From:	corridoreiswebmaster@anl.gov
To:	Corridoreisarchives;
CC:	
Subject:	Energy Corridor Programmatic EIS Comment 80051
Date:	Monday, November 28, 2005 3:11:41 PM
Attachments:	Nevada_Power_Company_and_Sierra_Pacific_Comments_80051.pdf

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Thank you for your comment, Paul Schmidt.

The comment tracking number that has been assigned to your comment is 80051. Please refer to the tracking number in all correspondence relating to this comment.

Comment Date: November 28, 2005 03:11:33PM CDT

Energy Corridor Programmatic EIS Scoping Comment: 80051

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Attachment: C:\Documents and Settings\ps2234\Desktop\Nevada Power Company and Sierra Pacific Comments.pdf

Comment Submitted:
Nevada Power Company and Sierra Pacific Power Company comments on the Department of Interior / Department of Energy request for comments relating to the Energy Policy Act 0f 2005, Section 368, regarding the proposed Programmatic Environmental Impact Statement (PEIS)attached.

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.

Nevada Power Company and Sierra Pacific Power Company comments on the Department of Interior / Department of Energy request for comments relating to the Energy Policy Act 0f 2005, Section 368, regarding the proposed Programmatic Environmental Impact Statement (PEIS)

November 28, 2005

Introduction

Sierra Pacific Resources is the investor-owned holding company for Sierra Pacific Power Company and Nevada Power Company ("The Companies"). The Companies provide electricity to over 1 million electric customers throughout Nevada and in northeastern California. Among the many communities served are Las Vegas, Reno-Sparks, Henderson, Carson City, Elko and South Lake Tahoe. Sierra Pacific Power also provides natural gas to over 120,000 customers in the Reno-Sparks area. The Companies have two distinct Control Areas with a combined service territory of 54,500 square miles – approximately the size of the State of New York. Of the total 109,788 square miles of geographic area within the State of Nevada, 82.9% is federally controlled.[1]

In the last 7 years, the Companies have constructed 100 miles of 230 kV, 350 Miles of 345 kV, and 40 Miles of 500 kV transmission lines. There are an additional 30 miles of 345 kV (2008) and 60 miles of 500 kV (2007) approved by the Public Utilities Commission of Nevada (the "PUCN"). The Companies have built interconnections for ~4000 MW of IPP generation in the last five years. These numbers reflect a doubling of the transmission capacity and a ~71% increase in total interconnected generation. An additional 1280 MW of generation is scheduled for commercial operation in the second quarter of 2006, raising the generation increase to 97%.

[1] Source: USDI. Bureau of Land Management. Public Land Statistics 1999. Washington, D.C. March 2000

The Companies are highly versed in Federal, State and Local siting processes and greatly appreciate this opportunity to provide comments within this process.

The Companies' comments are divided into seven major sections. These sections are as follows:

1. Comments on process
2. Comments on scope
3. Comments on participation
4. Corridor specific comments
5. Comments on technical issues
6. Comments on process deliverables
7. Companies' recommended corridors

The Companies request the following specific outcomes from this process:

- No negative effects on existing projects or processes
- Flexibility to refine this EPAct PEIS project and its processes going forward
- Merit based corridor screening for inclusion in the PEIS
- Inclusion of all critical parties (federal, state, local)
- Access for corridors on military reservation and national forests
- 2 mile wide corridors
- Deference to national and/or regional councils on electrical reliability and engineering design issues related to corridors
- Existing Right of Way grants would become easements for any disposal action
- Environmental Assessment and COM plan would be the maximum required to site in a designated EPAct corridor
- First in Time priority should be established for competing requests or new projects requiring mitigation on existing projects
- Consideration of The Companies' specified corridors for inclusion in the EPAct PEIS evaluation

1. Comments on process

The EPAct of 2005 PEIS should supplement the existing permitting processes

The PEIS process should attempt to maximize benefit by selecting the most significant corridors for study. The resulting ability to pre-screen some of the likely future corridors and have a significant portion of the permitting completed represents a significant step forward. However, this process should be explicit in stating it is not the intent to funnel all future projects into these corridors or be used to block other corridors not designated in this process. The existing permitting processes and the ability of a user to attempt to permit a corridor not identified in this new process should not be affected by this effort.

