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BEFORE THE UTILITY FACILITY REVIEW BOARD

ROCKY MOUNTAIN POWER, Petitioner, vs. TOOELE COUNTY, Respondent.	**DIRECT TESTIMONY OF BRANDON D. SMITH**

BACKGROUND OF WITNESS

Q: Please state your name, business address, and present position.

A: My name is Brandon D. Smith. My business address is 1407 West North Temple, Salt Lake City, Utah. I am currently employed as a Project Manager in the Transmission Delivery Department for Rocky Mountain Power (the "Company"). I have held my present position since April 2007.

Q: Please describe your education and business experience.

A: I have a Bachelor of Science degree in Civil/Environmental Engineering from Utah State University. My experience includes 12 years of project management, nine of which have been with the Company, consisting of civil, environmental, and electric utility projects. For the past three years I have been responsible for managing transmission, distribution and substation projects for the Company.

Q: As a Project Manager in the Transmission Delivery Department of the Company, what are your primary responsibilities regarding the transmission project at issue?

A: My responsibilities are to ensure that the new transmission line from the existing Mona substation to the existing Oquirrh and Terminal substations (the "Project") is adequately sited, permitted, engineered, designed, and constructed according to Company standards in order to provide the essential electrical service needs of the Company's customers and communities throughout Utah and the Company's larger service area. These responsibilities include managing the day-to-day activities of the Project, coordinating the different disciplines for the Project, and ensuring that the Project is constructed in a safe, reliable, adequate and efficient manner.

PURPOSE AND SUMMARY OF TESTIMONY

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to demonstrate how the Company applied prudent industry standards to identify the best transmission route in order to balance engineering requirements, environmental impacts, Project costs and impacts to communities during the siting process, while assuring that siting and system criteria requirements are met as

outlined in Mr. Darrell Gerrard's testimony filed concurrently herewith. My testimony will describe in detail the process the Company implemented in the siting of the Project, including the steps taken to: (1) identify a range of feasible alternative routes and substation site options consistent with the siting and system criteria set forth in Mr. Darrell Gerrard's testimony; (2) inform the public and affected federal, state, and local agencies; (3) select a preferred route and substation site from a range of reasonable alternatives; and (4) obtain the necessary permits for the Project. My testimony will also demonstrate that through its denial of the Company's conditional use permit for the Project, Tooele County has impaired the Company's ability to construct the Project which is needed to provide safe, reliable, adequate and efficient service to its Customers.

Q: Please describe the Company's statutory duty with respect to siting transmission lines.

A: The Company is a public electric utility regulated by the Public Service Commission of the state of Utah ("PSC"). Under Utah Code Annotated § 54-3-1, the Company has an affirmative legal duty to "furnish, provide and maintain such service, instrumentalities, equipment and facilities as will promote the safety, health, comfort and convenience of its patrons, employees and the public, and as will be in all respects adequate, efficient, just and reasonable."

DESCRIPTION OF THE PROJECT AND THE SITING PROCESS

Q: Please describe the Project.

A: The Company proposes to construct a 500 kilovolt ("kV") single-circuit transmission line between the existing Mona substation located near the community of Mona in Juab County, Utah, and a proposed future 500/345/138 kV substation to be located in the southwestern portion of the Tooele Valley (the "Limber substation"). A new 345 kV double-circuit transmission line will also be constructed from the future Limber substation to the existing Oquirrh substation, located in West Jordan, Utah. In the future, a 345 kV double-circuit transmission line will be constructed from the future Limber substation to the existing Terminal substation, located in Salt Lake City. Ultimately, to

accommodate the new transmission lines, upgrades to the existing Mona, Oquirrh and Terminal substations will also be necessary.

Q: How did the Company initiate the Project permitting and siting process?

A: Once the need, siting and system criteria were established for the Project as set forth in detail in Mr. Darrell Gerrard's testimony, the Project siting and permitting process commenced with the following six major phases:

1. Conducting a Regional Environmental Feasibility Study (the "Feasibility Study");
2. Submitting a right-of-way application to the U.S. Bureau of Land Management (the "BLM");
3. Initiation of a community outreach program;
4. Identification of a range of reasonable alternative route alignments and substation locations;
5. Route analysis, comparison, and selection of a proposed route and substation location; and
6. Completion of federal, state, and local permitting.

FEASIBILITY STUDY

Q: Please describe the Feasibility Study process.

A: The Company conducted the Feasibility Study to assess the ability to permit and construct the conceptual Project. The Feasibility Study process was initiated in 2005 and completed in November 2006. For the purposes of the study, feasibility is defined as the ability for transmission and substation facilities to be permitted and constructed. The first step of the Feasibility Study was to define the study area. Next, the Company identified and evaluated a wide range of alternative transmission corridors and substation sites within the study area. The study results also identified feasible alternative corridors and future substation locations alternatives warranting further review, and recommended the elimination of these alternatives that did not meet Project needs and requirements.

Q: How did the Company define the study area boundary for the Project?

A: The overall study area for the Project was defined to include feasible alternative corridors for the location of new 345 kV and 500 kV transmission lines and future substations with interconnections from the existing Mona, Oquirrh and Terminal substations. The Project study area is situated in north-central Utah. Exhibit BDS-1 (Map of Feasibility Study Area Boundary) illustrates the Feasibility Study area boundary.

The Feasibility Study area boundary was defined by a combination of topography, major water bodies (Utah Lake and Great Salt Lake), existing linear corridors (i.e., major roadways and railroads), and existing and future substation locations in order to identify a range of reasonable and feasible alternatives for consideration.

