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**Testimony on “The Chu Memorandum: Directives Could Increase Electricity  
Costs for Over 40 Million Families and Small Businesses”**

**House Natural Resources Committee**

**September 11, 2012**

**New Demands on Old Infrastructure**

The Power Marketing Administrations (PMAs) operate a significant amount of transmission in the US and are an integral part of an increasingly interdependent grid. While the system has operated to meet the demands of the past, the existing electric grid is not designed to meet the demands of the 21<sup>st</sup> century economy. Increasing reliance on digital technology, integration of variable resources, threats from cyber attacks, development of smart grid technologies, and a host of other innovations are stressing an aging electric transmission infrastructure.

There is very strong agreement among those in the utility sector that the grid needs to be modernized to keep pace with these changes to continue to deliver reliable, cost-effective electricity to consumers. The measures outlined by Secretary Chu in his memorandum explore these options, and are in large part already being implemented or considered by grid operators throughout the country.

It is therefore imperative that the PMAs keep pace so they are not the “weak link” in the grid. Failure to keep pace with grid modernization efforts will result in increased costs to consumers, including preference customers, stemming from reduced reliability, increased security risks, and inefficient and more costly operation of the grid.

**Messages from the DOE/Western Workshops – There is Agreement on the  
Need for Grid Modernization and Enhanced Coordination and Planning**

Vote Solar participated in the Department of Energy (DOE) and Western Area Power Administration (Western) jointly hosted Workshop “Defining the Future” in Rancho Cordova, California<sup>1</sup>. There were a large number of Western’s preference customers in attendance, with a relatively small number of other stakeholders participating.

During the workshop, some objected that the process was not very open or transparent. There were also objections to the tone of the memo and what was

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<sup>1</sup> This workshop was one of a series of stakeholder workshops and listening sessions hosted by the DOE and Western.

perceived as top-down control by DOE. There were also objections that the DOE is misinformed about the condition of Western's grid.

However, we did not hear any major objections to the overall goals of the memo, nor did we hear disagreement over the value of the measures outlined by the Secretary. In fact, we heard that Western and its customers are already doing many of the things outlined in the Secretary's memo. From the descriptions of the upgrades and programs being undertaken by Western and the individual preference customers, it's evident that they share the same goals outlined by the Secretary.

### **PMA's Obligation Extends Beyond Preference Customers**

The PMAs have an obligation to continue marketing and delivering reliable, renewable, cost-based Federal hydropower to their customers – that message is clear and undisputed. But, as is the case with Western, they also have an obligation to the American citizens that funded the projects that provide their customers with low-cost hydropower. As part of an interconnected and highly interdependent grid, all of the PMAs have an obligation to all users of the electric grid, as does every transmission operator. Finally, as agencies of the Federal government, the PMAs have an obligation to support the efforts and programs established by the Administration, Congress, and other agencies of the Federal government that support national energy, economic and environmental goals.

Preference customers are obligated to serve the interests of their citizen-owners, and that is as it should be. But the PMAs play a larger role as major transmission service providers. While PMAs are involved in many transmission planning and coordination activities, they need to be looking at the broader regional and long-term implications.

### **Consequences of Business-As-Usual**

As the Secretary outlined in his memo, the nation faces significant new challenges that the existing electric grid was not designed to handle efficiently or effectively. The central question in this discussion is this: What are the consequences of not doing the things outlined by the Secretary in his memorandum?

While Western and the other PMAs have undertaken some of the modernization measures outlined in the memo, they may not take into account the broader regional implications, and they may not support the many efforts underway or being planned for the broader Western Interconnection.

For example, how do the modifications undertaken or underway by Western support the Department of Interior's (DOI) Solar Programmatic Environmental Impact Study (SPEIS)? Will they allow preference customers to fully benefit from a west-wide Energy Imbalance Market (EIM)? Do they support the more aggressive Renewable Portfolio Standard (RPS) Governor Brown has suggested for California,

or the expansion of renewable energy being studied by Western Electricity Coordinating Council for the 2013 Regional Transmission Expansion Planning process? How well do Western's planning efforts mesh with FERC Order 1000 regional and interregional planning requirements?

