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A Touchstone Energy® Cooperative 

January 22, 2013

Anita J. Decker, Acting Administrator  
Western Area Power Administration  
PO Box 281213  
Lakewood, CO 80228-8213

RE: Comments in Response to November 20, 2012, Federal Register Notice  
Emailed: [JOT@wapa.gov](mailto:JOT@wapa.gov)

Dear Administrator Decker:

Please accept this letter as the comments of East River Electric Power Cooperative, Inc., (East River), Madison, South Dakota, in response to the November 20, 2012, Federal Register Notice concerning the draft recommendations of the Western/DOE Joint Outreach Team (JOT).

East River is a preference customer as defined by federal law. East River is owned by and provides transmission service and delivers wholesale power supply to twenty-four retail rural electric cooperatives and one municipally-owned utility. East River is a rural electric cooperative operating in accordance with the laws of the State of South Dakota and holds bulk wholesale power supply and transmission access and interconnection contracts with the Western Area Power Administration (Western). The twenty-five retail cooperatives and municipal-owned system provide electric service to over 120,000 end consumers in the rural areas of eastern South Dakota and southwestern Minnesota. The total area served of about 40,000 square miles is larger than the equivalent size of the State of Indiana.

East River and its members have actively participated in the Defining the Future initiative which is based on the March 16, 2012, Memorandum to the Power Marketing Administrators from Department of Energy Secretary Steven Chu.

East River's long-standing operational and working relationship with Western has been foundational to our ability to provide affordable and reliable wholesale power supply during our sixty-three years of operation. East River's member distribution system owners provide retail electric service to end consumers in very rural areas. The underlying number of retail customers served per mile of line by East River member systems is about 2.1. Without access, at cost, to federal resources which is part of the Pick Sloan Missouri Basin Program, our ability to continue to provide reliable and affordable wholesale power supply will be compromised.

East River, along with many other preference customers in the Upper Great Plains, has worked with Western and its predecessor federal agencies for decades focused on

providing at-cost service to areas that would otherwise not be served. During that time, the preference customer interests led by the cooperatives came together in 1963 with the federal government to create a jointly owned transmission system. This transmission system has evolved over time and remains today as a highly reliable system partially owned by Western, cooperatives, and other preference customers. Since the initial formation of the Joint Transmission System, today known as the Integrated System, it has operated under open access principles to provide service throughout this region.

Access to this transmission network and the certainty of the availability of federal generating resources marketed to preference customers on cost-based principles has survived many political attacks which have sought to make fundamental changes to the use of these resources. These attacks have included proposals to sell these assets or to arbitrarily increase the cost basis of these assets to raise revenue for other purposes. In addition, many have offered proposals to redirect the underlying statutory purposes away from the current 'core mission' of providing at-cost service to non-profit utilities, to state and federal entities and Native Americans.

Federal power supply and transmission resources enable the ultimate provision of reliable and affordable retail service through non-profit utilities because of case-proven federal law, thoughtful policy decisions by regional PMA administrators, financial commitments from preference customers, and carefully crafted reasonable contract arrangements. Western has a long-standing proven record of collaboratively working with its customers and many others as a proven and capable bulk wholesale provider that has given first priority to meeting its 'core mission' prescribed by federal law, integrating new technology, continuing to develop and operate a jointly-owned transmission network that has demonstrated exceptional reliability and meets federal open-access requirements, and is adapting with its customers to conform with and meet or exceed NERC reliability standards.

We note with deep concern JOT recommendations to define the 'commercial value' of parts of the federal system. This strikes us as a first step toward pursuing the sale of federal assets which by law are to be available for preference customers. We will strongly resist such an effort and urge this course of action be removed from consideration.

At a minimum, the JOT recommendations must contribute to improving and building on the proven record of Western and other PMAs who primarily serve non-profit utilities based on long-standing federal law. The outcome of the JOT recommendations should not and must not compromise the reliability, increase the costs, or seek to redefine the legal standing of Western. Doing so will have a direct effect on the millions of consumers who are served by non-profit preference customers, including East River and its member owners.