The northern boundary of the study area was defined by the Interstate 80 ("I-80") corridor, the south shoreline of the Great Salt Lake, and the existing Terminal substation, the northern terminus of the Project.

The eastern boundary of the study area was defined based on the location of the existing Terminal, Oquirrh and Mona substations, the western shoreline of Utah Lake, and existing extra high voltage ("EHV")[1] transmission lines/corridors.

The western boundary of the study area was located in Tooele County and was defined based on topography, the West Tintic mountains, the Union Pacific railroad, and Highway 36. In particular, the Stansbury mountain range defined the northwest boundary.

The southern boundary of the study area was defined by the location of the existing Mona substation, the southern terminus of the Project.

[1] "EHV" means transmission lines of 345 kV or greater.

Q: How did the Company begin to define potential transmission corridors within the Feasibility Study area?

A: The process to define potential transmission corridors followed standard industry practices used repeatedly by the Company and other public utilities throughout the country in siting and permitting transmission facilities, and comprised of several steps, including data collection, development of opportunities and constraints, and identification of potential alternatives.

Q: Please describe the Feasibility Study data collection process.

A: During this process, publicly-available data from past studies by local agencies (*e.g.*, city and county general plans, etc.), federal agencies (*e.g.*, U.S. Forest Service, BLM, U.S. Fish & Wildlife Service, U.S. Geological Survey, etc.), and state agencies (*e.g.*, Department of Wildlife Resources, Utah Automated Geographic Reference Center, Utah Department of Transportation, etc.) was gathered for the Feasibility Study area.

Documentation of the data included a combination of mapped, written, and tabular information. Mapped information was organized using geographic information system ("GIS") technology. The GIS was used to depict existing and planned environmental resources in the Feasibility Study area, to identify siting opportunities and constraints, identify corridor and substation site locations, and rank and compare alternatives.

Q: What data was collected during the Feasibility Study?

A: The data collected included:

- Human resources, including existing and planned land use, parks, recreation, and preservation areas (including special management areas), transportation, utilities (including formally designated and proposed corridors), and visual resources. As part of the land use, recreation, and visual resource inventory, limited field reconnaissance was conducted. Zoning and general plan information was gathered for counties or municipalities and used to characterize alternatives.

- Biological resource information such as major vegetation types, wildlife habitat, sensitive, threatened, and endangered species (wildlife and plants), and special management areas and reserves. Biological resource investigations included a literature and GIS data review of the vegetation types and critical wildlife habitat in the Feasibility Study area, and review of threatened and endangered species (including candidate and state-listed species of concern) in the study area. Limited field reconnaissance occurred to verify major vegetation types.

- Earth resources, including geological hazards, geotechnical information and soils. Earth and water resource studies included a review of wetland types based on National Wetland Inventory data, along with soil types and geologic hazards (*e.g.*, liquefaction, landslide areas, faults, slopes greater than 15 percent).

- Cultural resources, including a literature review conducted to determine the presence of any known archaeological or historic sites listed on the National Register of Historic Places that could be affected by the Project.

Q: Did the Feasibility Study address engineering requirements?

A: Yes. The information inventoried considered construction factors including, but not limited to, topography, slope, vegetation, access, and natural hazards (*e.g.*, liquefaction areas, landslides).

Q: Did the Feasibility Study consider federal, state and local agency management plans?

A: Yes. Federal, state and local agency management plans were reviewed to determine potential fatal flaws for siting and permitting the facilities, as well as potential community issues and concerns were identified based on the Company's previous experiences in building projects within the potentially affected communities.

Q. Did the Company contact federal, state and local agencies during the Feasibility Study?

A. No. Given the purpose of a Feasibility Study, which is a preliminary project analysis conducted internally by a company prior to public distribution of project information, there were no direct contacts with federal, state, or local agency staff to discuss the Project at this point in the process.

Q: Please describe the process of identifying opportunities within the Feasibility Study area.

A: In order to identify potential locations for transmission line corridors and substation siting areas, information gathered during the data inventory process was used to determine environmental, engineering, and agency/public opportunities within the Feasibility Study area. For purposes of the Feasibility Study, siting opportunities for a new 345 kV or 500 kV transmission line generally included locations consisting of, or in proximity to, existing or planned linear facilities, previously disturbed corridors, or corridors designated for future use as utility corridors. These included transportation corridors (highways and major roads), existing utility corridors, pipelines, and railroads that potentially allow for collocation of additional linear facilities.

Q: How were engineering and environmental constraints within the Feasibility Study area identified?

A: Engineering constraints were identified based on a general constructability analysis. Using GIS, levels of difficulty associated with the construction of Project facilities were determined based on topography (slope, vegetation, and elevation) and natural hazards.

The identification of environmental constraints was based on a sensitivity analysis of the environmental resources within the study area. For example, existing residential areas or locations of threatened and endangered species represent areas of potential high sensitivity/constraint for the location of new transmission lines and substations. GIS was used to create composite environmental sensitivity/constraint maps for the study area.

These maps served to identify potential overall levels of environmental constraint for the location of Project facilities.

Q: How were the potential corridors identified by the Company?

A: By integrating the data gathered at this point of the Feasibility Study, a GIS map was created identifying the areas of high opportunity and low constraints.

Feasible alternative corridors and substation sites were identified based upon the ability to utilize areas of opportunity while avoiding areas of higher environmental sensitivity/constraint and engineering constraint. This analysis resulted in the identification of several alternative corridors and substation sites that could meet the purpose of the Project, and provided an initial starting point for future detailed investigations and evaluation in the next phase of the Project.

Q. What criteria were used by the Company to identify potential transmission corridors to support future permitting activities?