Minimize interaction with projects and corridors currently being permitted

The Companies believe it is important for this effort to avoid attempts to link it to existing permitting processes. While we think it is useful and required that existing data be used to supplement the EPAct PEIS process, it would be counterproductive to force projects into this process.

Evolutionary effort with flexibility

Because of the fluid nature of growth, consumption patterns, and competing interests, this process should contain enough flexibility to allow some modification of plans without the need for complete revisions of corridor studies.

To this end, the process should provide for well defined procedures to revisit and/or alter the Land Use Plans for expansion or renewal.

Resource and load viability must play critical roles in corridor selection

The federally designated corridors will be used for specific future generation-to-load projects. The problem with this is that these are future projects without specific locations or sizes. Sufficient numbers of corridors should be defined to provide developers options to develop the best economical project and to serve the projected load growth. New generation potential estimated in, the Rocky Mountain Area Transmission Study was 7,800 MW, the Northwest Transmission Assessment Committee studies (less the Montana estimates) was 21,500 MW, and Nevada has about 4,000 MW. If each corridor has two 500 kV lines, AC or DC, 6 corridors may be needed to transfer the generation to loads. Load estimates in 2014 in California, Southern Nevada, and Arizona show 25,000 MW of projected growth or the equivalent of 5 new corridors by 2014 if generation is sited remotely from the load. The California Energy Commission stated at the PEIS scoping meeting in Sacramento that the California Independent System Operator (CAISO) load alone is expected to grow by 25,000 MW over the next 20 years which includes a 10,000 MW renewable requirement. All together, 3 or 4 corridors may be required to Northern California (NP15) load centers, 2 or 3 to Southern California (SP15) load centers, and 2 or 3 to Southern Nevada and Arizona Load centers.

Evaluation and Selection of Corridors to be considered under this PEIS should be based on merit

The projects evaluated for inclusion in this process should be weighted against one another based on economic benefit, scale, cost, likelihood of construction, and environmental impact. Previously identified future line routes, created through various processes, should be considered along with corridors requested by state agencies and in utility comments under this process. A quantitative screening matrix and methodology for evaluation of which corridor to study should be developed and utilized to prevent “gaming” of this study.

The corridors should be geographically diverse to prevent a single event from affecting multiple corridors. The corridors should be defined with the flexibility to include as many potential generation projects as possible.

2. Comments on Scope

Federal vs. Private Land Impact

The designation of corridors under this process is limited to federal land, but the corridor routes may have several path options which could include more or less federal land. Because the corridors are mainly for regional projects, use of federal land is very appropriate and the routes should avoid or minimize impact to non-federal land where possible. Some analysis of privately held sections of studied corridors should be undertaken in close coordination with state and local agencies. This will assist in creating usable corridors that have been screened not only across the federal properties but also for state and private fatal flaws.

Local versus Regional

While initial efforts should be directed towards regionally significant projects, such projects should not be pursued to the exclusion of local and sub-regional projects. A regional emphasis will maximize the near term benefits of this effort. However, there may be projects of a highly localized nature that provide great regional or local economic or reliability benefits. If these projects show high benefit they should be included. This will optimize the total effort.

Access to National forests and military reservations

The extent to which the United States Forest Service and Department of Defense allow facilities to cross or abut national forests and military reservations will have a significant impact on the corridor designation in the State of Nevada. It would be highly beneficial if there is access to corridors across these classifications of land.

3. Comments on participation

Coordination within Federal Agencies

It is crucial that all federal agencies with permitting and/or siting authority agree and endorse both the methodologies to be used in this process and the resultant products, procedures, and policies.

State Involvement

We recommend that each state government energy office and/or state utility regulatory body with jurisdiction over project siting be involved in the selection of corridors within their state.

