are protocols in place that address adequate gas supply for both LDC sales and electric generation and to ensure there is timely delivery of the gas for LDC, electric generation and transport customers.

Response:

PSCo Gas Supply has developed Gas Purchasing Procedures for both the LDC and PSCo-supplied electric generation that ensure a minimum level of natural gas reserve margin at various temperature thresholds. The updated procedures as of August 3, 2006 are submitted with Response No. 16. The level of the reserve margin and the temperature thresholds will be reviewed and adjusted as necessary prior to November 1st each year.

By: Tim Carter

Date: 7/31/2006

PUC Report Recommendation Response:
Section 4; Page 36

Recommendation 25:

“PSCo should eliminate off-tariff tolerance of gas imbalance dead bands. This will make tariff penalties transparent and ensure that no “favoritism” is shown, or appears to be shown, towards electric generation.”

Response:

To the best of its knowledge, PSCo has no “off-tariff tolerance of gas imbalance dead bands.”

To the extent that Staff believes that changes to the balancing provisions contained within its current tariff should be considered, this would be a significant issue for all transportation customers and would, therefore, need to be presented and debated in a separate proceeding. PSCo is willing to meet with Staff to get a more thorough understanding of Staff's concerns.

By: Don Basler

Date: August 7, 2006

PUC Report Recommendation Response:
Section 4; Page 36

Recommendation 26:

PSCo should engage NERC and NAESB concerning necessary improvements to the gas trading cycle.

Response:

The Company will continue to participate in efforts to promote improvements to the national industry business standards, including gas trading cycle parameters, as these efforts develop.

Public Service notes that the NAESB has initiated at least two task forces that have explored gas trading cycle issues since December 2003. There have been no changes to the gas trading cycle as a result of either of these task forces and it appears that the issue is not being actively pursued at this time. PSCo believes that advocating such changes requires large scale support on an industry wide basis. Accordingly, the Company will monitor developments in this area, and will look for opportunities to support initiatives of national organizations such as the American Gas Association, National Association of Regulatory Utility Commissioners, and the Western Electricity Coordinating Council.

By: Tim Carter

Date: 7/31/2006

PUC Report Recommendation Response:
Section 4: Page 36

Recommendation 27:

PSCo should model the LDC system using dynamic/transient simulations. These will indicate how the gas system is likely to respond under different use configurations, including electric generation use of gas off the LDC and low-pressure situations.

Response:

PSCo utilizes a variety of steady state and transient models to ensure sufficient pipeline capacity under a variety of operating conditions. PSCo believes one of the underlying problems on February 17th and 18th was a lack of relatively simple tools that would have allowed the Gas Control Operators to predict forward. PSCo is not convinced that transient flow modeling of the system would have significantly improved the situation, particularly given the amount of information that is required to be maintained and changed on a transient model. PSCo is in the process of studying and developing a variety of tools and changes to operating guideline criteria that we believe will be more effective in the quick changing day-to-day environment of Gas Control. These detailed guidelines will assist Gas Control in evaluating when to call an OFO to protect system integrity. These guidelines will include: 1) Temperature vs. Gas Delivery chart/curves for the gas residue plants, 2) Hourly system load balancing showing gas deliveries and receipts for the overall PSCo bulk delivery system, and 3) additional operating guidelines to be developed to address system impacts from large transportation customers. PSCo will have the tools in place, operational and trained by the end of the 3rd quarter of 2007, as applicable. PSCo will provide quarterly updates on the progress of this commitment until the tools are in place, tested and fully functional. In addition, PSCo will re-institute the transient model based training for Gas Control Operators. This will allow a wider variety of training scenarios, including a wide variety of weather conditions, to be presented to Gas Control Operators.

By: Cheryl Campbell

Date: July 29, 2006

PUC Report Recommendation Response:

Section 4: Page 36

Recommendation: 28

PSCo should be required to develop a system that has a reserve of natural gas to provide a cushion for the LDC and electric generation when unforeseen incidents occur.

Response:

PSCo's Generation Gas Purchasing Procedures and LDC Gas Purchasing Procedures, developed and implemented in response to the February 18th event, include guidelines regarding the minimum reserve margins that must be maintained under various conditions to accommodate unforeseen incidents that affect gas consumption by both the LDC and PSCo-supplied electric generation. These procedures, updated as of August 3, 2006, are being submitted in response to Recommendation No. 16. These procedures will be reviewed annually prior to November 1st each year.

Prepared By: Tim Carter

Date: July 25, 2006

PUC Report Recommendation Response:
Section 4: Page 36

Recommendation: 29

Staff recommends that any charges for overruns, whether authorized or unauthorized, should be tracked and reported as a separate line item in the GCA. This will assist in investigating whether such costs are prudent and should be passed through to the firm sales ratepayers without express approval by the Commission. This will ensure that PSCo manages the gas supply in the best interest of the ratepayers and has sufficient storage set aside rather than relying on authorized or unauthorized overruns to manage its system.

Response:

The Company does not believe the monthly GCA application, which is filed on less than statutory notice, is the appropriate place for it to report historical costs related to authorized or unauthorized overrun charges or presents an opportunity for Staff or any other party to investigate whether such costs are prudent and should be recovered. Rather, PSCo commits to report any charges for authorized and unauthorized overruns as a separate schedule in the annual Gas Purchase Report beginning with the report for the Gas Purchase Year ended June 30, 2006.

By: Tim Carter

Date: July 31, 2006

PUC Report Recommendation Response:

Section 4: Page 36

Recommendation 30:

PSCo should investigate if the Brush IPPs are able to withdraw gas directly from Young Storage, and if not what modifications would be needed relating to a cost benefit analysis. If the Brush IPPs can currently pull gas directly from Young Storage, a protocol should be developed to address system operating procedures for efficient operations of both the Manchief and the Brush IPPs.

Response:

PSCo has already acquired a CIG pipeline facility, known as the "Pawnee Lateral," that will provide PSCo's system in the area of the Brush IPPs more direct access to Young Storage. Acquisition of the Pawnee Lateral from CIG will allow PSCo to nominate and receive storage gas from Young directly into PSCo's system in the immediate vicinity of the Manchief plant and the Brush IPPs, eliminating the need to ship gas over CIG's system. PSCo's acquisition of the Pawnee Lateral was accomplished on July 31, 2006.

By: Curt Dallinger

Date: August 4, 2006

PUC Report Recommendation Response:
Section 5; Page 58

Recommendation 31:

Clarify expectations regarding issuing Energy Emergency Alerts during a developing situation (This is partially addressed by Commitment Log Report Item 7), and practice through simulation training in coordination with the RDRC. This recommendation is only partially addressed by Commitment Log Report Item 34).