A. Each of the potential 500 kV and 345 kV transmission corridors and substation siting areas were identified, evaluated and compared based on the data gathered:

- Site and systems criteria, and engineering/design factors (length of corridor (approximate), system reliability, construction access and natural hazards, transmission interconnection to substation);
- Environmental factors (biological resources, earth resources, cultural resources, existing land use, planned land use and visual resources);
- Permit requirements (federal, state, county, and municipal) and political issues, including general corridor siting issues; and
- Overall feasibility potential for engineering and environmental.

Q: What additional activities were conducted to analyze the potential transmission line corridors and substation siting areas within the Feasibility Study area?

A: As a part of this process, limited field review(s) and aerial over-flights in selective locations were conducted along existing and planned linear facilities that could represent opportunities for the siting of 500 kV and 345 kV transmission lines and substations. The corridors were then refined, and additional segments were added (as needed) to develop an alternatives map. (*See* Exhibit BDS-2 (Map of Potential Corridors and Substation Siting Areas).

Q: Were any of the preliminary corridors eliminated?

A: Yes. The options along the two existing 345 kV transmission line corridors from Mona to Oquirrh via the Camp Williams substation were considered and identified for elimination based on engineering and system reliability criteria. Exhibit BDS-3 (Map of Potential Corridors and Substation Siting Areas – Recommended for Elimination) illustrates the alternative corridors recommended for elimination. These routes would not provide sufficient separation from the existing 345 kV transmission lines for either the entire length or a significant portion of the route, which poses system reliability issues as discussed in Mr. Gerrard's testimony. In addition, the Mona to Camp Williams corridors would potentially have significant impacts on existing and planned land uses. Residential development in these areas has built up to the existing transmission line rights-of-way. Any expansion of the existing corridors would require the displacing of residents and the demolition of existing homes in order to accommodate new transmission lines.

SUBMITTAL OF RIGHT-OF-WAY APPLICATION TO BLM

Q: Upon completion of the Feasibility Study, what was the next step in the process?

A: Upon completion of the Feasibility Study in November 2006, it was determined that almost all of the potential corridors crossed BLM lands at some point, particularly in Tooele and Juab Counties. In order to obtain a right-of-way grant from the BLM, the Company prepared and submitted a right-of-way application to initiate the federal review and approval process.

The Company's right-of-way application was submitted to the BLM in January 2007, at which point the BLM was designated as the agency to lead the National Environmental Policy Act ("NEPA") process. After reviewing the scope of the Project, the BLM determined that granting a right-of-way for constructing, operating, and maintaining the proposed transmission lines and associated facilities would be a major federal action and would require an Environmental Impact Statement ("EIS") in compliance with the requirements of NEPA.

Q: How did the BLM initiate the NEPA analysis of the Project and inform the public?

A: The BLM was designated as the lead federal agency for preparing the EIS and published a Notice of Intent ("NOI") to prepare the EIS in the Federal Register on October 16, 2007. Publication of the NOI in the Federal Register marked the beginning of the 30-day BLM scoping period. The intent of scoping was to formally solicit comments from federal, state, and local agencies and the public early in the preparation of the EIS, identify significant issues and concerns for analysis in the EIS, and review the potential alternative corridors and substation siting areas of the Project. Based on the Company's SF-299 application which included the Company's Potential Corridor and Siting Map (*see* Exhibit BDS-2 (Map of Potential Corridors and Substation Siting Areas)), the BLM developed a map of the potential alternative corridors and substation siting areas. The BLM's map, as shown in Exhibit BDS-4 (BLM Public Scoping Map of Project – Potential Transmission Line Corridors and Substation Siting Areas) depicted wider corridors (ranging from 1 to 6 miles wide) for siting the alternative transmission line routes.

Q. Did the BLM engage State and local agencies or entities in the EIS process?

A. Yes. The Utah Governor's Public Lands Policy Coordination Office served as a Cooperating Agency in preparing the EIS, representing all the Utah state agencies, which included, among others, the School and Institutional Trust Lands Administration, the Utah Division of Wildlife Resources, the State Historic Preservation Office, and the Department of Environmental Quality.

Tooele County was invited to participate in the EIS process as a "cooperating agency." A "Cooperating Agency" means any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal (or a reasonable alternative). (*See* 40 CFR § 1501.6(b)). It is the BLM's policy that State or local agencies of similar qualifications may become a cooperating agency as well. The role of a cooperating agency includes:

1. Participate in the NEPA process at the earliest possible time.
2. Participate in the scoping process
3. Assume on request of the lead agency responsibility for developing information and preparing environmental analyses including portions of the environmental impact statement concerning which the cooperating agency has special expertise.
4. Make available staff support at the lead agency's request to enhance the latter's interdisciplinary capability.
5. Normally use its own funds.

While Tooele County, along with Salt Lake, Utah and Juab Counties, were all invited by the BLM to participate as cooperating agencies, each declined to accept the invitation. As a "cooperating agency," Tooele County had the opportunity to become involved early in the BLM siting and permitting process, but chose not to participate as a cooperating agency.

Q: What actions did the BLM take to identify issues and concerns related to the Project?

A: The actions listed below were employed by the BLM in order to inform the public and federal, state and local agencies and other interested parties of the Project, seek input and identify issues and concerns related to the potential alternative corridors and substation siting areas.

- Agency, interagency, and stakeholder meetings were held to discuss the Project and solicit comments.