With those observations, we offer the following comments:

1. *Work in Progress:* Many of the JOT recommendations are being or have been studied by Western. Accordingly, we believe each JOT recommendation should include a description of the on-going or previous work which has already been completed.
2. *Collaboration:* Beginning with the March 16, 2012, Memorandum from Secretary Chu, the Defining the Future process has been largely conducted as a top-down initiative with no initial and little subsequent collaboration with non-profit utilities. The public process conducted during the summer of 2012 was poorly organized and offered little meaningful opportunity for collaboration nor did it define DOE's

intentions. While the JOT recommendations offer some general views on several operational and policy issues, we once again urge that any further development of these recommendations be conducted through collaboration between Western and its customers.

3. *Budgetary Challenges:* Many of the JOT recommendations suggest costly additional studies and devoting substantial Western staff time to perform such work. We believe redirecting Western's resources will compromise its ability to meet core mission responsibilities. Before proceeding with JOT recommendations, we request cost and staffing estimates be prepared and a clear description of where the revenues to conduct this work will be secured.
4. *Legal Authority:* We believe some, if not many, of the JOT recommendations conflict with underlying federal law. We would point especially to suggestions of inter-regional transmission rate consolidation which appears is possible only by comingling separate project costs and revenues and, therefore, violating cost-based principles. Before moving forward with further studies, we request Western conduct a legal review of the authority to implement all of its recommendations and make public such legal analysis. Without such legal review, we believe substantial time, effort, and budget resources will be expended unnecessarily.
5. *Respecting Regional Differences:* While a guiding principle for JOT suggests sensitivity to regional differences among Western's projects, we note that many of the recommendations call for consolidation and standardization. Before such broad principles can be applied, Western must define how such consolidation and standardization theories conform to the statutory and practical regional differences which exist among Western's projects.
6. *Respect for Core Mission:* Generally, the JOT recommendations do not appear to be aligned with Western's core mission to market and deliver federal hydro-power to preference customers at the lowest possible rate consistent with sound business principles. We request the JOT recommendations be revised to describe the relationship that each of these recommendations has to Western's core mission.
7. *Energy Planning and Management (EPAMP):* East River and its members systems have actively participated in this Integrated Resource Planning (IRP) process. We are puzzled by the JOT recommendation which suggests this process is not meeting Western's requirements. To the extent that Western needs to revise or standardize the reporting requirements within the process, that can be done in consultation with customers without a major commitment of resources. The JOT recommendation which suggests the EPAMP process should encompass broader public policy questions, such as the definition of externalities or the rare, if not non-existent situation where energy efficiency programs would directly affect the partial requirements portion of the power supply represented by Western's allocations. We strongly believe these recommendations are beyond the scope of the EPAMP process. In consultation with its customers, Western has developed an EPAMP process that respects the ability for G&Ts, such as East River or Joint Action Agencies, to consolidate reporting requirements and avoid duplication with similar obligations to meet other state and federal integrated resource planning requirements. We note that most of Western's customers have and continue to demonstrate leadership in developing and integrating renewable resources, offering energy efficiency programs, and integrating new technologies such as 'smart grid', including the use of demand-side management. Beyond the articulated desire to

better standardize the reporting requirements, a clearer identification of any deficiencies in the EPAMP program should be developed. In no event should Western use the IRP process to reward or penalize its customers or initiate broad new IRP requirements.