Response:

The Emergency Operations Manual and procedures have been modified to tie the Energy Emergency Alerts to the PSCo Standardized Alert Level designations (See Highly Confidential Standard Alert Level Definitions submitted to the Commission on June 15, 2006 as part of Commitment 36). Transmission Operations is expanding training formerly done in biannual emergency operations/ Black start training. Training is augmented, not replaced, as operators still participate in the RMPP training and existing operating season training. The RDRC participates in existing training and has agreed to participate in additional emergency training with Transmission Operations. The RDRC will facilitate one-day training each Wednesday in October and the first Wednesday in November on Black Start, Emergency Operations and the Load Spin Shed Drill. All operators will participate in at least one session. Transmission Operations continues work on the Operator Training Simulator module in new Siemens EMS system to ensure the final product supports emergency scenario training.

Aforementioned procedures and training will be in place by December 15, 2006.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 5; Page 58

Recommendation 32:

Clarify roles and responsibilities between Real-Time Dispatch and Transmission Operations. Define how and when roles and responsibilities change during emergency situations. This recommendation is only partially addressed by Commitment Log Report Item 7.

Response:

Real-time Dispatch and Transmission Operations management have collaborated to develop a "Responsibility Matrix" that will enhance awareness and reinforce the responsibilities and tasks that are to be undertaken by each department during Emergency conditions. This matrix, attached to this response as Highly Confidential Attachment 32.A1, is now a clarifying attachment to the Emergency Operation Procedures for Real-time Dispatch and Transmission Operations, making it easier and timely to respond to emergent situations or deteriorating system conditions.

By: John Welch

Date: 7/19/2006

Attachment 32.A1

Highly Confidential

PUC Report Recommendation Response:
Section 5; Page 58

Recommendation 33:

Establish a training program for the system operators so they know the critical transmission paths that pass power into PSCo's control area. Training should include practicing interactions under different schedule scenarios. This recommendation was not addressed by Commitment Log Report Item 34.

Response:

Transmission Operations already has such a training program in place. In addition to formal seasonal training on transmission paths, operators receive on-going training on critical transmission paths, especially as such paths experience limitations or re-ratings. Transmission Operations has requested from the RDRC a process where real-time ratings are shared with the operators during emergency conditions. Transmission Operations will complete this training by December 15, 2006.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 5; Page 59

Recommendation 34:

Activate the PI active view terminal or its equivalent to provide full information, within the regulatory requirements, to Transmission Operations staff, and train staff on its use. Training should help operators make informed decisions as to the status of the critical transmission paths and other transmission systems that can be used to import power into the PSCo control area.

Response:

Transmission Operations will provide more training on PI and increase operator utilization of PI. The operators have access to the RDRC PI data and can utilize that tool to identify constraints outside the PSCo transmission area. In addition, PSCo has data on all TOTs in EMS via the ICCP link on WECC net. Training on import paths and limitations is conducted bi-annually in the RMPP training. Training will also be added to the annual spring System Operator training that is conducted every March / April.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 5; Page 59

Recommendation 35:

Execute targeted training for the Transmission Operations staff on the AGC. Clarify and clearly define when it is appropriate for Transmission Operations to assume control of the AGC.

Response:

Transmission Operations is developing a plan for AGC targeted training. Actual AGC control will be transferred to Transmission Operations so that operators will get individual training and experience. This will be coordinated between Transmission Operations and Real-time Dispatch. The training will be in place by December 15, 2006.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 5; Page 59

Recommendation 36:

Synchronize the processes used by Transmission Operations and Real-Time Dispatch (and other departments within PSCo) for establishing emergency levels with those of NERC. This issue is only partially addressed in Commitment Log Report Item 7.

Response:

Transmission Operations has modified the emergency procedures (See Highly Confidential Standard Alert Level Definitions submitted to the Commission on June 15, 2006 as part of Commitment 36) to indicate mandatory color elevations when the EEA is initiated and elevated by the RDRC. The mandatory levels are the same for all departments across PSCo.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 5; Page 59

Recommendation 37:

Clearly define when the FERC Standard of Conduct rules may be suspended to allow for more open discussion between Real-Time Dispatch and Transmission Operations, and what steps are required to subsequently bring PSCo back in alignment with the regulations. This alignment is not addressed in Commitment Log Report Items 7, 34, or 36 and needs to be made clear, concise and identical in all three Commitment responses.

Response:

The Company has formed a team to identify when the FERC Standard of Conduct rules may be suspended and to provide training to the operators on this issue. The training associated with this issue will address the steps required to reinstate the rules. Transmission Operations is developing specific guidelines to implement this training. The training will be in place by November 15, 2006.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 5; Page 59

Recommendation 38:

Work with other utilities to evaluate winter ratings of WECC transmission paths, together with protocols and guidelines on how to create an emergency rating of a path taking into consideration the current ambient conditions.

Response:

Transmission Operations will address this issue at the Colorado Coordinated Planning Group meeting on August 17, 2006. The region's major path owners and operators are CCPG members. PSCo will request that the upcoming Winter TOT 2A, 3, and 5 studies use winter ratings. Transmission Operations will be requesting that the group factor in ambient conditions in the development of emergency ratings.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 5; Page 59

Recommendation 39:

Work with neighboring utilities and the other utilities in WECC to create an emergency protocols and plans of action to schedule power in non-standard methods to other utilities during times of emergencies. One such non-standard method is "displacement scheduling", as described below. This is not currently addressed in the Commitment Log Report.

Response:

NERC allows for emergency schedule implementation between balancing areas as long as the energy is scheduled within 60 minutes after the initiation of the schedule. PSCo will address the lack of emergency procedures for emergency scheduling with the appropriate WECC subcommittee.

PSCo will pursue allowing less restrictive scheduling rules during the period when a Balancing Authority is in an Emergency Alert status. The primary forum will be the upcoming Colorado Coordinated Planning Group meeting on August 17, 2006. There are a number of groups in WECC involved in emergency operations. PSCo will introduce the concept as they meet throughout the remainder of the year.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 6; Page 70

Recommendation 40:

PSCo needs to clearly identify the differences between the Real-Time Dispatcher and the transmission operator roles and responsibilities, particularly as situations develop and operational issues begin to surface. While responses to audit questions indicated good documentation of these roles, discussions with team members and the actions taken during this event highlighted a lack of clarity on the part of individuals.

Response:

See response to recommendation 32. The Responsibility Matrix will be updated as necessary to continue to help define roles and responsibilities for Real-time Dispatch and Transmission Operations staff.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 6; Page 71

Recommendation 41:

The Transmission Operations department, as the backup for ACE, needs training and accessibility to the AGC and other tools used to maintain system balance, and needs to stay current on how to execute these functions. The conditions under which this ownership transfers to another group or individual during difference scenarios should be clarified and supported by management of both organizations.

Response:

Transmission Operations will assume control of AGC from Real-time Dispatch for predetermined time periods on a mutually agreed upon schedule to provide the training and experience required to maintain expertise. AGC training for Transmission Operations is under development and will be completed by December 15, 2006.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 6; Page 71

Recommendation 42:

Real-Time Dispatchers need additional training and practice for responding to the loss of a major generation power plant under a variety of conditions. The load forecast, reserve margin, and available capacity need to be more dynamically applied to the real-time environment, and Real-Time Dispatchers need a better understanding of how to incorporate changes in these key areas into their decisions regarding purchases, plant utilization, and grid stability.