- Announcements to inform the public of the Project, EIS preparation, and public scoping meetings included the Federal Register NOI, media releases to local newspapers and radio stations, and legal notices.
- A newsletter was distributed to interested parties on the Project mailing list, which includes federal, state, and local government agencies; special interest groups; and individuals. The newsletter introduced the Project, solicited input for the environmental analysis, and announced upcoming public scoping meetings.
- A telephone voice message information line ((801) 573-6814) was established to provide an opportunity for the public to learn about the Project status and/or request information.
- A Project website page was established on the BLM West Desert District website.[2] The website contained a brief description of the Project, including a map, the need for the Project, and a Project timeline. A link was provided for the public to submit comments via email.[3]
- The Project was posted on the BLM's Environmental Notification Bulletin Board.[4]
- Three formal public scoping meetings were held in November 2007 in West Jordan, Tooele, and Nephi to introduce the Project, explain the purpose and need for the Project, describe the Project, present the potential alternative corridors and substation siting areas, explain the planning and permitting process, and formally solicit comments useful for the environmental analysis.

The scoping process and results are documented in the Mona to Oquirrh Transmission Corridor Project EIS Scoping Report (BLM 2008). As a result of scoping, the potential alternative corridors and substation siting areas were refined to establish the network of alternative transmission line routes and substation sites to be studied in detail. *See*

[2] http://www.blm.gov/ut/st/en/fo/salt_lake/planning/mona_to_oquirrh_transmission.html.

[3] UT_M2OTL_EIS@blm.gov.

[4] https://www.blm.gov/ut/enbb/index.php, NEPA # UT-020-2008-009.

Exhibit No. BDS-5 (BLM Map of Alternative Routes and Substation Sites Considered and Eliminated).

Q: Did the Company provide any notification of the Project beyond the BLM's actions?

A: In addition to the BLM's effort, the Company conducted community leader briefing meetings in fall 2007 with all the potentially affected communities, and convened a Community Working Group that represented diverse interests within the northern portion of the Project area, including representatives from Tooele County, Tooele City, Kennecott Lands, Kennecott Utah Copper, Town of Stockton, Salt Lake County, Salt Lake City, South Jordan City, and West Jordan City. The Town of Grantsville was also invited to participate, but it declined the invitation. The Community Working Group was asked to provide input to the Project team (*i.e.*, issues, concerns, data) as the siting process and environmental studies progressed. While the Community Working Group was not a decision-making entity on the Project, the group members were asked to provide feedback on the Project and consider the views of the group, as well as the views of their respective organizations and/or communities. The Community Working Group met on four occasions at key points during the planning process. The Tooele County Commissioners designated the Economic Development Director as the representative for the County on the Community Working Group, and the Tooele City Mayor designated the Public Works Director as the representative for the City on the Community Working Group.

It is important to note that all comments received by the BLM during the formal scoping period, Community Working Group process, community leader briefing meetings, and stakeholder meetings were incorporated into the Draft EIS analysis. In addition, the Company was permitted by the BLM to show the Community Working Group refined route alignments and substation sites during the Community Working Group meetings in order to receive feedback on potential siting issues and concerns. The BLM attended all four meetings of the Community Working Group an observer.

Q: Please describe the next step in the EIS review process with respect to siting the Project.

A: As part of the Draft EIS process, the BLM conducted a comprehensive environmental analysis of all the alternative routes and substation sites. This analysis process consisted of several steps including: (1) data inventory, (2) impact assessment and mitigation planning, (3) screening and comparison, (4) identification of the alternative routes, and (5) selection of the BLM's preferred alternative.

Q: Please describe the BLM's data inventory process.

A: Each alternative route and substation site was inventoried to establish a baseline of existing environmental conditions and data. Through scoping and data inventory, a number of environmental issues were identified. These environmental issues helped to determine the level of the analyses and were considered in developing criteria for assessing impacts of the Project facilities.

Identified environmental resources that could be affected by the Project were carried forward for analysis in the EIS. "Environmental Resources" as used in the EIS and this testimony is understood to include:

- Land use and recreation resources
- Social and economic conditions
- Public health and safety: electric and magnetic fields, noise, hazardous materials
- Visual resources
- Climate and air quality
- Earth and water resources
    - Geology
    - Soil resources
    - Water resources
- Biological resources
    - Vegetation
    - Wildlife
    - Special status species

- Wild land fire ecology and management
- Cultural resources
- Paleontological resources
- Wilderness characteristics
- Special designations
- Environmental justice

Q: Please describe the BLM's impact assessment and mitigation planning process.

A: The alternative routes and substation sites were assessed to identify the potential impacts on the Environmental Resources, that would result from the construction, operation, and maintenance of the Project alternatives. Where warranted, selective and specific measures beyond standard mitigation were recommended to mitigate impacts. Mitigation measures were reviewed and discussed with the Company to ensure applicability and feasibility.

Q: Please describe the BLM's screening and comparison process.

A: Through a systematic analysis, all of the alternative substation sites and transmission routes studied were screened and compared in order to narrow the number of alternatives addressed in the EIS and to select a preferred alternative(s) as described below.

Q: Please describe the process to screen and compare substation sites.

A: A number of sites were identified in the northern portion of the Project area for the future Limber substation. Originally, the size requirements for the future Limber substation property, including proposed and future facilities and interconnections, were anticipated to be approximately 140 to 160 acres. As a result of engineering and system studies conducted by the Company during the preparation of the Draft EIS, it was determined that additional equipment for the future Limber substation would be required, expanding the substation property size requirements to approximately 370 acres.

In addition, the expansion of the existing Mona substation was found to not be feasible due to surrounding topography and, therefore, a new substation site, the Mona annex, was

required. Several sites were initially identified in the southern portion of the Project area for a future Mona annex substation. All of the alternative substation sites for the future Limber substation and Mona annex considered are shown on Exhibit BDS-5 (BLM Map of Alternative Routes and Substation Sites Considered and Eliminated).