8. *Opportunity Missed:* We express our disappointment that the JOT recommendations ignored the multiple pleas it received during the Defining the Future process to address an initiative from the Department of Energy related to the use of large volume electric water heaters which are a key element of demand-side management programs. Many of Western's preference customers, including East River and its members, have developed and effectively used demand side management to accomplish very significant benefits for energy efficiency and customer savings. East River and its members launched demand-side management in 1985. The JOT recommendations ignored the multiple suggestions to help secure the continued use of high efficiency, high volume electric water heaters as part of these demand-side management programs. We have enclosed with these comments the letter submitted by East River on July 10, 2012, to Ms. Brenda Edwards, U.S. Department of Energy Building Program, outlining the substantial value that the use of high efficiency, high volume water heaters have as part of our demand response programs. We request the July 10, 2012, letter also be included as part of our comments. We again offer the request raised during Defining the Future process and in our July 10, 2012, letter to DOE that part of the JOT recommendations pursue within DOE a change of course which would allow the continued use of this cost-effective proven tool as part of Western's customers demand response programs.

We also wish to submit as part of the record the comments by East River in the August 17, 2012, letter previously submitted to the JOT. We ask the August 17, 2012, letter also be considered a part of these comments.

In closing, we believe JOT should affirm in its final report to the Secretary that DOE should work to strengthen the regional administration and operation of the PMAs. Further, the JOT should confirm and find ways to broaden the successful collaboration the PMAs have had in working with preference customers to advance virtually all of the broad goals defined in the Secretary's March 16, 2012, Memorandum. Last, the JOT should recommend placing a higher priority on providing budgetary resources to sustain and improve the facilities managed by the PMA's which facilities are some of the finest renewable assets available.

Sincerely,



Jeffrey L. Nelson  
General Manager

JLN/sl

Enc.



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A Touchstone Energy® Cooperative 

July 10, 2012

Ms. Brenda Edwards  
U.S. Department of Energy  
Building Technologies Program  
Mailstop EE-21  
1000 Independence Avenue SW  
Washington, DC 20585-0121

RE: EERE-2012-BT-STD-0022  
RIN 1904-AC78

Dear Ms. Edwards:

East River Electric Power Cooperative is located in Madison, South Dakota, and provides wholesale power supply and transmission service to 25 electric distribution systems in eastern South Dakota and western Minnesota. These systems serve over 82,000 residential accounts representing almost 250,000 people. We would like to comment on RIN 1904-AC78, the Request for Information on the Energy Conservation Program for Consumer Products and Certain Commercial and Industrial Equipment: Energy Conservation Standards for Residential Water Heaters.

We appreciate DOE's re-evaluation of the recently passed water heater efficiency standard and its impact on consumers and utilities. That standard effectively mandates heat pumps for all large capacity electric water heaters (above 55 gallons). We agree that heat pump water heaters are efficient. However, they have several characteristics that make them less effective and less practical for use in demand response programs like the one that over 47,000 of our members/owners are part of.

For over 25 years, East River has offered a demand response program of water heater control to our members. Almost half of our end consumer-members take part in this program that allows us, as their utility, to shift electric consumption from 'on peak' times to 'off peak' times. Large capacity (85 – 105 gallon), super insulated electric storage water heaters are critical to this program. These water heaters are grid connected and when the weather is cold or hot and our electric system is operating in 'peak load' conditions, we can use the storage capacity and the quick response of these units to carry the member through the control periods. Thus, lowering peak demand and the need to build additional generating resources for the cooperative and saving money for the consumer. This system, utilizing large capacity electric resistance water heaters as its critical, grid connected, operational component, has saved our member/owners more than \$140 million. Savings from control of the large capacity water heaters totals 27.7 megawatts per month translating into over \$5.2 million a year.

Capacity and response time are both critical to the operation of our demand response program. Because of such overwhelming acceptance of our program, we have the ability to control up to 24% of our total system demand. This, however, creates potentially long control periods. Cycling water heaters for regeneration during a control period is one of the few mechanisms that we have to moderate these situations. This does not fit well with the operation of the Heat Pump Water Heater (HPWH) since they require longer time frames to regenerate. This cycling can happen for many hours a day and many days a year. During the five-year period, 2006-2010, water heaters were controlled an average of 117 days per year. Increasing the amount of time required for regeneration or reducing the capacity of the water heaters would lessen our control options and increase system demand. Presently, about 75% of our residential membership has electric water heaters and over 70% of them are at least 85 gallons in size.