Response:

The Real-time Dispatchers are well trained and practiced in responding to the loss of major generation power plants under a variety of conditions. All of the Real-time Dispatchers are NERC certified. The Real-time Dispatchers have each completed annual NERC required Emergency Operations training. They routinely adjust for updated load forecasts, monitor reserve margins and available capacity while continually incorporating the changes in these key areas into their decisions regarding market purchases, plant utilization and reliable system operation. The Company is committed to continual learning and development practices. Learning from past experiences, the Company has taken specific actions to refine processes and procedures in response to February 18th, which will help to avert a similar situation in the future.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 6; Page 71

Recommendation 43:

The contractual obligations of the firm wholesale customers to curtail load during a reliability crisis need to be enforced consistently and appropriately. The Company should review the treatment of these customers to ensure there was not a violation of contracts and if there was preferential treatment of certain wholesale customers.

Response:

The firm wholesale contracts have been reviewed in response to the February 18th event. The Company is committed to enforcing the wholesale contracts on a consistent basis. The contract language pertaining to curtailment or interruption of the schedules during an emergency has been incorporated into the revised and updated Emergency Operation Procedure. These schedules as well as any other sales are now prioritized in a daily curtailment list established by the Day-ahead Trading group. Please see response to PUC recommendation 70 for additional detail on the curtailment priority list.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 6; Page 71

Recommendation 44:

The treatment of firm load and firm sales if controlled outages are necessary to maintain system reliability needs to be evaluated to determine if firm sales during an outage should have been allowed to take place, and if so, under what conditions.

Response:

PSCO has always had a policy that all firm sales both external and internal to the control area will be cut prior to any curtailment of firm load. The only firm sales that will continue will be sales which are part of a displacement transaction that, if cut, would actually be detrimental to the PSCO system.

By: Kyle Smith

Date: 7/31/2006

PUC Report Recommendation Response:
Section 6; Page 71

Recommendation 45:

As events unfolded on Friday night, very little additional assistance was available to the on-duty staff as the system became more difficult to manage. As a part of its new emergency escalation procedures, PSCo should evaluate the Real-Time Dispatch and Energy Trading functions relative to ensure resource allocation is appropriate in an emergency situation.

Response:

The revised and updated Emergency Operation Procedure already incorporates a provision to call in additional resources as soon as possible to help facilitate averting or mitigating the emergency condition. This includes notifying and/or calling in an additional Trading Analyst, Real-time Trading, Real-time Dispatch as well as management support staff.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 6; Page 71

Recommendation 46:

Communication between Gas Control and Real -Time Dispatch needs to be improved on both sides. Real-Time Dispatch needs a better understanding of the interdependencies of the departments, in order to more appropriately respond to signals from Gas Control.

Response:

Real-time Dispatch personnel have been trained on updated procedures and the associated actions to take in response to Gas Control OFO declarations. The Emergency Operation Procedure has been enhanced to incorporate a section detailing "Special Instructions For Tight Gas Days".

As discussed in the Company response to Commitment #16, "On May 23, 2006 John Welch, Jeff Pavlovic, Jeff Haskins and Joe Froehle visited Gas Control at the Lookout Center. System layout and issues with gas delivery at specific power plants were discussed. Procedure was discussed for Real-Time calls to Gas Control, and how important information is on how long the plant is expected to burn gas, and at what Dth per hour rate it is planned to burn at. This helps Gas Controller to set up the system to better deliver gas to the plant and decide if there is sufficient supply and/or pressure if elevated operating conditions exist." The two groups will continue to meet as needed to ensure that common understanding and appreciation of the interdependencies is fostered.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 7; Page 79

Recommendation: 47

Require that all PSCO units actively participate in the root cause, corrective action and action to prevent reoccurrence activities when issues are identified that could potentially affect other production units. The Company's Commitment Log Item 12 does address this issue in its commitment that "the root cause and event reports will be reviewed with all plant directors during the June 19, 2006 Unplanned Outage Rate conference call". While this action is appropriate, it is recommended that the root cause, corrective action and action to prevent reoccurrence procedure be modified to require positive affirmation that appropriate review and actions have been taken by all of the Company's potentially affected production units as well as its Independent Power Producers and Non-Regulated Generators.

Response:

Energy Supply - Production Resources currently has a process in place to review all root cause reports on a quarterly basis. Production Resources evaluates all root cause reports across all the operating companies for commonality and applicability. Production Resources will notify management at other owned facilities that similar issues may occur based on comparable equipment. It is plant management's responsibility to consider this information when planning for planned outage work. In addition, all major reliability events are reviewed in Colorado on a monthly basis with all plant management personnel during the Unplanned Outage Rate (UOR) conference call. Every load reduction or outage requires an Event form to be filled out. If the event is longer than 48 hours of total generation, a formal root cause is required.

PSCo's purchase power agreements require that IPPs shall operate their generation facilities in a manner that complies in all material respects with all applicable national and regional reliability standards. This includes compliance by IPPs with all current generating unit outage reporting requirements. Please see PSCo's Recommendation No. 56 (Section 7, Page 80) for a complete response with regard to PSCo's IPPs.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:
Section 7; Page 79

Recommendation: 48

A collaborative effort should be made to assure that Predictive or Preventative Maintenance (PM) procedures implemented at each individual production unit have been considered for the entire PSCo generating fleet. The Company's Commitment Log Items 10 and 11 address this issue in its issuance of "Cold Weather Policy" ESO-OP-CO-6.151, Revision 0, and approved May 25, 2006. The policy requires that each plant establish plant specific cold weather procedures, but a specific completion date is not specified. The Company should establish an issuance deadline for the plant specific cold weather procedures.

Response:

Predictive and Preventative Maintenance procedures are tailored to individual facilities. The varying in-service dates, differences in technology and the general equipment design differences are valid reasons not to implement standardize corrective actions across the PSCO generating fleet. The Energy Supply reliability team advises each facility of best practices among the units that have similarities and experience operating difficulties. This information identifies potential problems. Facilities review the information and determine if the issue and the solution are pertinent to their facility. If so, they will generate the process to implement the solution. If the information is not applicable, they are not required to take any action.

The "Cold Weather Policy" ESO-OP-CO-6.151, Revision 0 approved on May 25, 2006 did not include a specific completion date for each facility. All PSCO generating facilities will have a plant specific cold weather procedure in place by 9/1/2006.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:
Section 7; Page 79

Recommendation: 49

The PM procedures should require the periodic blow-down of all instrumentation lines where sediment or sludge build-up is a potential problem. The Company's Event Commitment No. 12 does confirm that this issue was addressed for the specific instrumentation lines at Valmont where the failure occurred, but there is no assurance that this issue has been assessed for similar lines at Valmont or at other potentially affected production units. See recommendation 2 above for the additional recommend action.