During the first Community Working Group meeting (as further discussed below), the Tooele County Planner suggested that lands on the northwest side of the Tooele Valley and along the south side of the Tooele Army Depot may be the best options for the transmission corridor and the future Limber substation site because they are less populated, less developed, and would accommodate future industrial and commercial development. The substation sites were compared based on the Company's siting and system criteria, and engineering and design criteria, which include:

- Topography and slope
- Property size
- System planning and reliability
- Economics
- Access
- Engineering and operations
- Transmission interconnections (500, 345, and 138 kV)
- Zoning
- Existing and planned land use
- Identified environmental-related constraints

Site visits were conducted in 2007, 2008 and 2009 by the Company's engineering staff to review each potential substation site. The results of the comparison process resulted in identification of a proposed site for the future Mona annex and a proposed site for the future Limber substation.

In particular, the Limber substation site in Tooele Valley was chosen based on the following:

- minimal environmental impacts

- site is adjacent to paved road for ease of construction access (Mormon Trail Road)
- optimal location for EHV transmission line interconnections to Oquirrh, Terminal and Mona
- property can accommodate substation and site buffer size requirements
- minimal site grading needed
- lowest estimated site development costs
- community considerations, including compatibility with zoning classification and adjacent land uses

Q: Please describe the BLM's process to screen and compare transmission line routes.

A: More than 450 miles of alternative transmission routes were studied and analyzed as part of the Project. All of the alternative routes studied are shown on BDS-5 (BLM Map of Alternative Routes and Substation Sites Considered and Eliminated). These alternatives were inventoried and assessed to determine the Environmental Resources present and to identify potential impacts. The alternatives were then systematically screened and compared in order to identify the most preferable alternative routes from an environmental and engineering standpoint, thereby narrowing the number of alternative routes to a reasonable range to be compared and addressed in the EIS.

To facilitate screening and comparison of routes, the Project area was divided into two segments: the southern area (Mona to Limber) and the northern area (Limber to Oquirrh and Terminal). The Company evaluated routes based on siting criteria as summarized below:

- Meeting purpose and need for the Project
- System planning and reliability
- Meeting national and regional planning standards
- Costs
- Access
- Route length
- Right-of-way limitations and restrictions

- Miles parallel to other linear facilities (*i.e.*, 138 kV lines, pipelines, railroads, etc.)
- Constructability, operations and maintenance
- Interconnections with future Mona annex and Limber substations
- Existing and planned land use
- Known Environmental Resource constraints
- Safety
- Project scheduling—in-service date

The comparison process resulted in the identification of the Company's proposed route for each segment of the Project and a range of alternative routes.

Q: Please describe the BLM's process to select its preferred alternative route.

A: All of the alternative routes were ranked for preference based on impacts to Environmental Resources as outlined earlier in this testimony. The alternative with the lowest overall impact on the Environment Resources was selected as the BLM preferred alternative.

Q. How did the BLM first inform the Company and the public of the BLM's preferred route?

A. The BLM first informed the Company and the public of its preferred route when the Draft EIS was released on May 15, 2009.

Q. Did the Company engage the general public during the preparation of the Draft EIS?

A. No. The BLM instructed the Company not to approach private landowners and the general public during the analysis of the routes to avoid releasing information that would be considered pre-decisional. BLM decision makers approved a BLM preferred route to be published in the Draft EIS. However, NEPA guidelines instruct the BLM to not release to the public any maps developed during the analysis that identify preferred and alternative routes prior to the release of the Draft EIS.

Q: Please describe how the preferred route selected by the BLM compares to the Company's proposed route.

A: The BLM's preferred route was shown in the Draft EIS which was first released to the Company and the public on May 15, 2009. In that document, the BLM's preferred route and the Company's proposed route consisted of the same alignment throughout most of the Project, except in a few areas as shown on Exhibit BDS-6 (Proponent's Proposed Route and Alternative Routes).

Q. Please describe the areas where the BLM preferred route and the Company's proposed route differed, and where differences were addressed.

A. The difference between the two routes are described below:

Mona to Limber

Near Mona, the BLM's preferred route extended north from the Mona annex substation site along the existing EHV transmission line corridor for approximately six miles before diverting west, away from the corridor. The Company's proposed route extended north from the Mona annex substation site for approximately 1.5 miles before diverting west over the Long Ridge Mountains. The Company has since demonstrated the risk imposed on system reliability regarding the BLM's preferred route paralleling an existing EHV transmission corridor in this area. The BLM has indicated that they will revise the BLM preferred route alignment in the Final EIS to match the Company's proposed route, provided that access road reclamation and helicopter construction are implemented over the Long Ridge Mountains to mitigate ground disturbance impacts.

Although the BLM and Company were in agreement regarding the alignment through the Goshen Valley, Tintic Mountains, and southern Rush Valley in both Utah and Tooele Counties, the BLM subsequently requested that the Company consider minor alignment adjustments to better utilize existing roads for construction and long-term operation, and minimize environmental impacts through the area. The Company and BLM discussed issues associated with the adjustments regarding reducing environmental impacts and increasing costs to the Project. The Company evaluated the proposed changes against its siting criteria and accepted the BLM's proposed alignment.

Limber to Oquirrh

In the Tooele Valley, both the BLM preferred route and the Company's proposed route were in alignment with the exception of a small section associated with the North Oquirrh Management Area. The BLM has stated that it would not approve the new 345 kV line through the North Oquirrh Management Area because the Project does not comply with the agency's management plan for the area. The Company evaluated the proposed changes against its siting criteria and accepted the BLM's proposed alignment.

