

## Corridor EIS Archives

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**From:** corridoreiswebmaster@anl.gov  
**Sent:** Monday, July 10, 2006 5:44 PM  
**To:** Corridor EIS Archives  
**Subject:** Preliminary Draft Corridor Map Comment M0117

**Attachments:** Comments\_from\_NAPG\_on\_Prelim\_Draft\_Map\_M0117.pdf



Comments\_from\_NA  
PG\_on\_Prelim\_D...

Thank you for your comment, Michael Ruffatto.

The comment tracking number that has been assigned to your comment is M0117. Once the comment response document has been published, please refer to the comment tracking number to locate the response.

Comment Date: July 10, 2006 05:44:25PM CDT

Preliminary Draft Corridor Map Comment: M0117

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Attachment: C:\Comments from NAPG on Prelim Draft Map.pdf

Questions about submitting comments over the Web? Contact us at:  
corridoreiswebmaster@anl.gov or call the Preliminary Draft Corridor Map Webmaster at  
(630)252-6182.



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*"Clean Energy at its Source"*

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July 10, 2006

Ms. Julia Souder  
Office of Electricity Delivery and Energy Reliability  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Room 8H-033  
Washington, D.C. 20585

Re: Comments of North American Power Group, Ltd.; Preliminary Draft Map of Potential Energy Corridors on Federal Lands

Dear Ms. Souder:

Thank you for the opportunity to provide comments on the "Preliminary Draft Map of Potential Energy Corridors in Federal Lands" ("Draft Map") jointly drafted by the Departments of Agriculture, Energy, Defense and Interior. We think the opportunity to provide interim comments on the Draft Map will improve the draft West-wide Programmatic Environmental Impact Statement ("PEIS") and its comment process. We also commend the agencies for working on this joint initiative in cooperation with Western states and building on the important transmission work of the Western Governors Association and other regional associations.

The issuance of the Draft Map is an important step in implementing Section 368 of the Energy Policy Act of 2005 ("EPACT"). Western public and private lands contain vast and diverse sources of energy from coal, oil and gas to wind, biomass, solar and geothermal. Efficient delivery of those energy resources to growing population and demand centers across the nation is a critical part of the solution to improving our country's energy security and the reliability of our energy infrastructure. North American Power Group intends to be part of that solution.

North American Power Group, Ltd. ("NAPG") is a privately-held company headquartered in Colorado that develops, owns and operates independent electric generation facilities in the United States and Canada. NAPG is a full member of the Western Electricity Coordinating Council ("WECC"). NAPG, through a Wyoming limited partnership, Two Elk Generation Partners and a Wyoming corporation, Wyoming Power Company, is developing a multi-phase power project in Campbell County, Wyoming approximately 20 miles southeast of Wright, Wyoming.

NAPG is the owner of a strategically-located, 760-acre parcel of land adjacent to the Black Thunder, North Antelope-Rochelle and Jacob Ranch Powder River Basin ("PRB") coal mining

complexes (See Attach. A). Together, these three mines produced 20% of United States coal supply in 2004 – over 190 million tons of low sulfur, sub-bituminous coal.

The NAPG project consists of waste (non-commercial) coal and coal-fired power generation facilities. NAPG's fully-permitted Two Elk Unit 1 facility will generate approximately 325 MW to be sold to several Western electric utilities. The Two Elk facility is designed to utilize natural resources that have no commercial value and would otherwise be discarded as waste. Construction began on Two Elk in 2005 and completion is anticipated in 2009-2010.

NAPG is also working to expand the Wyoming site into a large-scale Energy Park with up to 3,000 MW of generation capacity. This would take advantage of the planned infrastructure for Two Elk Unit 1 and the underutilized production capacity of the adjacent mines. The mines produced and shipped 200 million tons of coal in 2005, but have mine permits that would allow them to produce approximately 250 million tons per year.

