

From: corridoreiswebmaster@anl.gov
To: [Corridoreisarchives;](#)
CC:
Subject: Energy Corridor Programmatic EIS Comment 80087
Date: Monday, November 28, 2005 7:02:19 PM
Attachments: [IPC_Corridor_Comments_80087.pdf](#)

Thank you for your comment, Brett Dumas.

The comment tracking number that has been assigned to your comment is 80087. Please refer to the tracking number in all correspondence relating to this comment.

Comment Date: November 28, 2005 07:02:04PM CDT

Energy Corridor Programmatic EIS Scoping Comment: 80087

First Name: Brett

Last Name: Dumas

Organization: Idaho Power Co.

Address: PO Box 70

Address 2: 1221 W. Idaho St.

City: Boise

State: ID

Zip: 83707

Country: USA

Email: BDumas@idahopower.com

Privacy Preference: Don't withhold name or address from public record

Attachment: G:\Brett\Corridor_Planning\IPC Corridor Comments.pdf

Comment Submitted:

Idaho Power Co. comments are provided in the attached file (pdf format). Thank you.

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



Brett Dumas
Idaho Power Company
PO Box 70
1221 W. Idaho St.
Boise, ID 83707

November 28, 2005

Ms. Julia Souder,
Office of Electricity Delivery & Energy Reliability
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, D.C. 20585

Dear Ms. Souder:

Idaho Power applauds the leadership role the Departments of Energy and Interior are providing in the implementation of Section 368 of the Energy Policy Act—Energy Corridors. We would also like to recognize the cooperating agencies, whose participation is critical to the success of this endeavor. Thank you for the opportunity to comment and address the corridor needs in the West and, more specifically, those immediate to Idaho Power's service territory.

Idaho Power is an integrated electric utility company based in Boise, Idaho that serves approximately 450,000 customers in a 24,000 square mile service territory in southern Idaho and eastern Oregon. Idaho Power has a long history of involvement in, and is a proponent of, designated utility corridors. As a member of the Western Utility Group, we assisted with the development of the Western Regional Corridor Study, published in 1992, which has served as a blueprint for utility corridor planning up to this time. We also actively participate in regional electric planning projects, such as RMATS (Rocky Mountain Area Transmission Study) and NTAC (Northwest Transmission Assessment Committee). These regional coordinating committees serve to identifying source to market needs, which should serve as the foundation for identifying corridors.

The geographic disparity between where energy sources and load centers are located deems it necessary that energy be transported long distances. The predominance of Federal lands in the West necessitates that energy facilities be located on public lands. As identified in the National Transmission Grid Study, the process for siting and permitting high voltage electric transmission lines on Federal lands has been one of the impediments to building new lines. The competing interests for use of these public lands necessitates that energy needs be fully accounted for in agency planning and land use allocation.

Corridor Objectives

The objectives associated with on-the-ground implementation of the PEIS need to be clearly articulated and, subsequently, integrated into agency land use plans documents

and their planning processes. Idaho Power suggests that the PEIS result in the following outcomes:

- The siting and permitting of compatible energy infrastructure within a designated corridor should be streamlined. Alternative routes should not need to be considered, if located within the corridor. The project-level NEPA analysis should be no more stringent than an environmental assessment that tiers to the PEIS.
- A functional, predictable, and seamless permitting process should exist that facilitates projects spanning multiple jurisdictions.
- Corridors are likely to accommodate infrastructure from different utilities and industries. A process for managing corridors that is equitable and addresses liability exposure needs to be developed.
- Energy transport should be considered the highest and best use of these corridors.
- A process for updating and reviewing corridors should be incorporated in the Agencies planning processes. Currently, planning occurs at the unit level (e.g., Forest or BLM District) and does not adequately incorporate multi-jurisdictional project needs. Corridors identified through this process will have a limited planning horizon. Energy sources, infrastructure, and transport technology will change in the future. The process for identifying and designating corridors into the future needs to be adaptable.
- The agencies need to recognize that other interests may necessitate that linear energy infrastructure be built outside of a corridor. Federal lands are just one of many elements in the siting and routing process. In the future, corridors on Federal lands may not be consistent with constraints and opportunities on adjacent non-Federal lands.

Definition of a Corridor

By definition, an energy corridor is intended to support multiple facilities and/or uses. Consolidating energy infrastructure has potential benefits such as reduced land use impacts, streamlined siting and permitting, and enhanced planning opportunities to meet future needs. On the other hand, consolidation of energy infrastructure can also reduce reliability, constrain energy transport, create safety hazards, and increase security risks. Therefore, the balancing of competing objectives needs to be considered and accommodated in the definition of corridors.