Response:

Instrumentation sensing lines are routinely cleaned during major overhauls or during scheduled critical instrument calibrations activities. The Valmont root cause identified an issue regarding the location of the drum level transmitters. The drum level transmitters will be relocated to the drum enclosure eliminating the long sensing lines and pipe chase freeze potential. The drum level transmitter relocation date is to be completed on 10/1/2006.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:
Section 7; Page 79

Recommendation: 50

Considering the problems encountered at Valmont and FSV, a review should be made of all water filled instrumentation lines routed through non-insulated unheated spaces that could potentially freeze. The Company should perform a similar assessment for all PSCo production units to determine whether the issue extends beyond Valmont and FSV. Again, the Company's Event Commitment No. 12 does confirm that this issue was addressed for the specific instrumentation lines at Valmont where the failure occurred, but there is no assurance that this issue has been assessed for similar lines at Valmont or at other potentially affected production units. See Recommendation 1 above for the additional recommended action.

Response:

Each PSCO facility has a Cold Weather Policy that has been developed from past experience, knowledge of critical instrumentation and many years of operating experience. Specific actions at each facility are based on plant layout, construction design, location of critical instrumentation equipment and ancillary measures such as heat tracing and insulation. Valmont will be relocating the drum level transmitters to eliminate any freeze potential through a pipe chase.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:
Section 7; Page 79

Recommendation: 51

Investigate whether solutions implemented at Valmont 5 and FSV provide the same level of protection from freezing.

Response:

The actions to correct the deficiencies at Valmont and FSV are adequate for each application. The design, equipment configuration and protective heating provisions are correct for the specific application. In Valmont's situation, existing equipment malfunction was based on a poor location of the drum level transmitters. The root cause actions include relocation of the transmitters. The FSV scenario resulted from an original design deficiency and has been resolved by adding additional heating equipment and improved insulation. Although the remedy for each is different, the potential of freezing has been eliminated.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:
Section 7; Page 79

Recommendation: 52

Implement use of the special ultrasonic sensor designed at the request of Valmont staff that allows for the Low Frequency Eddy Current assessment of tube wall conditions around corners at all plants where similar design and equipment merits similar examination.

Response:

PSCO already uses a variety of non-destructive testing methods to assess equipment condition. PSCO uses Production Resources to assist in evaluating equipment using either company owned equipment or direct contract personnel in these assessments. Inspections are completed during overhauls or major outage periods. The different construction and design characteristics of each facility define the type of technology application for predictive maintenance tasks.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:
Section 7; Page 79

Recommendation: 53

Design change should be considered for Cherokee Unit 4 to allow switching from UPS to line power regardless of the condition of the UPS. Perform assessment of all PSCo production units to determine whether this issue extends beyond Cherokee Unit 4. The Company's Commitment Log Item 12 does confirm that this issue was addressed for the specific UPS at Cherokee Unit 4 where the failure occurred, but there is no assurance that this issue has been assessed for UPS equipment at other production units. See Recommendation 1 above for the additional recommended action.

Response:

There have been virtually no failures of this type in any other PSCO generating facility in decades. The results of the root cause and actions taken to periodically test the system will eliminate this type of event from occurring on Cherokee Unit 4. This particular root cause report has been reviewed on the monthly maintenance initiative call (7/26/2006) with all Xcel Energy generating stations. Specific emphasis was placed on the development of PM's and the actual testing of the power supply switching mechanism. This information will also be used during any UPS replacement in the future as the UPS component is upgraded in conjunction with any controls retrofits or equipment obsolescence.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:
Section 7; Page 80

Recommendation: 54

Develop a system to notify all PSCo generation facilities as to the level of elevated operations (i.e., normal – excess generating capacity and reserves, elevated – limited excess generating capacity and reserves, high – only marginal excess capacity or reserves available). The Company's Commitment Log Items 8 and 9 address this issue in its issuance of its "Standardized Alert Level Definition" and its Energy Supply Operations – Procedure, "System Operating Code Response" ESO-OP-6.140, Revision 0, and approved June 6, 2006. These documents establish standard alert levels and applicable plant response. It is the assessment of investigative staff that the new procedures would have resulted in only a mandatory alert notification to the generating fleet of a "System Condition ORANGE – Danger" at 08:40 Saturday morning; no earlier notification would have been required since a "System Condition YELLOW – Warning" does not require notification to the generation plants. The investigative team requested[1] that the Company modify the procedures proposed in the Company's Commitment Log Report unless it can demonstrate that the investigative team's analysis is incorrect. At the time of this writing, PSCo had not responded to that request.

Response:

The "System Operating Code Response" ESO-OP-6.140, Revision 0, and approved June 6, 2006 has been modified and approved on 6/29/2006 and is included in this submittal. The procedure states in 5.2 System Condition Yellow Warning, section 5.2.1 RT Dispatch Response will "notify all plants of the forecast system condition." The RT Dispatch notifications include system status, constraints and the availability of PSCO generation.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:
Section 7; Page 80

Recommendation 55:

Considering that the existing gas supply system is not capable of delivering natural gas to the entire electric generation fleet during peak LDC conditions, PSCo should develop a simple dynamic model that forecasts a two-day-ahead fuel burn rate for its gas fired generation fleet. A model with this capability would allow Real-Time Dispatch to schedule units based on availability of natural gas and fuel oil instead of strictly on an economic basis.

Response:

A simple dynamic model would not provide additional meaningful information to Real Time Dispatch that it could use to schedule units based on availability of natural gas and fuel oil. In lieu of such a model, procedures have been adopted wherein Gas Supply will provide Real Time Dispatch with a list of plants that can be served with firm supply for use in its economic dispatch model and its daily capacity planning requirements on days when tight gas supplies are anticipated. Plants without firm supply will not be included in the planning process to meet the load requirements on such days. This process will meet the objective set forth in the recommendation without the need to develop an additional model.

By: Tim Carter

Date: 7/31/2006

PUC Report Recommendation Response:
Section 7; Page 80

Recommendation 56:

Require that all tolling units actively participate in the root cause, corrective action and action to prevent reoccurrence activities when issues are identified that could potentially affect other production units. The Company's Event Commitment No. 32 does confirm that this issue was addressed for the specific issues encountered the weekend of February 17 and 18, but there is no assurance that that the plant specific issues were assessed for other potentially affected production units. See Recommendation 1 above for the additional recommended action.

Response:

Generally, PSCo's purchase power agreements require that IPPs shall operate their generation facilities in a manner that complies in all material respects with all applicable national and regional reliability standards. This includes compliance by IPPs with all current generating unit outage reporting requirements.

Not later than October 31, 2006, PSCo will remind each current tolling IPP in writing that upon a forced outage or derate during elevated conditions, PSCo will expect each of them to conduct root cause analyses and to take such corrective actions to prevent reoccurrences. Further, the IPPs will be reminded to provide a copy of such analyses and corrective action to PSCo. PSCo will add similar language in future purchase power agreements or PPA Operating Procedures.