In addition to the operational concerns, the initial cost of large capacity HPWH is higher than the cost of large capacity resistance units required for participation in demand response programs. This would be a deterrent to continued participation levels in our program and would translate into more demand on the system, more generating resources for the cooperative, and more costs for the member/owners.

The grid connected abilities of quick response, large capacity electric water heaters are just beginning to be realized in areas beyond peak shifting. We have long recognized the ability for East River to utilize these units to respond to electric system disturbances. As technology advances, we will be able to store energy generated by the wind and hydro resources that we have in our generation portfolio. These storage 'batteries' are located in the basements of over half of our members and are grid connected so we can remotely turn them on and off every few minutes, if necessary, storing energy as it is generated. Further capabilities of system stabilization through voltage regulation and distributed generation only enhance the argument for allowing large capacity resistance water heaters as part of utility energy management programs.

In summary, benefits of continued availability of large capacity electric resistance water heaters include:

For the Member/Owners:

- Participation in demand response programs which provide rate incentives to participants.
- Reduced installation costs through incentives from East River and the distribution cooperative for approved large capacity water heaters.
- Reduced rates for all cooperative members through reduced demand expenses at the distribution cooperative.

For the Retail Distribution Cooperative:

- The ability to shift energy use from peak demand times to off-peak times to lower supply cost.
- Enables more efficient use of electric distribution system through improved system load factors.
- Provide economical water heating options to its members.

For East River Electric Cooperative:

- Ability to avoid system demand by shifting water heaters to off-peak and being able to cycle them during control periods.
- Enables more efficient use of transmission and substation equipment by improving system load factors.

- Improve overall electric system efficiency.
- Reduced need to build generating resources to handle peak system loads.
- Potential storage of energy generated by renewable and hydro resources.

Again, East River appreciates DOE's re-evaluation of this regulation. We encourage DOE to allow the continued use of these cost effective, efficient water heaters that are such an integral part of our demand response program. This could be done either through a waiver system allowing manufactures to produce small quantities of large tank resistance models for use by utilities in programs such as this or through creation of a new product class for electric resistance 'grid interactive water heaters' that have the characteristics necessary to operate in the coming quick response 'smart grid' future.

The partnership that we have forged with our member distribution systems and their member consumers gives us an extraordinary ability to mold and shape the electric use on the system for efficiency and economy to everyone's benefit.

Sincerely,

A handwritten signature in black ink that reads "Jeffrey L. Nelson". The signature is written in a cursive, slightly slanted style.

Jeffrey L. Nelson  
General Manager

JLN/sl



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A Touchstone Energy® Cooperative 

August 17, 2012

TO: [JOT@wapa.gov](mailto:JOT@wapa.gov)

FROM: East River Electric Power Cooperative, Inc.

SUBJECT: Comments Related to March 16, 2012, Secretary Chu Memorandum

East River Electric Power Cooperative, Inc. (East River), is submitting this letter as its formal comments for the record as follow-up to the 'workshops' and 'listening' sessions related to the March 16, 2012, Memorandum (Memo) issued by Department of Energy (DOE) Secretary Steven Chu concerning the role of Power Marketing Administrations (PMAs).

East River is a preference customer as defined by federal law. East River is owned by and delivers wholesale power supply to twenty-four retail rural electric cooperatives and one municipally-owned utility. East River is a rural electric cooperative operating in accordance with the laws of the State of South Dakota and holds bulk power supply and transmission access and interconnection contracts with the Western Area Power Administration (Western). The twenty-five retail cooperatives and municipal-owned system provide electric service to over 120,000 end consumers in the rural areas of eastern South Dakota and southwestern Minnesota. The total area served of about 40,000 square miles is larger than the equivalent size of the State of Indiana.

The bulk power supply and transmission resources provided by Western to East River are critical and foundational resources for serving these end consumers.