The Western Electric Coordinating Council (WECC) oversees reliability of the western electric grid. When high voltage lines are located in proximity to each other, or cross, the combined amount of power they are rated to carry can be reduced, sometimes significantly below the total capacity of the individual lines. If the WECC determines that a single event (e.g., wild fire) could take out multiple lines, the carrying capacity of lines is reduced. Therefore, utilities would prefer adequate separation of lines such that energy transport efficiency and business investment is optimized. The National Electric Safety Code provides minimum clearance distances for safety. These requirements apply to right-of-way widths. Guidelines for separation distances to meet reliability needs less definitively defined. Idaho Power has developed the following general guidelines for minimum separation for reliability purposes:

- High Voltage Transmission Lines
 - 1000 feet for 500-kV to 230-kV lines with unique operation
 - 1320-2640 ft (0.25-0.5 mile) for 500-kV to 230-kV lines with common operation
 - 1 mile for 500/345-kV to 500/345-kV lines with common operation
- High Voltage Transmission Line Parallel with a Gas Pipeline
 - Minimum distance should be 250 feet with reasonable mitigation for cathodic protection
 - As distance decreases, safety measures must increase
- High Voltage Transmission Line and Transportation Corridors
 - Energy infrastructure must be outside the “clear zone” (i.e., safety zone) established for the transportation use

Several important issues are pertinent to the definition of “compatible” use. Transmission lines have different operational functions. High voltage lines function to serve native load, regional load, or a combination of the two. For example, one transmission line may connect two local substations that serve local load or connect a generation plant to a local area. A different transmission line may be used to move energy from one region to another, such as between Montana and California, without delivering any energy to the local area it passes through. Yet a different transmission line may provide both functions of moving energy long distances while dropping off some in a local area it passes through.

The reliability of the electric transmission system when operating one or more lines in parallel is limited by the critical contingency, or loss of the highest capacity line. Thus increasing the capacity of an existing line will not increase the transfer capability if that line is the critical contingency. The addition of another line, or matching the capabilities of each line, will increase and optimize the total path capabilities. This also demonstrates that new facilities can be placed adjacent to existing lines by developing or expanding a new corridor.

The separation requirements for multiple lines and multiple corridors, and recognizing the operational function as previously described does allow multiple lines to share the same corridor when their function or purpose does not impact reliability concerns. Therefore, an energy corridor is not constrained or “full” based solely upon the number of lines it contains, but becomes fully used when facility additions or upgrades do not increase the transfer ratings based upon reliability criteria. This can only be evaluated by the regional transmission planning entities in regards to system needs and performance. The work by these regional study groups should be recognized to determine the need and suitability of any proposed corridors under the requirements of this Act.

The first use developed in a corridor will set precedent for future uses. For example, designating a corridor where a gas pipeline currently exists can complicate collocating high voltage electric transmission lines. Depending on the proposed separation distances, it can be very difficult and expensive to retrofit an existing pipeline with adequate cathodic protection to make the uses compatible. Whereas, adding a gas pipeline to a corridor that contains a high voltage transmission line is less of a problem. Designing adequate protection measures into a new pipeline project that will be collocated with an existing transmission line is more easily done.

Implicit to the comments above is that corridors will be defined, managed (e.g., compatibility, liability, assigning management responsibility, etc.), and determinations made of when a corridor is full. Therefore, a process for managing corridors needs to complement their designation. How will corridors located across multiple jurisdictions be managed consistently?

Idaho Power Proposed Corridors

Electricity use in the Treasure Valley is increasing at a rate of about 50-70 megawatts (MW) per year, with peak loads growing at about 85 MW per year. Current annual demand is about 1750 MW. The current capacity of the electrical system is about 2400 MW. This growing demand for electrical power can be met by either developing power plants in the valley or remotely, or by importing power from other utilities. The latter two options would require additional transmission capacity being built. Within 10 years the existing transmission capacity to the Treasure Valley from the northwest and the east will be absorbed.

Treasure Valley (Boise) to Midpoint (Shoshone)

In the future, electric power is likely to be more readily available from the east than from the Northwest. Coal and wind power are likely to be developed to the east. Therefore, Idaho Power is developing plans for an additional 500-kV transmission line from Midpoint (Shoshone) to the Treasure Valley (Corridor 2 on Map). The attached Map shows two alternatives that are designed to be integrated with Pacificorp's existing 500-kV line. A 500-kV line would increase electric capacity the Treasure Valley by about 800 MW. The line would be managed operationally in compliment with the Pacificorp 500-kV line, thus enhancing reliability of the 500-kV system.

The proposed Boise to Midpoint corridor is in an area that encompasses the Boise and Twin Falls BLM Districts, which consist of several land use planning areas. Currently, the Snake River Birds of Prey National Conservation Area (SRBPNCA) and Bruneau Planning area are developing new management plans. Within these planning processes, Idaho Power proposed two corridors to meet the need described above. The SRBPNCA is close to making a decision on a preferred alternative. Depending on the timing of a decision, this could set a precedent in motion that this PEIS and other local planning efforts will need to compliment.