The NAPG Energy Park is in a unique geographic position which enables it to connect with multiple NERC reliability regions and transmission providers to deliver energy to load-serving utilities to meet current and future electrical demands. Current transmission owners within a reasonable distance from the plant include Western Area Power Administration (Rocky Mountain and Upper Great Plains Regions), Basin Electric Power Cooperative, Black Hills Power & Light, Idaho Power Company, Tri-State Generation & Transmission, Xcel, NorthWestern Power Company and Nebraska Public Power District. Major transmission line expansions have been proposed by Arizona Public Service, TransCanada and National Grid.

Two Elk Unit 1 and Wyoming Power Unit 2 will be integrated as network resources for the PacifiCorp system. The point of interconnection will be the PacifiCorp Tri-County/Antelope (Dave Johnston power plant) substation, Converse County, in eastern Wyoming. Network improvements will be made from this point of interconnection to PacifiCorp's load area in and around Salt Lake City, Utah. PacifiCorp has already identified and gathered environmental data for each of three alternative transmission corridors for this upgrade between the point of interconnection to the Salt Lake City area. (Attach. B).

We anticipate that the NAPG Energy Park will employ clean coal technologies and may use either or both conventional boilers or IGCC, each with provision for carbon capture, at least in pilot phases. The NAPG Energy Park site is uniquely situated to allow for carbon capture and carbon sequestration through enhanced oil recovery. Local CO<sub>2</sub> injection for oil recovery is already underway. This area of Wyoming also has a long history as an exporter of CO<sub>2</sub> through underground pipelines to other oil producing areas in the West.

The area of the NAPG energy project is in the heart of coal country in Wyoming and, indeed, the country. The PRB in Wyoming and Montana and the Dakotas also have bountiful wind resources that are transmission constrained. Ensuring sufficient transmission capacity to move the generated power from the PRB and adjacent states to load centers around the nation should be a priority given the significance of Wyoming energy supplies to the nation. We have several

significant issues we would like the agencies to consider as they continue the preparation of the West-wide PEIS.

#### Permanent Transmission - Avoidance of Coal Resources

Due to the critical role that these Powder River Basin coal and wind resources play in the country's energy supply, it is important to carefully consider the corridor route in that area. We believe that corridor selection should be based on a goal of siting permanent transmission facilities. In the PRB, that means avoiding coal deposits. In the past, it has been necessary to move, at great cost and disruption, transmission lines as the coal resource is developed. All of the existing infrastructure to the west of the NAPG property (Attach. A) is over mineable coal and will have to be moved. This infrastructure includes State Highway 450, railroad tracks, oil and gas pipelines, and existing power lines. Likewise, if a transmission corridor is located to the west of NAPG property, it will overlay approximately 80 million tons of coal per section and would, at some point, have to be moved to allow coal mining. The way to avoid this costly and disruptive exercise is to locate a transmission corridor past the "burn (scoria) line," or south, then west of the coal mines (see Alt. 3 in Attach. A). Following this approach will involve use of U.S. Forest Service Thunder Basin grasslands for a transmission corridor. We would look to the Forest Service to cooperate in the planning of the corridor or to consider an exchange to facilitate the location of the corridor in this area.

#### Avoidance of Congestion

A related issue is the avoidance of congestion in transmission corridor selection. We understand that Wyoming Highway 450, which already contains the above-described road, railroad, power lines and natural gas pipelines is a candidate for a corridor designation. This corridor is exceptionally congested because of the coal mine power and transportation support infrastructure. In addition to the coal avoidance issue discussed above, we do not think it is prudent to add to the existing congestion with a critical transmission corridor meant to move the significant energy resources of the PRB out to load centers.