In Salt Lake County, the Company's proposed route in the Draft EIS crossed the foothills west of State Route 111 and paralleled an existing 138 kV line in Bingham Creek to interconnect with the Oquirrh substation. The BLM's preferred route paralleled the existing 138 kV line adjacent to SR 111 and then paralleled Old Bingham Highway into the Oquirrh substation. Based on discussions with West Jordan City and South Jordan City in the late summer/early fall of 2009, and after review of the Company's siting criteria, the Company modified its proposed route to match the BLM's preferred route in this area.

Q: How did the BLM first inform the public of the Company's proposed route, the BLM's preferred route, and alternative routes?

A: The BLM and U.S. Environmental Protection Agency each published a Notice of Availability of the Draft EIS for public review and comment in the Federal Register on May 15, 2009, which initiated a 90-day public comment period. The Company's proposed route, the BLM's preferred route and the alternative routes were contained in the Draft EIS. More than 50 hard copies and 200 electronic copies of the Draft EIS were distributed in May 2009 to federal agencies; tribal, state, and local governments; organizations; and individuals. The availability of the Draft EIS, deadline for public comments, and locations, dates, and times of public meetings on the Draft EIS were announced in paid newspaper legal notices, paid newspaper advertisements, and newsletters that were mailed out to affected property owners, agencies, and stakeholders.

The BLM held three public meetings in June 2009, one each in Tooele, Magna, and Nephi, Utah, to provide information and solicit public comments on the proposed Project and the Draft EIS. These meetings were held a month before the Draft EIS public comment period closed. The public comment period closed on August 12, 2009.

Q: Did the Company perform any additional notifications to the public regarding the Draft EIS?

A: Yes. The Company posted a basic description of the Project on their company communications website (www.pacificorp.com/transmission) and met with elected federal, state, and local officials to brief them on the purpose of the Project.

Also, the Company identified all landowners within the two-mile-wide corridors for the proposed and alternative routes analyzed in the Draft EIS. A Company newsletter was mailed to nearly 10,000 property owners and others informing them on the status of the Project and inviting them to a series of three landowner meetings hosted by the Company in Tooele, West Jordan and Nephi. Those meetings were conducted in June 2009, following the release of the Draft EIS by the BLM. The purpose of the meetings was to inform the public about the Project and address concerns from impacted landowners. These meetings were held almost two months before the Draft EIS public comment period closed.

Q: After the issuance of the Draft EIS, were any additional meetings held on the Limber to Oquirrh alignment with community leaders and other key stakeholders?

A: Yes. Additional meetings were held with community leaders and other key stakeholders including the Tooele County Commissioners and the County Planning Director, along with the Mayor and the Director of Public Works of Tooele City. Additional meetings were also held with leaders and representatives from Salt Lake City, Salt Lake County, South Jordan City, West Jordan City, Kennecott Land, and Kennecott Utah Copper.

Q: What feedback was received from Tooele County, other communities and the public in response to the proposed route between the Limber Substation and the Oquirrh Substation?

A: General comments from the public and communities acknowledged and supported the need for the new transmission lines and other portions of the Project. However, the feedback received was negative toward the transmission line route along the southern part of the Tooele Valley and along the east bench. Those in opposition to the alignment along the southern portion of the Tooele Valley suggested that the line be constructed in other locations, as discussed in more detail later in this testimony.

Q: What did the Company do to address the opposition expressed by the communities?

A: The Company convened and facilitated three conflict resolution meetings in August and September 2009 with key stakeholders who had commented on the Draft EIS. The meetings included staff and elected officials from Tooele County, Tooele City and Grantsville, as well as other interested parties. The purpose of the conflict resolution meetings was to determine if there were any alternate routes supported by the key stakeholders that would fulfill the Company's siting and system criteria, and engineering/design factors for the proposed Limber to Oquirrh transmission line segment.

Q: Please describe the alternative routes proposed by the conflict resolution members.

A: In order to describe the routes, I will break the alternatives proposed into the following four categories: (1) the "Railroad Routes" *See* Exhibit BDS-7.1 (Map of Railroad Routes), (2) the "the Army Depot Routes" *See* Exhibit BDS-7.2 (Map of Army Depot Routes), (3) the "Silcox Canyon Route" *See* Exhibit BDS-7.3 (Map of Silcox Canyon Route), and (4) the "Grantsville Route", which required the relocation of the future Limber substation. *See* Exhibit BDS-7.4 (Map of Grantsville Route – Option 1) and Exhibit BDS-7.5 (Map of Grantsville Route – Option 2). Each of the attached exhibits depict the alternative routes considered within each of the categories.

Q: Did the Company analyze the proposed alternative routes?

A: Yes. All routes proposed by the communities were analyzed for general environmental issues, constructability, reliability, safety, impact to permitting and NEPA schedule, and cost.

Q: Were any of the Railroad Routes and the Army Depot Routes ultimately deemed acceptable?

A: No. Grantsville residents opposed the Army Depot Route segment along the north edge of the Tooele Army Depot due to its proximity to residential developments. *See* Exhibit BDS-7.2 (Map of Army Depot Routes)

Tooele City initially stated that a route through Tooele City would be preferred over the Company's proposed route along the southern part of the Tooele Valley. *See* Exhibit BDS-7.1 (Map of Railroad Routes). Based on this representation, the Company conducted a more detailed analysis of these routes, which included discussions and input from other landowners along the alignment.

At the time of the third conflict resolution meeting, although the Company had not completed its full siting and system criteria analysis, the Company shared its preliminary findings relative to the constructability of all of the Railroad and Army Depot Routes. These findings indicated that all of these routes were constructable. However, during that meeting, Tooele City changed its prior position, stating that it would not agree to *any* route through the Tooele City limits.