In our experience, it has been highly beneficial to have the state agencies well informed early in the process of our future plans. While these plans at times do not match the State's perceptions of how tasks are best accomplished, their involvement has always ultimately been beneficial.

4. Corridor specific comments

Corridor Requirements

The federally designated corridors should not be for specific projects, but should provide efficient opportunities for future projects. The width of the corridors should not be less than 2 miles, but terrain constraints, existing utilities, and existing rights will probably reduce some parts of these designated corridors. The minimum width of a major regional corridor defined by this process should be sufficient for safe construction and operation of two 500 kV transmission lines. In the case of a major corridor which has existing line within it, the designated corridor should allow for two additional 500 kV transmission lines. Moreover, the siting of facilities within the corridor should be coordinated to maximize its use for future purposes, e.g., a single line should not be allowed to meander throughout the corridor to minimize costs as it could reduce the remaining availability of the corridor for future facilities.

Right of Way spacing

As discussed above, the corridors in this PEIS should have a minimum width of 2 miles. This is seen by the Companies as the minimum that would still allow for multiple facilities while providing siting flexibility for the various rights of way. In some cases terrain or other impediments will impede adequate line spacing. In those cases, the spacing may be reduced but should never be less then the total height of the tallest transmission line structure. This is to prevent "toppling" of one structure into a parallel line's structures in the event of a structure failure.

Criteria for line spacing will be developed jointly with other regional organizations (i.e. WUG, WECC, etc.) Criteria for line spacing will be based upon probable events and severity of those events for the existing and proposed conditions within the corridor.

5. Comments on technical issues

Electrical design issues

The Companies want the agencies undertaking this process to be informed that there are significant technical issues that arise from parallel electrical and pipeline or electrical facilities. A limited list is given below. These issues affect the transmission reliability and public safety. They are for the most part, a function of proximity of the facilities.

1. Multiple use corridors' require Voltage/Current induction, cathodic protection, and grounding studies stipulated for pipeline/cable/overhead transmission multiple-use corridors;
2. Mutual impedance, breaker re-strike, and fault duty studies stipulated for overhead transmission multiple-use corridors;
3. Joint development (WUG, WECC, DOE) of spacing criteria based upon probable event and severity of result if such event occurs;

Compatible Uses

The following are uses that in the past have been seen as compatible with transmission facilities:

Parks;
Camping;
Hiking;
Hunting;
Boating and Fishing;
Off road recreational vehicle use, year round;
Trail systems – horse, walking, Off Highway Vehicle
Farming and irrigation;
Ranching;
Roads and highways;
Railways;
Wildlife;
Pipelines;

Other electric transmission and distribution lines.

Facilities that are compatible must still meet the separation requirements and any other requirements to ensure reliability, security and safety.

Incompatible Uses

The Companies consider the following uses to be incompatible with transmission facilities:

Residential or commercial developments (permanent structures) on the right of way;
Gravel pits or industrial plants and processes that can contaminate the transmission facilities;
Storage of combustible materials.

6. Comments on process deliverables

Planning Horizon / PEIS Corridor lifespan

It has been suggested that a 6-10 year planning horizon be used for this project and the defined corridors may have a useful lifespan of 20 years. While The Companies understand the basis for this, we would like to clarify that the sequencing of each individual facility affects both the scope and timing of other projects. As such, it is crucial that this process not be damaged by self-imposed time constraints. Additionally, it is common for transmission lines to take 5 or more years from concept to energization. Because of this, The Companies think this process should have a planning horizon of at least ten years to allow for the second generation of projects to utilize this study. No corridor designation lifespan should be established. However, a process to remove corridor status for unused corridors should be established in these EPAct PEIS resultant processes.

Corridor Preservation

It is critical that the corridors be established in a way that assures developers that they will be usable in the future for construction. Land sales or transfers or reclassifications should not remove or diminish the corridors future use. Land Use Plan revisions should encompass a process that would protect corridors from disposal in future land sales. In designated corridors, existing right of way grants would revert to easements during disposal actions.