#### Incorporation of Reliability Requirements

Congestion raises another important issue – WECC reliability standards dictate corridors of sufficient width to support appropriate transmission line separation or, in some cases, duplicate transmission corridors. On June 28, 2006, James T. Loock, Director of Technical Services for WECC, testified to Congress on the work of the Western Congestion Assessment Task Force ("WCATF"). He testified about the WCATF report recommendations and said several important things. "Corridor designation for elective transmission and gas pipelines must recognize technical separation issues addressing safety, reliability and maintenance considerations. There have been incidents of gas pipeline explosions along pipeline rights-of-way that could significantly impact electric reliability if there is not adequate separation." In addition, the WCATF report identified another reliability issue. "There is a reliability risk to placing too many transmission lines on a common corridor. The risk to interconnected system operation is

having too many critical facilities on a common right-of-way, or too many lines feeding a major load center on a common corridor.” Finally, “Basically, the issues of corridor designation partly deal[ ] with assuring there is adequate corridor width, to assure that the technical and safety aspects can be dealt with technically.” The proper location, the width of the corridor, the separation of energy facilities and the possible need for duplicate transmission in certain critical areas must all be considered by the agencies drafting the PEIS.

#### Flexible Energy Corridor Designations

Given the significance of the PRB energy supply, the agencies should identify corridors in all directions, not just to the West. The PRB coal and wind energy assets can serve as a national energy hub if the right infrastructure is in place. This contributes to energy security and system reliability. First, transmission lines can move energy in both directions (*e.g.*, Palo Verde nuclear energy from Arizona can move north to Wyoming and then be shipped in another direction with the right transmission line configuration). Second, the PRB and the Dakotas have the resources to be a major contributor for lower cost, reliable coal and renewable electricity to markets other than just Western markets.

For example, if it makes sense and is feasible to construct a 1-1,500 mile line from Arizona to Wyoming, as is suggested by the Arizona Public Service (“APS”) TransWest Express project, why not consider the opportunities of other long-distance transmission lines from Wyoming. If you envision a 1,500-mile radial from the PRB, you could see PRB and Dakotas energy moving to Chicago, Kansas City, Texas, and Ontario, Canada. Each of these areas is experiencing electrical demand growth. Mr. Looch, WECC, confirms this possibility and also testified that a number of studies have identified “potential congestion in the Rocky Mountain Areas and specifically Wyoming and Montana. This potential congestion is the result of the identification of abundant coal and wind resources in this area which can be developed and used to supply load growth along the West Coast and in the Southwest.”

#### Use of Existing Environmental and Transmission Planning Data

We would also encourage the agencies to take advantage of the planning and environmental work that has already been done by the states or private entities. For example, NAPG and PacifiCorp have already gathered and reviewed environmental data to effectively analyze three alternative routes from the NAPG point of interconnection (Tri-County Switchyard/Dave Johnston) to Salt Lake City (Attach. B). We believe that this work would support the PEIS analysis of corridor environmental impacts and should be used.

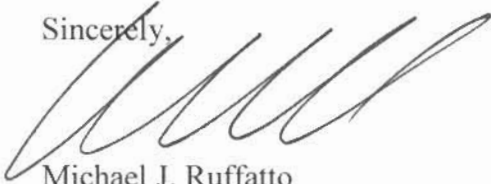
Finally, we would specifically urge consideration and inclusion of the proposed transmission corridor to support the NAPG energy project (Attach. A). This would transmit power from the NAPG power project to the point of interconnection with PacifiCorp (Tri-County Switchyard/Dave Johnston). It has been designed to avoid the problems of congestion and reliability detailed above, but again would need the cooperation of the U.S. Forest Services to provide either a long-term special use permit or the agency’s consideration of an exchange.

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We would remind the agencies that this is an unparalleled opportunity to plan for future energy demands of a growing region and of a country that is ever more dependent on electricity. The PRB and surrounding states contain tremendous energy resources, both fossil and renewable. The country will need those resources. The West-wide PEIS needs to carefully consider where the energy is generated and where the demand is located and provide the right infrastructure that will be permanent, reliable, avoid congestion and flexible enough to move energy in all directions.

Thank you for this interim comment opportunity and we look forward to a review of the draft PEIS and further opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Ruffatto', written over a light blue horizontal line.

Michael J. Ruffatto  
President and CEO  
North American Power Group, Ltd.