By: Jeffrey Klein

Date: July 28, 2006

PUC Report Recommendation Response:
Section 7; Page 80

Recommendation 57:

Although the Company concluded that its contracts with its IPPs were adequate in its Event Commitment Nos. 29 and 30, on the basis that "IPP's are required to promptly comply with Real-Time Dispatch and control area instructions at all times, including during Emergencies and elevated or unusual weather conditions," it would appear that there is still room for improvement. It is recommended that contractual changes be made to assure that "Cold Weather Policy" implemented for PSCo production units is similarly required for the entire tolling unit fleet. Going forward, the Company should include language in IPP contracts to establish a baseline expectation for response during an emergency situation.

Response:

In concert with PSCo's written communication to each tolling IPP referred to in PSCo's response to Recommendation No. 10 (Section 7, Page 80), PSCo shall by October 31, 2006 also request that each IPP develop and/or provide to PSCo a policy similar to PSCo's Cold Weather Policy.

PSCo's revised Emergency Operation Procedure establishes that Real-Time Dispatch will notify all IPPs of system conditions, including elevated conditions/operations, system status and constraints. In that regard, the IPPs are to promptly respond to and follow PSCo's instructions. Generally the PPAs and/or Interconnection Agreements state that PSCo has the right to determine the dispatch control of the facility, including start-ups, shutdowns and generation loading levels. Specific notice requirements of dispatch levels are subject to preemption by real-time operating conditions, including emergencies, reliability matters, stability and economic conditions.

By: Jeffrey Klein

Date: July 28, 2006

PUC Report Recommendation Response:
Section 7; Page 80

Recommendation 58:

Require the review of combined cycle tolling units to determine whether the issues of steam drum level instrumentation tubing freezing that occurred at FSV may potentially occur in IPP combined cycle units. See also recommendation 4 above.

Response:

Not later than October 31, 2006, PSCo will request each tolling combined-cycle IPP to review and respond as to whether steam drum level instrumentation tubing freezing may potentially occur at their facilities. If so, the IPPs will be asked to provide their corrective actions to remedy the matter.

By: Jeffrey Klein

Date: July 28, 2006

PUC Report Recommendation Response:
Section 7; Page 80

Recommendation 59:

Develop a system to notify all tolling units as to the level of elevated operations (i.e., normal – excess generating capacity and reserves, elevated – limited excess generating capacity and reserves, high – only marginal excess capacity or reserves available. The Company's Event Commitment Nos. 32 and 33 address this issue by adding the IPPs to the list of persons to be notified under tight conditions.

Response:

The updated and revised Emergency Operation Procedure establishes that RT Dispatch will notify all plants of system conditions. The IPP facilities are included in the notification process.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 7; Page 81

Recommendation 60:

Going forward, PSCo should exercise the contract clauses regarding performance of tests for reliability for both summer and winter conditions as well as for alternative fuel capabilities.

Response:

The Company does test and validate dual fuel capability. Currently, the Blue Spruce facility is the only IPP that has dual fuel capability. Blue Spruce has been tested twice since February 18th using fuel oil. Testing facilities on secondary fuel is not a new practice, however, as tests were conducted at Blue Spruce prior to February 18th as well.

The Company will continue to regularly test the Blue Spruce (and such other IPP facilities as applicable in the future) on secondary fuel to ensure the facility can timely respond on fuel oil so that it is able to meet PSCo's needs when required. The results of the tests are shared with the Purchase Power group.

In general, PSCo conducts capacity tests (summer and winter) every two years, and heat rate tests every year. Heat rate tests are conducted in the summer because the contract conditions are closest to summer conditions and the IPPs operate more in the summer.

By: John Welch and Jeff Klein

Date: 7/19/2006

PUC Report Recommendation Response:
Section 8; Page 92

Recommendation 61:

It is recommended that the Company further improve training for all impacted departments (transmission, gas control, account managers) regarding the details of the tariff. This may include additional information for account managers regarding the appropriateness of the tariff for various types of customers, to ensure that exceptions are not necessary going forward.

Response:

On July 27, 2006, the Rate Operations Portfolio Manager met with several Energy Market Real Time Trading Representatives and provided training on the ISOC Tariff, and also provided detailed training on the operation of the ISOC Cannon Interruption System and interruption process.

On July 28, 2006, the Rate Operations Portfolio Manager met with a Transmission System Operation Representative and provided training on the ISOC Tariff, and also provided detailed training on the operation of the ISOC Cannon Interruption System and interruption process.

The Managed Accounts Sales Manager has scheduled ISOC Tariff training with the Account Managers on a semi-annual basis. The training will be completed during the January and July staff meetings that are held on the second Wednesday of each month. The first training session is scheduled for January 10, 2007.

By: Joe Petraglia

Date: August 4, 2006

PUC Report Recommendation Response:
Section 8; Page 92

Recommendation 62:

As committed to in an e-mail from the manager of the Transmission Operations staff, and in response to the Commitment Log report, periodic updates and reviews of the tariff policies should be scheduled with the Transmission Operations Center to ensure continued understanding and compliance with the requirements of the tariff.

Response:

Transmission Operations has implemented a training program that provides for review and implementation of changes in the ISOC and other tariff changes that occur from time to time. All personnel are trained on the current requirements regarding ISOC customers. All personnel are aware that transition from MOSCAD to CANON is underway and will be given instruction on these new procedures by December 31, 2006.

By: Blane Taylor

Date: August 7, 2006

PUC Report Recommendation Response:
Section 8; Page 92

Recommendation 63:

Until such time as the Cannon system is fully deployed, tested and functional it is recommended that the Company provide Staff with quarterly updates regarding the Cannon System deployment, including on-site hardware implementations.

Response:

The Company will provide quarterly updates on the status of the implementation of the Cannon system until the system is fully installed, tested, and trained on internally. Quarterly updates will begin at the end of the third quarter.

By: Joe Petraglia

Date: August 4, 2006

PUC Report Recommendation Response:
Section 8; Page 92

Recommendation 64:

Until such time as the Cannon system is fully deployed, tested, and functional, it is recommended that the Company conduct quarterly tests of the Moscad system to ensure the hardware is functioning properly and can reliably execute an interruption as designed.

Response:

Some ISOC customers on the less than 10-minute notice option have experienced 7 economic interruptions since June 1, 2006, and have indicated that any additional testing of interruption equipment resulting in a loss of productivity is burdensome. One customer in particular, has indicated that a 30-minute interruption test will result in a 6 hour loss of productivity due to the nature of their operation.

While we agree that testing the Moscad System is a good idea, it is also burdensome to our customers. Assuming there is not a live capacity interruption before the summer season is over, we will commit to test the Moscad system by October 31, 2006, if it is not activated for an actual capacity interruption earlier. The Cannon System is scheduled for complete implementation by December 31, 2006. It will replace the Moscad system in its entirety.