Finally, there is the issue of cost. What will be the impacts on rates if Western does not fully participate in initiatives like a west-wide EIM that will support more a efficient and less costly grid? If climate change continues unabated, how much low-cost hydropower will continue to be available to Western's customers and what will be the price? What's clear is that there will be more renewable energy in the generation mix throughout the West – without adequate preparation, will Western be able to cost-effectively integrate larger amounts of renewable energy and bring those benefits to its customers?

### **Supporting National and Regional Goals**

FERC has recently issued orders on integrating variable resources and developing regional and interregional plans, including consideration of public policy requirements for the first time. Federal efforts to slow climate change, promote the development of the country's vast homegrown, inexhaustible renewable resources, wean off of imported energy and enhance our energy security and other federal goals will benefit greatly from these proposed changes. Already the country is benefiting from the economic activity generated from these policies.

For example, the transition to a clean energy economy will continue to yield dividends to both rural and urban America. Despite the worst recession since the Great Depression, renewable energy has emerged as a strong economic force, growing and creating jobs for Americans. The solar energy industry alone is projected to support upwards of 100,000 jobs by 2016 in the 15 states Western serves. Already there are more than 2,500 solar companies in these states, with more being added each year. The approximately 1,800 MW of installed solar capacity in these states in 2010 is valued at over \$3 billion. There are an additional 26,800 MW of large-scale solar projects under construction or in development in these states, representing over \$10 billion in additional investment.

There are also over 30,000 MW of wind power in the states served by Western, representing approximately \$60 billion in capital investment and 65% of all the wind built to date in the U.S. The capital investment from wind projects has helped reinvigorate the manufacturing sector in the region with the creation of 128 manufacturing facilities in Western's service area. In 2011 alone, the wind industry was responsible for over 30,000 good paying manufacturing, construction and other jobs in these states. For rural economies in these Western service area states, the investments result in annual economic benefits including more than \$210 million in county property taxes and close to \$90 million in lease payments to land owners – an important factor for continuing the region's rich heritage in farming and ranching.

The PMAs can and should play a role in supporting these and other national and regional goals.

### **PMA Leadership is Needed**

We applaud DOE's leadership on this issue. We strongly believe the measures outlined in the Secretary's memo will greatly improve reliability, reduce costs and bring about significant economic benefits. We encourage DOE, the PMAs and their customers to work together to implement these measures.

We support the recommendations outlined by the Secretary to help guide PMA planning to meet their obligations to their customers. In particular, we encourage the PMAs to undertake the following measures:

- Maximize efficient operation of the PMAs' grids via consolidation of their Balancing Areas
- Eliminate rate pancaking across the PMAs' grids
- Implement conditional firm service rates to allow for fuller utilization of existing transmission resources
- Implement advanced technologies such as synchrophasors
- Improve coordination with neighboring Balancing Authorities (BA), as recommended in the FERC/NERC September 8, 2011 Blackout report
- Participate in the development and implementation of a west-wide Energy Imbalance Market (EIM) (Western and BPA)
- Participate more actively in the Regional Transmission Expansion Planning process and Scenario Planning Steering Group effort (Western and BPA)
- Continue to participate in the development of regional and interregional planning efforts in compliance with FERC Order 1000, identifying opportunities for PMAs to support regional and interregional goals
- Use Section 1222 funding, leveraging private sector financing to support regional and national goals, such as building transmission to Solar Energy Zones that have been identified by the Bureau of Land Management (BLM)
- Actively support efforts of other federal agencies, such as Department of Interior's Solar Programmatic Environmental Impact Studies (SPEIS) and Restoration Design Energy Project (RDEP), the Department of Energy's SunShot Vision Study, implementation of FERC's Variable Energy Resources Integration Order, and support for the Rapid Response Transmission Team efforts. For example, BLM lacks the transmission expertise to evaluate transmission capacity to serve the proposed SEZs. Western should lend its expertise to BLM in screening SEZs for access to existing or planned transmission capacity.

Nothing here takes away from the PMAs' primary obligations to deliver cost-based, economical hydropower from federal projects to their customers. To the contrary, we believe these changes are absolutely necessary to ensure their ability to continue

to meet their obligations into the future and do their part to ensure continued reliable and cost effective operation and enhancement of the entire grid.

Thank you for the opportunity to comment.