Reliability and affordability are the top priorities of these consumers. Western's historic focus on its core missions has played a vital role in enabling utilities in the Upper Great Plains region to meet these goals.

Western's backbone system has also permitted the rural electric cooperatives to be leaders in deploying smart grid technologies, promoting energy efficiency, and integrating variable energy resources. Without Western's reliable and affordable platform, these achievements and future advancements will not be possible. The resounding chorus at the workshops of 'first do no harm' is not only the right policy in general but also the best way to permit Western and its preference customers to build upon this proven track record of success and continue to meet the goals outlined in the Memo.

Because DOE has identified Western for its initial workshops and listening sessions, these comments will be primarily focused on Western.

East River's participation in two of the DOE workshops revealed a stunning gap in DOE's understanding of the proven leadership of Western as a respected and capable bulk wholesale provider of essential power supply and transmission services throughout its large service area. We assert and are supported by the overwhelming body of conclusions offered during the workshops and listening sessions that:

- A. **Leadership:** Western is effectively collaborating and coordinating with all manner of other interests, including its customers and other utility and stakeholder groups, to provide leadership and appropriate regional planning to meet or exceed its statutory responsibility to serve preference customers and operate a reliable and resilient transmission system.
- B. **Transmission Service:** Western is making significant investments in its transmission system to (i) assure reliability; (ii) sustain and improve reliability and load serving capability; (iii) integrate new technology; and (iv) comply with open access requirements while also meeting its legal responsibilities to serve the broad range of diverse preference customers including cooperatives, municipalities, state and federal installations, Tribes, and other customers.
- C. **Variable Energy Resources (VER):** Western is demonstrating by its actions and is addressing through its strategic goals and objectives a clear commitment to integrate VER. We offer as an example the over 730 MW of rural electric cooperative (including East River) owned or purchased wind resources which have been developed and integrated into Western's transmission system in North and South Dakota. These wind generating assets represent about 15% of Western's transmission delivery capacity.
- D. **NERC Reliability Compliance:** Western is actively complying with NERC Reliability Standards including cyber-security assets. These efforts have been undertaken in full coordination with the region's other utilities including preference customers. We would urge DOE to review Western's successful work in the area of NERC Reliability compliance evidenced by the results of NERC's audit of Western's transmission operations.

Both the record of the workshops and East River's conclusion is the same; namely, Western's performance in managing and operating foundational power supply and transmission resources is solid in all respects. In other words, there are no material 'gaps' in Western's performance.

In summary, we support initiatives to improve Western's operations including appropriate use of new technology and integration of clean energy. We strongly believe these on-going initiatives can and should be accomplished based on the following:

1. DOE should reaffirm its commitment to the proven success of the PMAs by evaluating and supporting the regional management of each PMA.

2. DOE should support the PMAs in the responsible integration of VERs within the principle of the 'beneficiary/user pays' while insuring the legal rights to federal power is not shifted to others at the expense of preference customers. At the South Dakota workshops, stakeholders, including wind advocates, utilities, tribes, and consumer groups, uniformly endorsed this 'user pay's principle.
3. DOE should actively support federal appropriations to sustain and enhance the valuable and proven federal renewable hydroelectric resources which are marketed by the PMAs. As part of this nation's critical and essential infrastructure, federally-owned hydro generation and transmission assets must share the same priority for funding along with the nation's federal highway system. Before imposing any new directives upon the PMAs, DOE should first focus on securing the funding necessary to carry out the core missions of the PMAs and any new responsibilities imposed upon the PMAs must include additional funding to carry out those functions.
4. DOE should withdraw its centralized and 'global' approach as outlined by the Memo and in its place restart a truly collaborative effort within each of the PMAs focusing on the unique regional challenges and opportunities within the framework of the PMAs Congressionally authorized purposes. To be successful, a collaborative process must provide a direct and substantive role for the federally defined preference customers.

We ask these comments be included in the formal record of the DOE proceeding.

Sincerely,



Jeffrey L. Nelson  
General Manager

JLN/sl