Midpoint East (Path 13)

Depending on the location of new power development, additional 500-kV lines would need to be built east of Midpoint to tap these new sources of power. The most likely sources of new power are thermal plants (coal or gas) and wind power in Wyoming and Montana. About 1500 MW of wind power are currently proposed in Wyoming. Additional thermal plants may be built in Montana, the Powder River Basin (PRB) of Wyoming, and/or additional units at the Jim Bridger coal plant in Rock Springs, Wyoming. This increase in power supply would be transmitted across wires to the west and south. Idaho Power would likely tap into this power from either the northeast (MT/PRB) or the southeast (Ogden, UT) with new transmission lines into the Borah Substation near American Falls and/or the Midpoint Substation near Shoshone. Thus Idaho Power foresees needing corridors north to MT and southeast to Ogden (Ben Loman) (Corridors C & I). If power is brought into Borah, Idaho Power will need a new

500-kV line from Borah to Midpoint to allow import of electricity to the Boise market. Such a line would allow for the upgrade of the existing Midpoint to Borah 345-kV line to 500-kV, thus allowing us to manage a 500-kV system along Path 13.

In addition, because of the constraints at Borah, an additional corridor to get power from MT & WY south and east may require additional corridors from MT to UT via Soda Springs (Corridors F, G, & H); and, from WY to UT directly (Corridor D) and/or via Soda Springs (Corridors E & F).

A corridor between the Idaho National Engineering and Environmental Lab and Borah (Corridor 5) should be designated to facilitate the future development of a nuclear reactor at the site.

Northwest to Boise

A new 500-kV line between one or more generation facilities in the southeast Washington/northeast Oregon area to Boise (Corridor 1) will likely be needed during the current planning horizon. Likely interconnection locations include Boardman (fossil plant), McNary Dam, and Lower Monumental Dam. Increasing the capacity of Path 14, Idaho to the Northwest would also allow additional transfer and exchanges between Northwest entities (e.g., Bonneville Power Administration and Avista Corporation) and Idaho Power.

Other Western Regional Needs

The transport of electricity from sources in MT and WY to the high load centers in Las Vegas and the West Coast will likely require corridors through Idaho Power's service territories. Corridor 3 (SWIP – Southwest Intertie Project) and corridors A & B (Idaho to N. California) are intended to represent these needs.

Recognizing that the project will evaluate numerous constraints, Idaho Power's preference is to avoid locating corridors on Indian Reservations.

Alternatives Suggested in the Federal Register Notice

The Federal Register notification proposed preliminary alternatives that may be formulated in the PEIS in addition to the No Action Alternative. These alternatives are presented as programmatic alternatives. Idaho Power is concerned that tangible alternatives to routing of designated corridors need to be considered when formulating alternatives. If not, future projects may be at risk to challenges during the site-specific NEPA process because alternative routes were never developed nor analyzed. Analyzing alternative routes on a project basis may undermine the benefits of conducting the PEIS. If this is not the case, based on Programmatic NEPA policy, then the PEIS needs to lay out why alternative routes are not required as part of the current analysis and will not be required at the project level in the future.

Conclusion

If possible, Idaho Power encourages the Agencies to have an ongoing dialogue with the industry, through industry groups (e.g., WUG, RMATS) during the development of the PEIS. Recognizing that the Federal Advisory Communication Act places certain constraints on such communication, we feel that the benefits provided by such coordination would offset the process required by FACA to allow such coordination. The

WUG has had a long, effective relationship with the Agencies on issues of mutual interest because of such ongoing coordination. Effective coordination can only enhance the opportunity for success of this important project. By no means, does Idaho Power expect industry to have an influence on the decisions being made by the Agencies. We do believe, however, that the industry is uniquely qualified to provide information essential to the effective designation and use of energy corridors.

Idaho Power would like to reiterate our appreciation for the opportunity to submit comments. We would like to take this opportunity to thank the Agencies for their efforts in this endeavor. We look forward to working with the Agencies on the development and implementation of the PEIS. Should you have specific questions, you may contact me at (208) 388-2330 or BDumas@idahopower.com.

Sincerely,

Brett Dumas
Supervisor
Environmental Affairs

Idaho Power Recommended Utility Corridors

- IPC Priority Corridors**
 - Corridors Specific to Idaho Power
 - Generalized Regional Corridors
- Baseline Features**
 - Interstate
 - Other U.S. highway
 - State secondary highway
 - IPC Transmission
 - Transmission lines to MT and WY
 - PPL 500-kV
 - Railroad
- Ownership**
 - BLM Lands
 - Forest Service
 - Indian Reservation
- Land Use Constraints**
 - Department of Energy
 - Military Reservations
 - National Parks & Monuments
 - U.S. Fish & Wildlife Service
 - Orchard Training Range
 - Wilderness and WSAs
 - Snake River BOP NCA
 - Area of Critical Env Concern
 - Preserve/ Refuge/ WMA
 - State Parks
 - wild and scenic river



