Quadrennial Energy Review comments

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Thank you, Secretary Foxx and Secretary Moniz, for coming here to learn about what's happening in the region. We have a great story to tell, and I think seeing it firsthand will provide much benefit to you and the Administration when crafting energy policy. Also, thank you to Bismarck State College for hosting this event.

I'm pleased to represent Basin Electric today – and our 137 member cooperatives across nine states. We are a wholesale generation and transmission cooperative with a system that stretches from the Canadian border to the Mexican border. Our electricity serves 2.8 million member-consumers across that area.

As with most cooperatives, Basin Electric was created out of need, by people who needed electricity, in a time when nobody else would serve them.

Our mission is always to serve our members … Member cooperatives like Upper Missouri Power Cooperative. Upper Mo's general manager Claire Vigesaa who will be speaking here today as well.

Basin Electric and our members have an obligation to serve and we support those that come to our service area.

Lately, we have a lot of new neighbors. (1st slide)

The attached graph gives you an impression as to just how many new neighbors I'm talking about. This is a look at the kilowatt-hour sales at Mountrail-Williams Electric Cooperative in Williston. The graph starts in 1980, and I clipped it off at the year 2007.

That's the same year we started building a base-load power plant in Gillette, WY – the Dry Fork Station. We were also building additional peaking units in South Dakota and we were working on a peaking unit in Montana.

We were all anticipating more oil drilling in western North Dakota at that point. (click to show the rest of 1st slide)

Here is what happened in Mountrail-Williams Electric's area through 2013.

This load has grown dramatically and has been difficult to predict. It would be one thing if this load had grown in the form of new housing developments, for example, or in the form of one big refinery.

But this is a load that grows 50 megawatts here, 10 megawatts there. When you talk to the general managers of the cooperatives out here, they'll tell you there was a point it seemed like these pockets of load were popping up overnight.

This same growth can be seen in Basin Electric's load forecast as well. (2nd slide) The graph demonstrates the significant growth associated with the Bakken.

Basin Electric and its members have developed a multi-part plan to respond to this effort. We are developing generation, transmission and power purchases in conjunction to meet the need. However, the speed of this process inhibits our choices.

Out of necessity we began an aggressive plan to build peaking power plants near the load. While this load could easily justify a major baseload facility, we could not reasonably choose to build a large baseload power plant in the area for several reasons – partly because we couldn't be certain of the magnitude of this ever-growing load. We chose small, 45-megawatt natural gas units because we could site them quickly, get them permitted quickly, and we could build them quickly, often in a little over one year, compared to the 3-5 years just to permit a larger base-load facility.

In addition to the speed with which we need to build, we also face obstacles crossing public lands – such as U.S. Forest Service, National Grasslands, and Tribal lands – and the environmental processes associated with that effort. While it would likely be more economical to build one large baseload plant vs several peaking plants, the combination of timelines, permitting, and future uncertainty make that choice impossible.

We built Pioneer Generation Station near Williston, with the plans to continue building that plant in phases. We were building Pioneer at the same time ONEOK was building their natural gas refinery right next door. ONEOK is now one of our members. We needed to be able to deliver electricity by the time they were ready to operate. We built Lonesome Creek Station near Watford City, and that's another location that's being expanded. In July, our board approved adding generation at both those locations.

Just last week, ONEOK announced another new natural gas processing facility and said it plans to spend more than $3 billion in the Williston Basin through 2016. That's the kind of news our load forecasting folks are watching for every day. Historically, we have completed a load forecast every two years for our entire service area. But today, it's become a document they're continuously updating. Our board approves it, with the understanding that it will likely be out-of-date the very next week.

While we're working on building the generation to produce enough megawatts, we also need to build the infrastructure to move megawatts across western North Dakota. We are aggressively developing transmission for both oil and gas development and the associated residential and commercial growth. It should be noted that there is no way to serve only oil or only housing. When it comes to keeping the lights on, we are in this together.

In 2011, we started work on developing a new major transmission line – we call it the Antelope Valley Station to Neset Transmission Project. It is 200 miles of 345-kilovolt line. It will help move more of our baseload electricity to western North Dakota – and it will help keep the lights on.

We started planning for this in 2011 because it takes a long time to get something like this built. The line needs to be in service by October 2017. We needed to build relationships with every

landowner along that 200-mile stretch, because we needed to build on their land. Our right of way employees contacted more than 500 landowners. 320 of them signed easements, after we contacted them on average 19 times a piece.

These are not your typical landowners. Their homes have been forever changed by development, and they may not be reaping any of the rewards. They are weary of development, and of people coming to them asking for access to their land. But because we were able to tell the cooperative story, and we were able to draw upon our practice of being a good, careful, respectful, responsible neighbor, today we have 93 percent of the easements we need for construction.

This transmission line will serve like a fire hose to get electricity out to where it's needed quickly. There are other innovative things our transmission folks are doing to make sure the electric grid remains reliable. They're doing things like setting up mobile capacitor banks to help pump up the voltage and working together with several members and the Western Area Power Administration on substations that can temporarily work as a tap to get the electricity where it needs to go until new lines are built. (3rd slide – projects will pop up in succession) The graph above shows how the combined efforts of generation and transmission will stay ahead of this growth curve. As you can see, this effort depends on the timely completion of each and every element of the plan.

From a public policy standpoint, we have been supportive of efforts both at the federal and state levels to create a more practical corridor approach to siting transmission and other infrastructure necessary for energy development on this scale. However, these efforts have also been hampered by the speed of the development. While a collaborative, streamlined approach is ideal, when the lights are in danger of going out, we need to act. This does not mean that such planning is not necessary, though. It is. It must be done in light of addressing future needs with a long vision.

A similar long term vision should be applied to secondary oil recovery. Basin Electric and our subsidiary, Dakota Gasification Company, have a long history with enhanced oil recovery and view it as a bridge which can provide stability to both the oil and electrical industries. Our Great Plains Synfuels Plant produces natural gas and a host of other products using lignite coal. During the process, the plant captures 50 percent of the carbon dioxide produced, and sends it in a pipeline to Canada, where it's used in the oil fields, greatly enhancing the longevity and productivity of the field and permanently sequestering nearly 30 million tons of CO2 at this time.

When we built that pipeline to Canada in the year 2000, we included eight taps along the way in western North Dakota. We knew that one day, the carbon dioxide produced at the Great Plains Synfuels Plant could be used right here in the North Dakota oil fields.

This is not work we're doing to grow Basin Electric, or to reap the money and opportunity we see in the Bakken oil field. This is work we're doing because it is our mission to serve our membership – be it a small farmstead in a sleepy rural town or a large natural gas refinery or oil company. We need to serve them, and we need to serve them quickly. But we are also doing this work to serve our members who have lived and worked in western North Dakota for their entire lifetimes. If we cannot continue to build the generation capacity that's needed – if we cannot continue to build the transmission lines that are needed – the lights will go out. People will lose power. Oil pumpers will lose power. Hospitals will lose power. Daycares and schools will lose power. The reliability of the electric grid is the most important work we're doing right now. Thank you.