Q: Was the Silcox Canyon Route deemed acceptable?

A: No. Both the Company and the BLM deemed the route unacceptable.

The Company's analysis of the siting and system criteria demonstrated that the high elevation of 9,500 feet and the line location would require additional engineering and construction techniques that would create a larger impact to maintenance, cost, and the environment when compared to the proposed route. *See* Exhibit BDS-7.3 (Map of Silcox

Canyon Route). The route would require more extensive access roads, larger structures, and more advanced equipment, and would eliminate the potential use of helicopter construction of the tubular steel towers at the high elevation. In addition, long-term maintenance of the line would be impacted due to limited access and exposure to extreme weather, and the environmental impact would increase due to the route requiring more extensive access roads.

In addition, the BLM deemed the route unacceptable due to the increased environmental impacts resulting from the extensive access roads required, wildlife habitat fragmentation, and vegetation clearing.

Q: Was the Grantsville Route deemed acceptable?

A: No. Initially, the communities proposed a route placing both the Limber to Terminal and Limber to Oquirrh double-circuit 345 kV lines north out of the proposed future Limber substation, west of Grantsville, then east through Lakepoint and around the north end of the Oquirrh Mountain range into the Salt Lake Valley, with one line proceeding to Terminal substation and the second line turning south to Oquirrh substation. The alignment is constrained by the I-80 corridor, the Great Salt Lake, the Tooele Valley Airport to the south, two existing single-circuit 138 kV lines and several lower voltage lines, railroad lines, and the Kennecott Copper Operations. Based on the Company's analysis of these constraints, it was determined that there is not a sufficient corridor to construct and operate two double-circuit 345 kV transmission lines in this area.

As a result of the Company's deeming the initial Grantsville route as unacceptable, the conflict resolution stakeholders modified the initial route to relocate one of the 345 kV lines to the southeast near Stansbury and continue through the Carr-Fork WMA to Pole Canyon. This route was also constrained by the I-80 corridor, the Great Salt Lake, and the Tooele Valley Airport to the south. The modified route also proposed two alternatives locations for the future Limber substation location. A summary of the proposed, modified Grantsville Routes and substation locations is provided below.

Option 1 - *See* Exhibit BDS-7.4 (Map of Grantsville Route – Option 1).

The Company's siting and system criteria analysis and engineering/design criteria of the Option 1 transmission route determined the route would require (1) an additional 15.5 miles of 500 kV transmission line, (2) an overall increase of 1.5 miles associated with the Limber to Oquirrh and Limber to Terminal 345 kV double-circuit line lengths, and (3) alternative engineering techniques to address corrosive and unstable soil conditions requiring larger transmission structure foundations. These adjustments resulted in estimated increased cost to the Project of up to $9.1 million.

Based on the Company's siting and system criteria analysis and engineering/design factors for the substation location, Option 1 was also deemed unacceptable to the Company due to the need for substantially larger foundations and alternative engineering techniques for the substation due to soil types. The soil conditions would require alternative engineering techniques with respect to unstable and corrosive soils, and the high water table associated with this route. The alternative engineering techniques would consist of larger foundations for the substation, protective coatings, and extensive backfill of more stable soils for the substation, resulting in approximately $43 million of additional cost.

The proposed, modified transmission line route would require both the Limber-Oquirrh and the future Limber-Terminal double-circuit 345 kV lines to be constructed in close proximity with a minimum 1,000-foot separation for approximately 8 – 10 miles, depending on the substation location. As a result these proposed route options do not meet the Company's siting and system criteria.

Option 2 - *See* Exhibit BDS-7.5 (Map of Grantsville Route – Option 2)

The Company's siting and system criteria analysis and engineering/design factors of the Option 2 transmission route determined the route would require (1) an additional 8.75 miles of the 500 kV transmission line, (2) an overall increase of 17 miles associated with the Limber to Oquirrh and Limber to Terminal 345 kV double-circuit line lengths, and (3) alternative engineering techniques due to corrosive and unstable soil conditions

requiring larger transmission structure foundations. These adjustments have been estimated to increase the Project costs up to $35.4 million.

The proposed, modified transmission line route would require both the Limber-Oquirrh and the future Limber-Terminal double-circuit 345 kV lines to be constructed in close proximity with a minimum 1,000-foot separation for approximately 15 – 17 miles, depending on the substation location. As a result these proposed route options do not meet the Company's siting and system criteria and engineering/design factors.

In summary, the Grantsville Route was deemed unacceptable to the Company based on its siting and system criteria analysis and engineering/design factors.

Q: During this process, did the Company exhaust all of the proposed alternative routes proposed by the communities and key stakeholders?

A. Yes. The Company reviewed all proposed alternatives advanced by the communities and the key stakeholders. However, no alternative was found to be acceptable to all parties involved.

Q. Although the alternative routes identified through the conflict resolution meetings were found to be unacceptable, did the Company make adjustments to the Company's proposed route between the future Limber Substation and the existing Oquirrh Substation?

A: Yes. Based on public and community comments, specific adjustments on the proposed route between future Limber and existing Oquirrh included refinements to move the line further south away from residences in the foothills south of Tooele City, to minimize visual impacts, to avoid crossing future gravel operations, and to relocate the crossing of the Settlement Canyon Reservoir.

Q: Were the adjustments made by the Company deemed acceptable by Tooele County and City?

A: Yes, in part. The adjustments were based on input from the public, Tooele City and Tooele County, and therefore were considered positive improvements to the proposed route. However, despite the adjustments, the communities maintained their opposition to any route alignment along the south and east sides of Tooele City.