By: Joe Petraglia

Date: August 4, 2006

PUC Report Recommendation Response:
Section 8; Page 92

Recommendation 65:

Within the Envoy system, it is recommended that internal Company managers be placed on a combined list with customers, so they receive identical notifications to what is received by the customer. This should help address the user error that resulted in Company management receiving notification when no official notification was delivered to customers. Additionally, procedures should be established to ensure that these lists are updated regularly.

Response:

The Xcel Company Manager list has been combined with the customer list. This list will be reviewed annually to ensure that the information remains correct.

Since this recommendation response was written, the Envoy System was eliminated from the ISOC interruption process. The Cannon System has replaced the Envoy System and a new process has been written, and distributed. Training has been given to all appropriate personnel on how to use the system. Under the new Cannon ISOC Interruption System, Company personnel receiving notification of interruptions is embedded in each interruption group, along with the appropriate interruption notice to each affected ISOC participant. In order to initiate an interruption, the operator must select a group or groups of ISOC customers to interrupt. Customer Groups are separated according to hours of notice and annual hours of interruption under contract. Company personnel receive notification for each interruption because they have been added to each customer interruption group.

By: Joe Petraglia

Date: August 4, 2006

PUC Report Recommendation Response:
Section 9; Page 97

Recommendation 66:

PSCo should create two distinct procedures (and supporting systems) for controlled interruptions: (1) a procedure for PSCo Balancing Authority load shedding that distributes controlled interruptions proportionately across the PSCo geographic regions and its four rural electric wholesale customers, and (2) another procedure for local load shedding in response to transmission or substation restrictions that targets specific geographic areas. These procedures should fully comply with all FERC, NERC, and WECC rules, standards, and procedures including NERC Capacity and Energy Emergencies Standard EOP-002-0.

Response: PSCo is in the process of implementing a new controlled load shed program that has two options:

- 1) The program will allow for load shed by area for problems that are associated with transmission transfer limits that would necessitate geographic load control
- 2) The program will also allow for controlled load that is geographically distributed for system problems that are not localized to a specific area.

Transmission Operations is developing procedures with its four rural electric wholesale customers. Discussions with Holy Cross and IREA are well underway to include their participation in the controlled load shedding program. Discussions with Grand Valley REA and Yampa Valley REA will be initiated so that a program and an agreement can be developed for their participation. The controlled load shed program is scheduled for completion by September 15, 2006. The wholesale customer communication and action items will be completed by December 15, 2006.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 9; Page 97

Recommendation 67:

The PSCo Balancing Authority should request that its NERC Reliability Center declare an Energy Emergency Alert as soon as the Balancing Authority identifies conditions meeting one of the three levels of alert criteria in NERC Capacity and Energy Emergencies Standard EOP-002-0. A Balancing Authority may choose to wait and see if conditions improve before requesting an Energy Emergency Alert, but valuable time to seek electric power support may be lost, as it was on February 18. An Energy Emergency Alert may be cancelled with little adverse effect when conditions improve.

Response:

Transmission Operations is implementing a plan calling for more frequent information exchanges with the RDRC as system conditions deteriorate but before the conditions meet one of the three levels of alert criteria in NERC Capacity and Energy Emergencies. All necessary Transmission Operations personnel will be trained on this procedure by December 15, 2006.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 9; Page 97

Recommendation 68:

PSCo Transmission Operations and Real-Time Dispatch should update their internal alert protocols to coordinate with the Energy Emergency Alert criteria of NERC Capacity and Energy Emergencies Standard EOP-002-0.

Response:

As indicated in Recommendation 36, PSCo has updated the emergency plan to include the mandatory declaration of the various emergency color alerts when EEA is elevated. All impacted departments at PSCo participated in the development and adoption of these procedures. Transmission has completed their training on these new protocols.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:
Section 9; Page 97

Recommendation 69:

PSCo should interrupt all Interruptible Service Option Credit (ISOC) electric service customers during Level 2 and Level 3 Energy Emergency Alerts for the PSCo Balancing Authority.

Response:

Transmission Operations has updated its processes to meet these requirements.

By: Blane Taylor

Date: August 4, 2006

PUC Report Recommendation Response:

Recommendation 70:

PSCo should curtail firm pre-scheduled wholesale electric energy sales at the earliest opportunity specified in each wholesale electric energy sales contract during Level 2 and Level 3 Energy Emergency Alerts for the PSCo Balancing Authority.

Response:

The Company initiated a new procedure that is geared to list and prioritize all applicable wholesale electric energy sales by order of curtailment, in addition to identifying the delivery point of the transaction and the OATI tag associated with the schedule. The new process includes a daily update of the schedules that would be interrupted in order of priority of curtailment established by the trading group. The scheduling group will identify and post the NERC tag information associated with each of the transactions prioritized by the trading group. The schedulers will take responsibility for delivering the curtailment priority list to the RT Dispatch group on a daily basis. The curtailment list is readily available to Real Time Dispatch and Trading today. The change will benefit this group in the future, by enabling a more efficient evaluation of schedule curtailment options.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 9: Page 98

Recommendation 71:

PSCo should adequately staff all 24-hour dispatch desks to provide sufficient time for operations training.

Response:

PSCo is adequately staffed at all 24-hour dispatch desks. Obviously, training in many areas is and will need to improve. The company will determine the best means to ensure staffing and training needs are met.

By: Mary Fisher

Date: August 7, 2006

PUC Report Recommendation Response:
Section 9: Page 98

Recommendation 72:

PSCo should conduct emergency simulation training exercises for operations personnel including Real-Time Dispatch, Energy Trading, Transmission Operations, Distribution Control Center, Media Relations, Customer Care, and its four rural electric association wholesale customers.

Response:

PSCo plans to conduct emergency training exercises on a bi-annual basis. These exercises will include Real Time, Trading, Transmission, Distribution, Media and Customer Care. PSCo intends to invite others to participate but can not guarantee participation on behalf of others.

By: Mary Fisher

Date: August 7, 2006

PUC Report Recommendation Response:

Section 9; Page 98

Recommendation 73:

PSCo should notify its four rural electric association wholesale customers of all future Energy Emergency Alerts for the PSCo Balancing Authority.

Response:

The Envoy notification system will be used as an Energy Emergency Alert process as well as direct communications from Lookout Center. The overall process will be fine tuned as needed.

By: John Svensk & Dave Krupnick

Date: August 4, 2006

PUC Report Recommendation Response:
Section 9; Page 98

Recommendation 74:

PSCo and its four rural electric association wholesale customers should negotiate responsibilities for future emergency load curtailments.

Response:

Negotiations are in process to identify wholesale customer loads that may be curtailed based on the type of system emergency and magnitude of curtailments proportional to customer load ratio share of system demand. We expect to have this completed by December 15, 2006.

