

# W O R C

*Western Organization of Resource Councils*

July 26, 2011

Ms. Julia L. Kyriss  
Colorado River Storage Project Manager  
CRSP Management Center  
150 East Social Hall Avenue, Suite 300  
Salt Lake City, UT 84111-1580

Re: Revision to the Final Principles of IRP for Use in New Resource Acquisition

Dear Ms. Kyriss,

Thank you for the opportunity to comment on the "Revision to the Final Principles of Integrated Resource Planning for Use in New Resource Acquisition and Transmission Planning (Final Principles)."

Western Organization of Resource Councils (WORC) is a regional network of seven grassroots community organizations with 10,000 members and 38 local chapters in seven states. Five of the WORC states are in the service area of the Western Area Power Administration (Western): the Northern Plains Resource Council (Montana), the Powder River Basin Resource Council (Wyoming), the Dakota Resource Council (North Dakota), Dakota Rural Action (South Dakota), and the Western Colorado Congress. Our member groups are concerned with a variety of issues including promoting family farm agriculture and renewable energy, protecting water quality, and reducing the impacts of coal and oil and gas production.

Our members have a strong interest in the impacts of energy resources that Western markets as supplementary power generation. Our region benefits from the clean and renewable hydropower that Western markets, and we would like to encourage Western to prioritize clean and renewable energy sources in its planning efforts.

WORC and its member groups would like to applaud Western for applying the principles of Integrated Resource Planning (IRP) and its strong commitment to providing an opportunity for public involvement. Given the present uncertainties and complexities surrounding energy resource acquisition, strong planning efforts are increasingly valuable in determining ways to reduce the costs and risks of electricity generation.

WORC is supportive of Western's entering long-term contracts for acquisition of new generation resources. We believe this could significantly reduce costs associated with purchasing short-term supplemental power as well as allow more control over exactly *which* generation resources supply the supplemental power to Western's load. Western's acquisition of new generation resources constitutes an opportunity to positively affect the energy mix in the West.

Our concern is that the evaluation criteria laid out in the Final Principles are subjective. To remove ambiguity from the document, the Final Principles should include an indication of priority or a weighting system of the evaluation criteria. Also, some of the evaluation criteria may not adequately reflect impending changes in energy markets. The Final Principles should include a clause stating that Western, when assessing whether or not to enter a long-term contract, will take into account near-future changes in a resource's cost, dependability, dispatchability, risk, and transmission availability.

We believe that renewable energy resources are more appropriate than fossil fuels such as coal for Western's resource acquisition due to their long-term advantages in terms of cost, dependability and dispatchability, risk, and transmission availability. In the near future, new technologies and new legislation—addressing the external ecological and economic costs of extraction and conversion—will make renewable resources competitive with fossil fuels. Additionally, many utility ratepayers across the West are willing to make the necessary upfront investment for the sake of a long-term, diverse, and sustainable electricity generation portfolio. The evaluation criteria for use in long-term resource acquisition should reflect the rapidly changing nature of the West's energy mix in the coming years and should explicitly designate *how* the criteria will be used to evaluate potential resources.

### **1. Cost**

Generally, electricity from *existing* coal-fired power plants is less expensive than electricity from new renewables. This is largely because coal already has an infrastructure in place and enjoys subsidies by state and federal government, especially tax policies. However, we are nearing the end of cheap coal. Coal plants across the country, including in the Western grid, are aging and are facing expensive retrofits, upgrades, and pollution controls to come into compliance with environmental laws and regulations as well as merely to keep running. The investments at some of these plants equal the cost of a new coal plant. Utility ratepayers across the West are seeing dramatic rate increases because of these coal plant investments, and it is very important for Western to properly account for these costs in its long-term planning. Additionally, running the plant is not the only cost risk related to coal. New coal capacity is becoming increasingly expensive to build and most utility projections show renewables, especially properly sited wind energy, as being cost competitive with new coal plants. On the mine side, remaining coal reserves are becoming more expensive to mine,<sup>1</sup> while renewable sources do not face any constraints on fuel sources.