Resulting Post-PEIS permitting processes

Lines in Corridors

With the completion of the PEIS, individual right of way grants should only require an Environmental Assessment (EA) and an approved Construction, operation and Maintenance (COM) plan. The EA and COM plan will cover project specific impacts not covered in the PEIS, and will document construction details. The PEIS should identify the specific required studies and protocols, the agency review timelines and requirements by all involved federal and cooperating agencies for processing right of way grants.

Placement of any line in a corridor should not prevent the goal of at least two 500 kV lines from being constructed within that corridor. The first right of way granted in the corridor should have prior and superior rights for placement of facilities and roads, and must determine placement allowing for future uses and access unless the development is not actively pursuing the easement.

Applicants shall be responsible for determining and mitigating impacts on facilities with prior rights. Examples include but are not limited to:

- Overhead Transmission Lines: Mutual impedance, electromagnetic transients, fault duty, etc.

- Underground pipe or cable: Induced current, cathodic protection, grounding, etc.

Lines not in Corridors

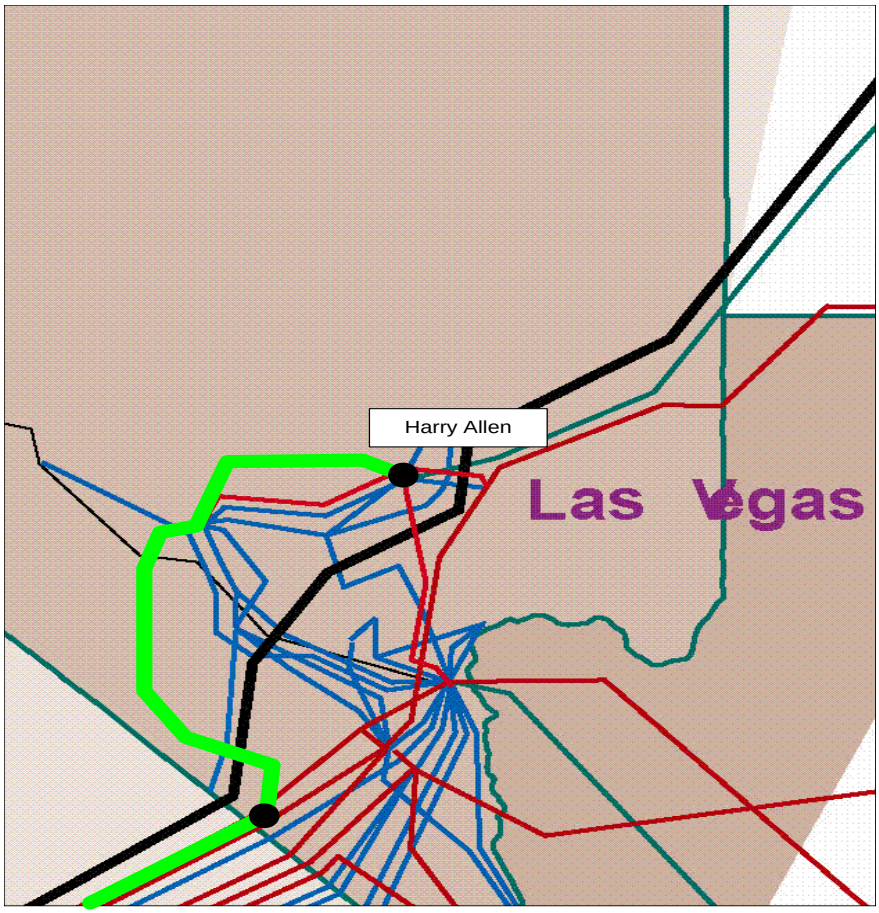
Even with the establishment of federally designated corridors, some line construction will be required on federal land outside of the corridors. The establishment of the corridors should not impede or raise the standard to permit, construct, or operate projects where use of a new or existing designated corridor is not economical or practical.

7. Companies' recommended corridors

Nevada Power and Sierra Pacific Power are two of the fastest growing utilities in the United States. Both companies have aggressive transmission and generation development programs for both themselves and Open Access Transmission Tariff customers. Additionally, Nevada is located between most of the identified new resources and the likely loads in many of the proposed regional projects. For these reasons, the corridors team should carefully study Nevada to optimize internal and regional benefits.