By: John Svensk & Dave Krupnick

Date: August 4, 2006

PUC Report Recommendation Response:
Section 9; Page 98

Recommendation 75:

PSCo and its four rural electric association wholesale customers should reevaluate annually the suitability of each of their electric distribution feeder circuits for load curtailment.

Response:

We agree to meet with our four rural electric association wholesale customers annually to discuss the suitability of their electric distribution feeder circuits for load curtailment. The next session will be completed by June 1, 2007.

By: Kelly Bloch

Date: July 26, 2006

PUC Report Recommendation Response:
Section 9; Page 98

Recommendation 76:

PSCo should evaluate whether engineering specifications for substation switchgear are adequate for operation at site-specific historical low and high temperatures.

Response:

Substation switchgear specifications require the equipment to operate over a wide range of ambient temperatures ranging from a maximum of 140 degrees to a low of -50 degrees Fahrenheit. Historical high and low temperatures in Colorado fall within this range.

By: Dick Blatnik

Date: August 7, 2006

PUC Report Recommendation Response:
Section 9; Page 98

Recommendation 77:

PSCo should open and close any medium voltage circuit breaker or recloser in a substation that has not operated in the previous 30 months, operating conditions permitting.

Response:

PSCo already has an established procedure to manually operate breakers that have not operated either through normal switching, fault operations or maintenance based operational checks. This procedure requires that all breakers be opened and closed once over a 2 year period provided that system operating conditions will support this without the loss of customer load.

By: Dick Blatnik

Date: August 7, 2006

PUC Report Recommendation Response:
Section 9; Page 98

Recommendation 78:

PSCo should replace all substation medium voltage circuit breaker or recloser mechanisms that have failed to operate properly on two or more separate occasions in the previous ten years.

Response:

Major substation equipment, including breakers, is evaluated each time a failure occurs. Replacement decisions are based on the condition of the equipment established through investigation and equipment testing. Breakers are included in an electrical equipment condition assessment program that evaluates all breakers on a 5 year cycle. In other words, we perform condition based breaker testing on 20% of the in service breakers each year. If a breaker does not meet our operational specifications or cannot be economically repaired, it will be replaced.

Replacing breakers for failing to operate on two or more occasions is not cost effective because breakers do not fail to operate for only one reason. Evaluating the cause for the failure to operate and performing a breaker condition assessment helps to identify root cause problems and provides PSCo with objective criteria to help make repair or replacement decisions.

By: Dick Blatnik

Date: August 7, 2006

PUC Report Recommendation Response:
Section 9; Page 98

Recommendation 79:

PSCo should replace all substation medium voltage air magnetic circuit breaker mechanisms that are more than 25 years old.

Response:

Substation breakers are evaluated using an electrical equipment condition assessment program. Breaker repair or replacement decisions are based on the evaluation of the operating history of the breaker and the results from equipment testing. If a breaker does not meet our operational specifications or cannot be economically repaired, it will be replaced.

Replacing breakers because they are older than a set threshold is not cost effective. Breakers should be replaced if they are not performing and cannot be economically repaired. Evaluating the cause for the failure of a breaker to operate and performing a breaker condition assessment helps to identify root cause problems and provides PSCo with objective criteria to help make repair or replacement decisions. This process could result in a breaker that is less than 25 years old being replaced because of the failure to meet performance requirements. This has recently occurred at PSCo with the replacement of 17 breakers that were in service for less than 2 years.

By: Dick Blatnik

Date: August 7, 2006

PUC Report Recommendation Response:
Section 9; Page 98

Recommendation 80:

PSCo should place substation electricians on alert during Level 2 and Level 3 Energy Emergency Alerts for the PSCo Balancing Authority.

Response:

The Substation Duty Manager, upon the declaration of an Energy Emergency Alert, will utilize the off-duty call list (as specified in the union contract) as necessary to provide substation electricians for undefined emergencies.

By: Dick Blatnik

Date: August 7, 2006

PUC Report Recommendation Response:
Section 10: Page 112

Recommendation 81:

Create a role in the organization with a direct line report to the CEO who is accountable for operational consistency, oversight, and communication between both the gas and electric units.

Response:

As stated in response to Recommendation 9, the Company has determined to create a new position reporting directly to the President and CEO of Public Service whose responsibilities will include managing change within the organization as indicated there, but whose duties will also include ensuring operational consistency and adequate communication between the Company's gas and electric departments. This person will also be responsible to facilitate the completion of the action items committed to as a result of ours and the Commission's investigation of the events leading to the controlled outage. This position will also be accountable to develop and ensure that bi-annual emergency drills are conducted. It is through these drills that PSCo will assess the effectiveness of these solutions. These drills will include not only operations but departments such as Customer Care, Media and Corporate Communications. It is also our intention to request the participation of other industry participants.

By: Mary Fisher

Date: August 7, 2006

PUC Report Recommendation Response:
Section 10: Page 112

Recommendation 82:

The emergency notification system (MissionMode) apparently contains test/exercise capabilities. PSCo should create a schedule for running tests twice a year, and consider reviewing results with the PUC.

Response:

PSCo intends to conduct bi-annual exercises to test the capabilities of Mission Modes.

By: Mary Fisher

Date: August 7, 2006

PUC Report Recommendation Response:
Section 10; Page 112

Recommendation 83:

Create and maintain processes for corporate emergency identification and response – identify roles and responsibilities across the organization, what departments will lead the response, how it will be communicated to the organization and the public, and what general steps will be taken to engage and communicate with cross-functional groups.

Response:

The Energy Alert Notification Guidelines document referred to in recommendation 6 in section 2; page 23, presents a fully integrated communications process with roles and responsibilities identified for emergency identification and response in the PSCo service territory. While the Energy Alert Notification Guidelines document specifically addresses the communications process for energy alerts, it will be expanded to address a wide variety of emergency scenarios. This will occur after the Mission Mode notification system has become fully operational in the PSCo service territory, by Nov. 30, 2006.

By: Theresa Donnelly

Date: July 17, 2006

PUC Report Recommendation Response:
Section 10; Page 113

Recommendation 84:

Clearly establish senior management participation in Company-impacting events, and define their roles and accountability during such events.

Response:

The Energy Alert Notification Guidelines present a fully integrated communications process with roles and responsibilities for Xcel Energy personnel for emergency identification and response in the PSCo service territory. Senior management of the operating company participates in such events from early alert levels through the duration of escalated operations. The Mission Mode notification software tool facilitates senior management decision-making on an operating company level. Mission Mode further provides a forum for corporate officers to participate as warranted.

By: Theresa Donnelly

Date: July 17, 2006

PUC Report Recommendation Response:
Section 10; Page 113

Recommendation 85:

Work with the industry to better define and clarify the role of the RDRC in executing emergency processes.

Response:

Transmission Operations will raise this action with WECC's Reliability Coordination Subcommittee, which meets August 14-16, 2006, and its Operating Committee, which meets October 25-27, 2006.