### **2. Dependability and Dispatchability**

One of the primary criticisms of wind and photovoltaic (PV) energy is that they are not dependable. In the past, this has been a valid complaint. However, current research has shown that interconnecting multiple, spatially distant wind farms via transmission lines increases dependability to rival that of fossil fuels. Furthermore, backing up wind with hydro resources through dynamic transfer—as is being piloted currently by the

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<sup>1</sup> See Leslie Glustrom's report "Coal: Cheap and Abundant ... Or Is It?" for details on how few remaining coal reserves are economically accessible.

Bonneville Power Administration—allows hydropower to firm wind power and vice versa. Hydropower is the most quickly and easily dispatchable generation resource. Using wind/hydro dynamic transfer, dependable, easily dispatchable, firm, baseload electricity can be generated with no carbon emissions whatsoever. Also, rapidly improving battery storage technology allows excess wind power to be captured and stored for use in low-wind conditions. We would submit that these factors must be incorporated into analyses of dependability and dispatchability.

### **3. Risk**

The Final Principles state that, “a supplier shall be required to demonstrate adequate financial and physical resources to provide capacity and energy to meet Western’s requirements during the term of the contract.” For the same reasons that renewables are more reliable as a long-term resource in terms of cost, dependability, and dispatchability, renewables are also more reliable long-term resources in terms of risk. The impact of future carbon legislation added to existing environmental regulations and the growing cost of coal and other fossil fuels significantly increase the risk of a long-term contract with a coal plant. renewables are also less risky than coal plants in terms of water intensity. Wind and solar photovoltaic are the only generation resources that do not use water, and Concentrated Solar Power (CSP) uses a minimal amount. Both new and existing coal-fired power plants use tremendous amounts of water for cooling. As water becomes an increasingly scarce resource, this risk factor associated with coal carries more weight. Meanwhile, new wind interconnection technology and wind/hydro dynamic transfer make renewable resources far more reliable in the long run.

### **4. Transmission Availability**

Coal’s existing infrastructure in the West means that it has more available transmission than renewable resources. However, that does not mean that there aren’t any renewable resources on the grid. Also, Western and the Department of Energy play a decisive role in determining which new energy resource developments may access transmission lines. This gives Western the ability to encourage increased wind development. The existence of available transmission lines should not stop Western from supporting renewables. Utilities across the West are investing in new transmission, as well as upgrading existing lines, to support additional renewable energy capacity. Moreover, as aging coal plants retire, existing transmission will be freed up to bring renewables online in the Western grid.

### **5. Other Criteria**

With the exception of the transmission loss criterion, which can only be assessed on a case-by-case basis, the remaining evaluation criteria clearly favor renewable energy. Adding renewable resources to the West’s energy mix obviously fits the criteria for diversity, reducing environmental impacts, and promoting renewable energy resources. The Indian preference criterion supports acquisition of renewable energy sources, given existing proposals to develop wind energy projects on tribal land.

The renewable energy potential of the Western service area represents a great opportunity. Of the top ten states for potential wind energy generation, nine of them are

in Western's service area. Of the ten states with the highest solar index, eight of them are in Western's service area. Renewable resource developers in Western states are eager to get their energy onto the grid. As these technologies mature and scale up, their cost is on a downward trajectory, while the cost power generation from conventional fuels, such as coal, is trending steeply upward.

In considering acquisition of new generation resources, the Western Area Power Administration has a variety of options. One is to perpetuate dirty and increasingly expensive fossil fuels. Another is to advance secure and sustainable renewable energy supplies that will power our country for years to come.

The evaluation criteria in the Final Principles could enable Western to advance a more secure and sustainable energy future if they are revised to be less ambiguous. The Final Principles should include a weighting mechanism or indication of priority criteria, as well as account for fundamental changes occurring in the Western energy mix when evaluating new resources.

Sincerely,

A handwritten signature in cursive script that reads "Monica Wiitanen". The signature is written in black ink and is positioned below the word "Sincerely,".

Monica Wiitanen, Chair  
Western Organization of Resource Councils