Sunrise corridor alternative

After the Companies planned 500 kV line construction in the existing Sunrise corridor (which includes the IPP 500 kV DC and the Navajo 500 kV transmission line), it will be doubtful if any additional lines can be constructed. Given this problem, a new corridor around the Las Vegas area to the west should be selected for analysis in this process. Generally the corridor would be from Harry Allen west to Pahrump, then south around Red Rock, and then back to the Eldorado Valley or on to Los Angeles. The existing Sunrise Corridor to the East of Las Vegas represents a significant "choke point" for many major, announced projects that intend on making deliveries to California or Arizona via the existing Southwest Intertie Project (SWIP) corridor.

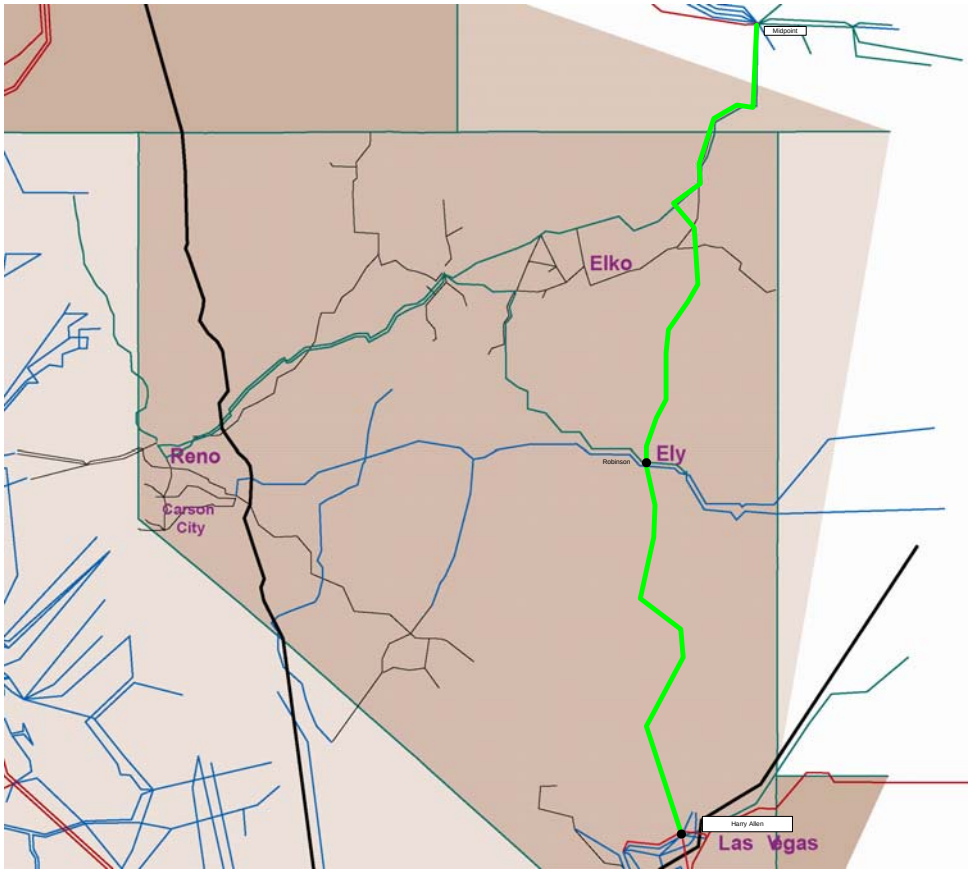


Harry Allen - Northwest - Jean - LA (about 100 miles from Harry Allen to the Ca-NV state line)

This corridor segment starts at NPC Harry Allen substation and runs west (north of Las Vegas), then SW near the NPC Northwest substation, then west along highway 157, then SW near Lovell Summit, then south along the western side of the national forest, then SE near Nevada SR 53 past Goodsprings and Jean, then South along the rail road to the existing 500 kV lines, then to LA.

