I. Introduction

Under Order No. 890, a network customer must undesignate a network resource before the customer can make a firm sale to a third party using the resource. The order provided that network resources must be undesignated “before the firm scheduling deadline (10 a.m. the day before service commences).” (Order No. 890 at P 1557.) Thus, the initial question raised was whether the parenthetical was intended to be a statement of the requirement, or simply an example using the standard deadline in the pro forma OATT. The Commission clarified this issue in its June 26, 2007 order, stating that Order No. 890 intended the latter.

While this clarification helped address the ambiguity around the parenthetical “10 a.m.” language, a minimum lead time for undesignation still poses significant reliability and operational concerns that the Commission should proactively address. Increased flexibility for undesignation in real time is necessary so resources can be available to respond to system emergencies or to prevent system emergencies from occurring. We believe that it clearly would be an unintended and undesired consequence if load were curtailed because neighboring utilities that could have provided assistance were not able to timely undesignate a resource that could have resolved or avoided the system emergency.
Also, liquid hourly markets in both the East and the West are valuable and critically important to balance systems and manage significant hour-to-hour variability in loads and resources. In the Desert Southwest, for example, this variability stems from weather impacts to load. If the undesignation process is too rigid, both the liquidity and value of these real time markets could be reduced unnecessarily, which would both increase costs and reduce the efficient operation of the system.

This introduction represents not only the view of APS, but also of the Edison Electric Institute and its member companies.

II. Real-Time Markets and Balancing

APS offers an hourly firm transmission service. Thus, as clarified by the Commission in its June 26, 2007 Order, APS can implement an hourly deadline, rather than a day-ahead deadline, for undesignation. APS has proposed in its Order No. 890 compliance filings that the undesignation of resources for a day or longer would be done the day before the undesignation, while undesignation for less than a day would occur no later than 25 minutes before the hour the undesignation would take effect.

However, because many transmission providers in the West do not offer hourly firm service, a broader approach to real time undesignation is necessary to avoid adverse impacts to hourly markets. In other words, the clarification provided may help APS undesignate resources on an hourly basis, but if other sellers are restricted in their ability to transact in hourly markets, APS and the real time markets will still be adversely impacted.

APS relies on hourly markets to balance our system—buying power when load is higher than expected or selling power when load drops off. On APS’s system, weather
can cause major swings in our load in very short periods of time. In July and August, during our monsoon season in Arizona, a storm cloud moving over the Phoenix area can cause a 700 MW drop in our 7500 MW load in an hour. When this happens, real time personnel turn generation off, ramp units down, and liquidate purchased resources to keep the loads and resources balanced. As load subsequently increases, generation may be unavailable due to minimum stop requirements and firm purchases from the hourly markets are needed. For APS, this variability of load moving up and down rapidly cannot always be addressed simply by ramping units up or down—short term purchases are a critical component of balancing our system. Also, because non-firm purchases require the buyer to carry 100% reserves for the purchase, it is important that these short term purchases be firm so we can meet WECC reliability requirements.

Similarly, many real-time sales are driven simply by the need to keep a system in balance rather than out of an affirmative desire to market power to a third party. Limiting these types of balancing sales to only non-firm sales, or requiring hourly or real-time undesignation that may not be available to most network customers, will create significant inefficiencies when balancing systems and result in higher costs to native load customers. Additional flexibility for short-term undesignation for all affected utilities will help ensure continued liquidity and availability of resources in important hourly markets.

III. Emergency Supply of Power

One critical issue that is directly affected by a minimum lead time for undesignating resources is the supply of emergency power between systems. It is not uncommon for a major generator outage on one utility’s system to require that utility to immediately seek firm replacement power to restore normal system operations and meet
NERC reliability requirements. Often, the replacement power is needed intra-hour and there are procedures that allow for emergency NERC e-tags to be prepared in real-time after the firm scheduling deadline.

APS believes that it is critical that we be able to respond to a system emergency on another system by selling firm power that we can make available. Because emergency power is needed intra-hour or after the firm scheduling deadline for the next hour, even systems with an hourly firm product such as APS require some relief from a strict application of the undesignation process to supply firm power when there is a system emergency. It is equally important that others be permitted to sell to APS in the event of an emergency on APS’s system. Many of the companies from which APS would normally buy emergency power do not offer hourly firm service. If these companies are restricted from selling to APS in hourly markets due to a 10 a.m. day-before undesignation requirement, the reliability of our system could be unnecessarily compromised because we may not be able to find firm resources to purchase.

IV. Reserve Sharing Groups or Pools

A similar problem is created for reserve sharing groups or pools, such as the Southwest Reserve Sharing Group of which APS is a member. Reserve sharing is a valuable process where a number of utilities join together to meet their reserve obligations. By evaluating reserve requirements across multiple balancing authorities, the reserve requirement that must be carried by each individual participant is reduced. Thus, reserve sharing groups allow for more efficient use of the interconnected transmission system.
However, a reserve sharing obligation is called in real time and cannot, obviously, be scheduled in advance. It is generally called intra-hour or past the firm scheduling deadline for the next hour. The resources that are used to meet the reserve obligation are, in many cases, designated network resources. Thus, the problem created by a minimum lead time for undesignating network resources is how one can meet Order No. 890 requirements if a reserve sharing obligation is called on. If a network customer is required to carry separate, “undesignated” reserves to meet its reserve sharing obligations and “designated” reserves to meet its network load reserve obligations, it is doubtful that reserve sharing groups would continue. The Commission should permit reserve sharing without requiring the undesignation of the resources involved.

V. Implementation

Both NAESB and OASIS vendors, such as OATI, are or will be working on implementation of undesignation business processes and requirements. It is possible that some of the issues regarding the real-time market, emergency supply and reserve sharing will ultimately be addressed in that process. Also, parties may propose in Section 205 filings certain company-specific workarounds to some of these issues. However, because of the importance of real-time and hourly markets and potential reliability concerns, it is critical that the Commission provide flexibility for the hourly undesignation process generically. It is also important for the Commission to indicate that these issues should be considered in the NAESB process.