Joint Statement
of the
Federal Energy Regulatory Commission
And the
North American Electric Reliability Corporation
For the
Assembly Utilities and Commerce Committee and the Joint Legislative Committee
on Emergency Management
San Diego, California

October 26, 2011

Thank you for the opportunity for the Federal Energy Regulatory Commission and the North American Electric Reliability Corporation to submit this statement to the Joint Legislative Hearing on the Pacific Southwest Power Outage.

The electric power system outage that occurred in the Southwest on September 8, 2011, reportedly left over two million customers in Southern California, parts of Arizona, and Northern Baja California Mexico without electricity. The blackout resulted in the loss of approximately 7,800 MW of customer load and 5,000 MW of generation.

The Federal Energy Regulatory Commission (FERC) and North American Electric Reliability Corporation (NERC) announced on September 9 that they were conducting a joint inquiry into the causes of the outage.

The bulk power system in North America is one of the largest, most complex, and most robust systems ever created by man. It provides electricity to more than 334 million people, is capable of generating more than 830 gigawatts of power, moves that electricity across more than 211,000 miles of high voltage transmission lines and represents more than $1 trillion in assets.

The electricity being used in this room right now is being generated and transmitted in real time over a complex series of lines and stations from possibly as far away as Montana or British Columbia. The fact that disturbances on the grid can impact operations and customers thousands of miles away highlights the critical importance of coordinated planning, operations and protection of the bulk power system.

Under section 215 of the Federal Power Act, FERC has oversight authority over the reliability of the Bulk-Power System in the United States through mandatory and enforceable reliability standards developed by NERC as the Electric Reliability Organization (ERO). FERC also has responsibility for interstate wholesale electric markets and transmission, as well as interstate gas transmission. FERC does not have jurisdiction over electric distribution facilities (generally 100 kV or below) or retail electric markets.

NERC's mission is to ensure the reliability of the Bulk-Power System of North America and promote reliability excellence. NERC was founded in 1968 to prevent cascading outages like the one that occurred in November 1965 and overall to ensure reliability of the Bulk-Power System.

In 2006, NERC was designated the Electric Reliability Organization (ERO) by FERC in accordance with the Energy Policy Act of 2005. NERC's reliability standards were approved by FERC and became mandatory across the bulk power system in mid-2007. In carrying out its activities, NERC works with and through its regions and stakeholders, which include large and small customers and state regulators in addition to investor-owned utilities, municipal utilities, co-ops, independent generators, power marketers, ISOs and RTOs, and federal entities like TVA, Bonneville and the Western Area Power Administration. Equivalent entities from Canada and Northern Baja California Mexico are also NERC stakeholders.

The joint FERC/NERC inquiry has two objectives. First, it seeks to identify the causes of the outage. Second, it seeks to identify any appropriate actions for preventing a recurrence similar to this outage.

Both FERC and NERC want to reemphasize that we view the impacts of the September 8, 2011 event as extremely significant. The fact that we convened a joint inquiry the day after the event shows our recognition of its significance. We are acutely aware of the impact and frustration that occurs when the electric infrastructure does not provide reliable service to end-use customers.

The events of September 8, 2011 give us cause for significant concern. Bulk power systems are supposed to be planned and operated to withstand a number of severe contingencies without major loss of customer load or uncontrolled cascading. Obviously, that was not the case in this event and FERC and NERC intend to determine what happened, why it happened, and what needs to be done to prevent it from happening again, in this area or in any other part of the North American bulk power system.

Immediately following the events of September 8, FERC and NERC formed teams of technical staff to gather and catalog detailed technical data and information, develop a detailed sequence of events, establish and validate system models to simulate each step of the event, review performance of system equipment, including protection and control systems, evaluate system operator visibility before and during the event, conduct detailed root cause analysis, evaluate the restoration process, and finally to develop lessons learned and other recommendations to prevent a recurrence. Three industry representatives with highly-specialized expertise will serve as technical consultants to NERC and assist the joint inquiry teams. None are from companies that were affected by the outage.

The following are key ingredients for an effective event inquiry and analysis:

- Identify what happened – sequence of events;
- Understand the causes of events;
- Identify and ensure timely implementation of corrective actions;
- Develop and disseminate recommendations and valuable lessons learned to the industry to enhance operational performance and avoid repeat events.

FERC and NERC have been conducting interviews with entities and individuals involved in the events leading up to the outage, as well as gathering and analyzing relevant technical data from multiple sources. Those efforts are ongoing, to include a number of interviews taking place this week.

It will take time to gather and analyze the complicated technical data from multiple generators and transmission systems. Until the inquiry team is able to establish the sequence of events and determine the root causes of the events, any speculation about the causes of the outage or potential corrective actions is premature.

Thank you for the opportunity to submit these comments. With the understanding that we are not in a position to discuss specifics of the inquiry or speculate prematurely about causes and recommendations, we stand ready to address any questions you may have and keep you informed on the progress of the inquiry.