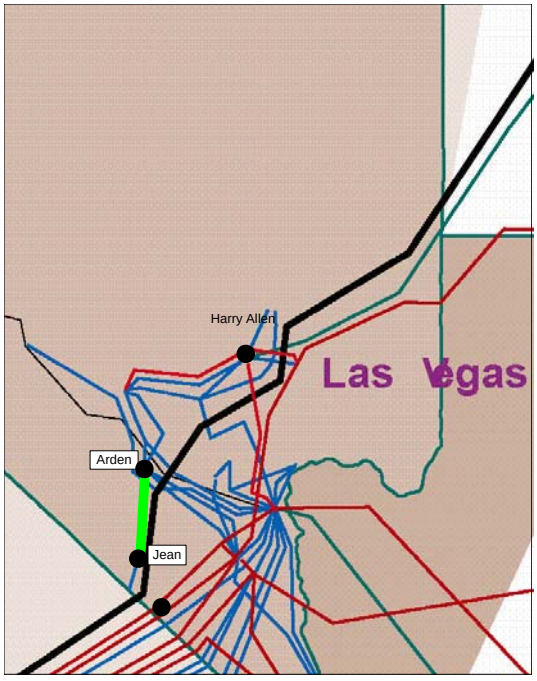
Widen SWIP corridor to 2+ miles

There are portions of the existing SWIP corridor that are not as wide as the company recommended in the definition of a corridor. It is less than 2 miles wide for significant portions of the corridor – particularly along the southern half. Because of the extensive interest in this particular corridor, as part of this process, this corridor should be widened.



Jean – Arden Corridor

In order to provide additional access into and out of the Las Vegas Valley for Nevada Power Company, Independent Power Producers, Retail Access loads, and other transmission dependent utilities within Nevada Power's Control Area, future secure corridors are needed. This corridor is in a federally controlled environment and would be highly beneficial to the listed customers.



Jean - Arden (about 17 miles)

This corridor segment starts at NPC Jean substation and runs north to NPC Arden substation following existing 230 kV and 69 kV lines.

Ft. Churchill – Emma

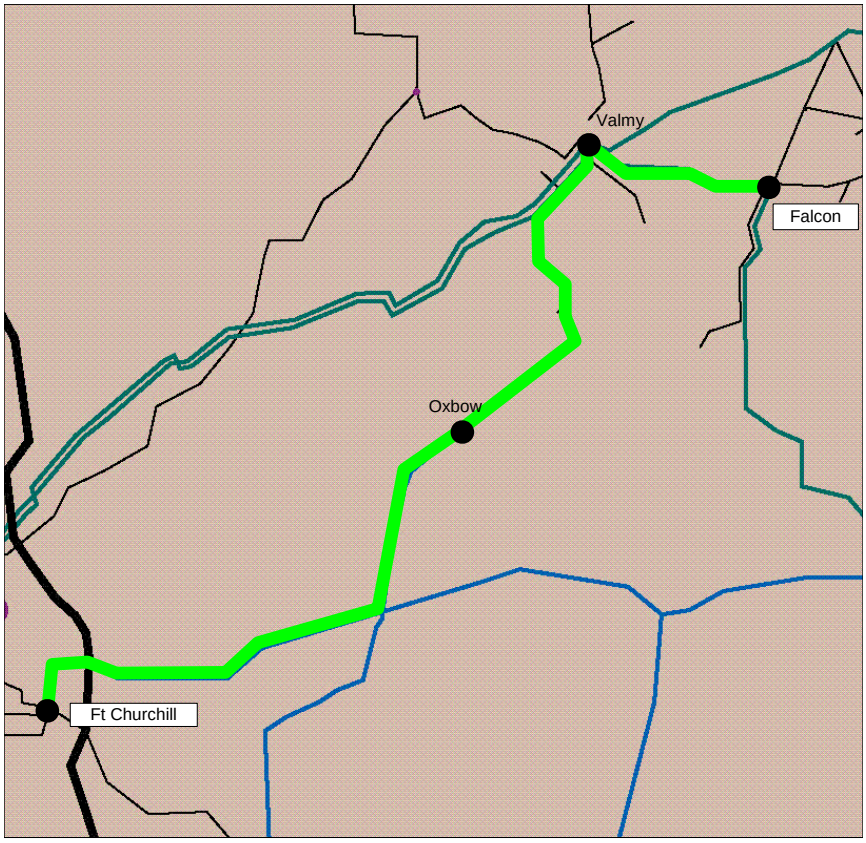
Given the electric, water and transportation resources in proximity to the existing Ft. Churchill site, this is a good location for the siting of new coal based thermal resources. In order to provide access to Sierra Pacific and California Markets, a corridor should be established between this location and the existing Sierra Pacific transmission grid.