PSCo also intends to invite the RDRC to participate in our emergency drills to better establish our relationship and roles in an emergency. PSCO can not commit to their participation.

By: Blane Taylor

Date: August 7, 2006

PUC Report Recommendation Response:
Section 10; Page 113

Recommendation 86:

A retroactive communication to customers through a bill stuffer to identify the top issues that occurred, and the ways in which the Company is addressing them, per the Commitment Log Report, would be an opportunity to make amends for the problems customers experienced on February 18.

Response:

Bill inserts are created for proactive communications about general interest topics such as upcoming tariff changes and customer-oriented programs; for example, Average Monthly Payment, energy efficiency tips and low-income energy assistance programs. We do not believe it would be advisable to create a bill insert about an event that occurred nearly six months ago. While the outages of Feb. 18th were important to the 25 percent of our customers who were affected, a bill insert on this topic would be sent to all customers and the associated costs to produce such an insert would be borne by all.

By: Theresa Donnelly

Date: July 17, 2006

PUC Report Recommendation Response:
Section 10; Page 113

Recommendation 87:

Reinstitute the OFO dry run process for training and staff development.

Response:

Gas Control will reinstitute the OFO dry run process and continue it on an annual basis. The first OFO dry run will occur before October 15, 2006.

By: Ken Buys

Date: 7/14/06

PUC Report Recommendation Response:
Section 10: Page 113

Recommendation 88:

Reinstitute educational sessions for suppliers to inform them of emergency processes.

Response:

PSCo intends to conduct annual meetings with the major gas suppliers/marketers who transport gas on our distribution system to discuss issues such as winter peak expected loads and to update emergency contact information as necessary.

The Gas Supply department will maintain a list of after-hour contacts with its various suppliers to assist in procuring gas during non-business hours.

By: Don Basler/Tim Carter

Date: August 7, 2006

PUC Report Recommendation Response:
Section 10: Page 113

Recommendation 89:

Create, deploy, and maintain training that incorporates an approach to simulating emergencies that span departments and external industry groups. Ensure that all affected employees are provided with simulation training generally, and that specific simulations are created for roles like Real-Time Dispatch, Gas Supply and Gas Control to help them understand appropriate responses to various situations, including shortages.

Response:

The company has committed to conduct bi-annual emergency simulation drills that will include all of the departments as recommended above. We will invite the external industry groups to participate.

By: Mary Fisher

Date: August 7, 2006

PUC Report Recommendation Response:

Recommendation 90:

Revisit existing documentation of training and processes and ensure that the Company is executing on what it has committed to in documentation.

Response:

RT Dispatch will continue to review the Emergency Operation Procedure at least on an annual basis making revisions to the plan as necessary for changes to system operation changes, industry standards or other shifting requirements. The RT Dispatch group plans to continue to participate in annual NERC Emergency Training and other regional reliability training opportunities.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 10; Page 113

Recommendation: 91

Improve communication between plants and Real-Time Dispatch to ensure adequate visibility of overall system stability, and rapid communication of developing situations.

Response:

The communication from RT Dispatch and the plants has improved with the implementation of the "System Operating Code Response" ESO-OP-6.140" procedure. Updates are sent to the plants as system conditions change. The procedure is working extremely well and as expected.

By: Steve Mills

Date: August 4, 2006

PUC Report Recommendation Response:

Recommendation 92:

Improve communication between Real-Time Dispatch and Gas Control to rapidly identify when issues are developing on either the electric or gas side. Establish processes whereby the two departments can work collaboratively to address problems before they escalate to emergencies.

Response:

Gas Supply, Gas Control and RT Dispatch have cooperated to develop and review a series of new procedures that will help facilitate and improve gas related communications during escalating system conditions. Additionally, the three groups will convene to ensure that the procedures remain updated and understood by the three department's operational staff. See response to recommendation 24 for further details.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:

Recommendation 93:

Improve communication between Real-Time Dispatch and Transmission Operations to ensure a smooth and articulate transfer of control between the departments during an emergency situation. Alternatively, update processes and training to reflect that Real-Time Dispatch will maintain control during emergencies, and that Transmission Operations will support Real-Time Dispatch in this type of environment, and ensure that staff understand and execute to the new processes.

Response:

The "Generation and Control Area Operations Interface Agreement" satisfactorily addresses the transfer of AGC Control and dispatch authority between RT Dispatch and Transmission Operations. When it is deemed necessary in the sole discretion of the Transmission group to engage this transfer, they will inform Real-Time Dispatch that they are assuming control for reliability purposes. Real-Time Dispatch understands this established process and will relinquish control when so instructed by the Transmission group. Real-Time Dispatch may continue to maintain AGC control during a system emergency so long as in the sole discretion of Transmission Operations, they do not deem it necessary to assume control. If control is transferred to Transmission, Real-Time Dispatch will help facilitate system operations and AGC control as requested by Transmission Operations. No training is required for Real-Time Dispatch. Transmission has accepted the CPUC recommendation to increase training practices specific to AGC operation, and has developed Recommendation Response # 35, detailing their training plan and commitments.

By: John Welch

Date: 7/19/2006

PUC Report Recommendation Response:
Section 10, Internal Organizational Communication; Page 113

Recommendation 94:

Clarify the FERC Standards of Conduct and the stipulations under which it can be suspended, communicate this broadly to the organization. Communicate this with Gas Control, Energy Supply, and Transmission Operations, and perform scenarios to ensure understanding of both when it is appropriate to suspend the Standards of Conduct, and what follow-on activities are required post-fact to come back in compliance.

Response:

Xcel Energy has established operating procedures (known as a System Operating Code Response) pursuant to which Energy Marketing, Real-Time Dispatch or the Transmission Operations of the individual Xcel Energy operating companies, including PSCo, can share operating information necessary to maintain reliable system operations under different system condition levels, consistent with the FERC Standards of Conduct rules. These procedures include guidance as to what system conditions warrant suspension of the Standards of Conduct. They have been reviewed with all appropriate operating personnel and PSCo has been operating under these procedures since 6/29/2006.

A web-based employee-training module based on the Response procedures, with focus on appropriate treatment of the Standards of Conduct under various system conditions, will be developed by October 1, 2006. PSCo Operations personnel, including members of the Gas Control, Energy Supply, Real-Time Dispatch, and Transmission Operations functions will be required to complete the training module by November 15, 2006.

By: Nicolai Lewis

Date: July 31, 2006

PUC Report Recommendation Response:
Section 10: Page 113

Recommendation 95:

Ensure consistency across departments regarding activities during an escalating situation, and clarify cross-department intersections and dependencies for emergency responses. Practice these activities to ensure understanding and commitment across organizations.

Response:

As part of the commitment to perform bi-annual emergency exercises the company believes that all will better understand the interdependencies of each department. By conducting these exercises it is the expectation that during a real escalation of events departments will have a better understanding of the interdependencies and communicate more effectively across the organization.

By: Mary Fisher

Date: August 7, 2006