Q: What is the current status with regards to obtaining the necessary permits from local government entities?

A: The Company obtained approval from all local land use authorities (South Jordan, West Jordan and Utah County) for its conditional use permits, with the exception of Tooele County.

In Tooele County, it was first necessary to seek a text amendment to the county ordinances and then a conditional use permit. The Company made a formal request on November 6, 2009 that Tooele County amend its ordinances to allow for transmission lines and substations within all zones within Tooele County. The text amendment was approved on February 2, 2010. The Company submitted the conditional use permit application for the Company's proposed route to the Tooele County Planning Commission on December 10, 2009. On February 3, 2010, the Planning Commission tabled a decision based on a request for additional clarifying information before making a decision. The Tooele County Planning staff recommended that the conditional use permit be approved subject to 22 express mitigation conditions. On March 3, 2010, the Company agreed to comply with all 22 conditions. Notwithstanding the Company's commitment, the Planning Commission denied the application based on the finding that the Company did not meet its burden to mitigate the impacts. *See* Exhibit BDS-8 (Planning Commission Finding of Fact). The Company appealed the Planning Commission's decision to the Tooele County Commission. On March 30, 2010, the Tooele County Commission denied the application.

Q: What is the effect of Tooele County's denial of the conditional use permit?

A: The Company is a public electric utility regulated by the Public Service Commission of the state of Utah. Under Utah Code Annotated § 54-3-1, the Company has an affirmative legal duty to "furnish, provide and maintain such service, instrumentalities, equipment and facilities as will promote the safety, health, comfort and convenience of its patrons, employees and the public, and as will be in all respects adequate, efficient, just and reasonable."

Through its denial of the conditional use permit application, Tooele County has prohibited the Company's ability to construct the Project, which is needed to provide safe, reliable, adequate, and efficient service to its Customers. Tooele County has acknowledged the need for the Project, but opposes the proposed alignment of the transmission line route along the south and east sides of Tooele City. In denying the conditional use permit, the County made clear its preference that the Company's proposed route be abandoned and that the Company pursue an alternative route. However, as outlined in this testimony, all of the alternative routes identified by the conflict resolution stakeholders were deemed unacceptable by the communities, or the Company, which determined that the alternatives did not meet the siting and system criteria and would not satisfy the Company's obligation to provide safe, reliable, adequate and efficient service to its Customers.

Q: If the communities now deemed the Railroad and Army Depot Route alternatives to be acceptable, would the Company deem these alternatives acceptable?

A: No. Although the Company's preliminary findings deemed these alternatives routes as constructable, the permitting lead times associated with the Federal Aviation Administration and the Tooele Army Depot (Department of Defense), as well as potential adverse impacts to the ongoing NEPA permitting process render these alternatives unacceptable to the Company based on our ability to complete this Project. As Mr. Gerrard testified, the Project must be constructed and in service by June 2013.

Q: Would the Company accept any modifications to the transmission line route that was proposed by the Company in its conditional use permit application?

A: Yes. Provided that the modified line route is within the Company's proposed transmission line corridor, as shown in Exhibit BDS-9.1 (Company's Approved Transmission Line Corridor – Limber South) and Exhibit BDS-9.2 (Company's Approved Transmission Line Corridor – Limber East).

Q: What relief are you seeking from the Utility Facility Review Board?

A: The Company requests the Board:

(1) Find that the Project and the Company's proposed route as identified in the conditional use permit application, which was denied by Tooele County on March 30, 2010, is necessary in order for the Company to provide safe, reliable, adequate and efficient service to its Customers;

(2) Require Tooele County to approve a conditional use permit for the Mona to Oquirrh a transmission line to be located within the Company's proposed transmission corridor as specified in my testimony. *See* Exhibit BDS-9.1 (Company's Approved Transmission Line Corridor – Limber South) and Exhibit BDS-9.2 (Company's Approved Transmission Line Corridor – Limber East); and require the County, in defining the transmission centerline within the corridor, minimize the number of angles or corners by using straight lines wherever possible in order to reduce the number of large corner structures and foundations, mitigate construction and environmental impacts, and assure a cost efficient solution for the Company's Customers; and

(3) Require the County approve a conditional use permit consistent with the Board's findings within 60 days following the decision of the Board.

Q: Does this conclude your direct testimony?

A: Yes.

EXHIBITS TO DIRECT TESTIMONY OF BRANDON D. SMITH

EXHIBIT BDS-1:	Map of Feasibility Study Area Boundary
EXHIBIT BDS-2:	Map of Potential Corridors and Substation Siting Areas
EXHIBIT BDS-3:	Map of Potential Corridors and Substation Siting Areas - Recommended for Elimination
EXHIBIT BDS-4:	BLM Public Scoping Map of Project – Potential Transmission Line Corridors and Substation Siting Areas
EXHIBIT BDS-5:	BLM Map of Alternative Routes and Substation Sites Considered and Eliminated
EXHIBIT BDS-6:	Proponent's Proposed Route and Alternative Routes
EXHIBIT BDS-7.1:	Map of Railroad Routes
EXHIBIT BDS-7.2:	Map of Army Depot Routes
EXHIBIT BDS-7.3:	Map of Silcox Canyon Route
EXHIBIT BDS-7.4:	Map of Grantsville Route – Option 1
EXHIBIT BDS-7.5:	Map of Grantsville Route – Option 2
EXHIBIT BDS -8	Planning Commission Finding of Fact
EXHIBIT BDS-9.1	Company's Approved Transmission Line Corridor – Limber South
EXHIBIT BDS-9.2	Company's Approved Transmission Line Corridor – Limber East