Ft Churchill - Emma (about 30 miles)

This corridor segment starts at SPP Ft Churchill substation and runs NW (along the existing SPP Ft Churchill to Steamboat, 120 kV line) to the SPP Emma substation

Falcon – Ft. Churchill

In order to move new generation resources from Northeastern Nevada into Western Nevada or Northern California, reinforcement of the bulk transmission grid is needed. Previous studies have identified this corridor as a likely option to allow for this generation development. Both generation expansion at Valmy, Oxbow, and at Gonder are facilitated by this corridor.

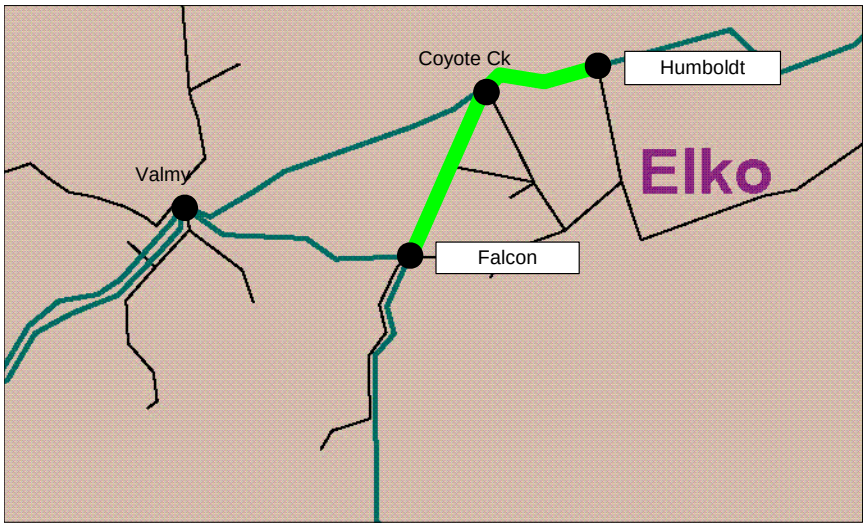


Falcon - Ft Churchill (about 226 miles)

This Corridor segment is from SPP Falcon substation, then west to Valmy along the existing SPP Falcon to Valmy, 345 kV line, then south along the SPP Valmy to Cove, 120 kV line, then SW to Oxbow substation, then south along the Oxbow 230 kV line, then west along the SPP 230 kV line to Ft Churchill

Falcon – Humboldt

This corridor allows for lines to be constructed that transmit energy between Sierra Pacific and Idaho and/or Utah. Additionally, these lines would reinforce the system to allow for more generation to be reliably sited in Northeastern Nevada.

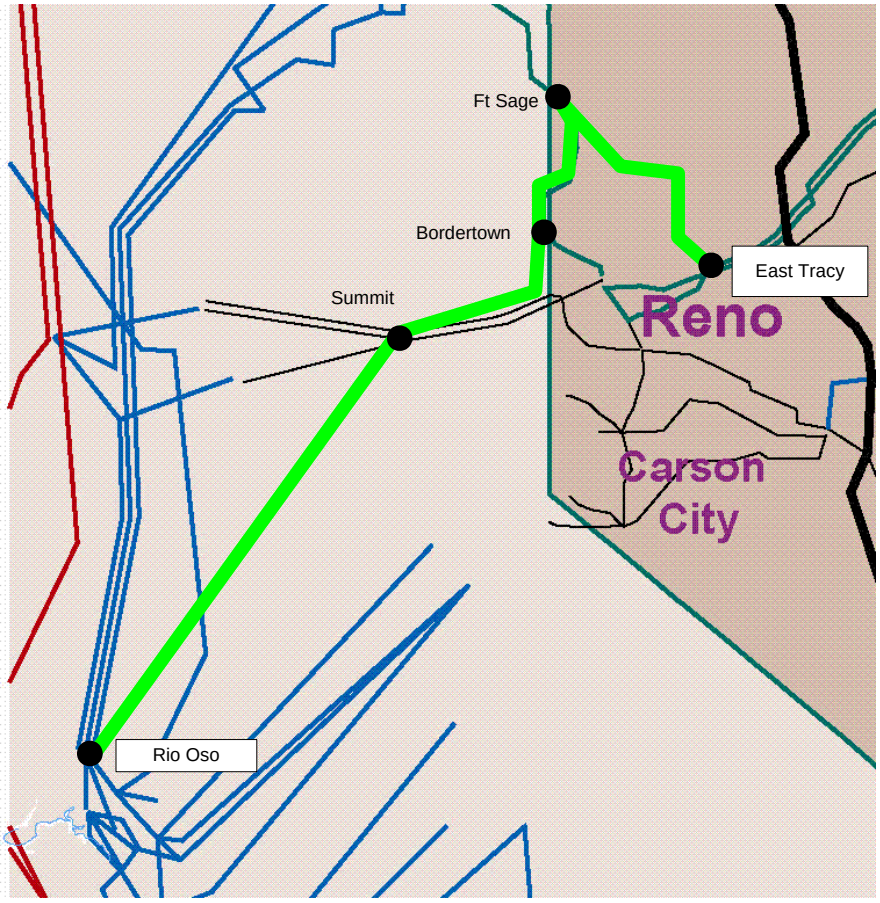


Falcon - Humboldt (about 51 miles)

This corridor segment starts at SPP Falcon substation and runs north along the existing SPP Falcon to Bell, 120 kV line, past SPP Bell substation along the existing SPP Bell to Coyote, 120 kV line, to near Coyote Creek substation, then east along the existing SPP Coyote to Humboldt, 345 kV line to the SPP Humboldt substation.

Tracy – Fort Sage – Summit – Rio Oso

The Tracy – Rio Oso corridor is useful to re-establish the Northern Nevada to Northern California interconnection. Although there is an existing 120 kV interconnection, it has not been upgraded to match both systems load growth and as such is of limited use. A new corridor into Northern California markets would be beneficial for both for economic and reliability reasons.



Tracy - Rio Oso (about 175 miles)

This Corridor section starts at SPP East Tracy substation, northwest to the proposed SPP Ft Sage substation, then south along the existing SPP Hilltop to Bordertown, 345 kV line near the SPP Bordertown substation, then south to the existing SPP California to North Truckee, 120 kV line, then west along the SPP California to North Truckee line, then west along the SPP California to Summit line to near the SPP/PGE Summit switching station, then SW along exiting PG&E 115 kV lines past the PG&E Drum substation to the PG&E Rio Oso substation.

Regionally suggested corridors

The Companies are providing the following map to show what corridors – in general – the Companies think are viable to provide the likely service needs for the loads and resources that are being projected regionally. The Companies focused on lines that affected Nevada. This is not intended to be a comprehensive view outside of this state. This map is only provided for discussion.

Dave Johnson - Mona – IPP – Robinson – Ft Churchill – Tesla Corridor

This corridor is from Mona substation, Utah to Tesla substation, California and is about 1,145 miles long. This corridor follows existing 230 kV, 120 kV, and 115 kV transmission lines for about 1,070 miles of the total length or 93%.

Dave Johnson - Midpoint – Valmy – Rio Oso – Vaca Dixon Corridor

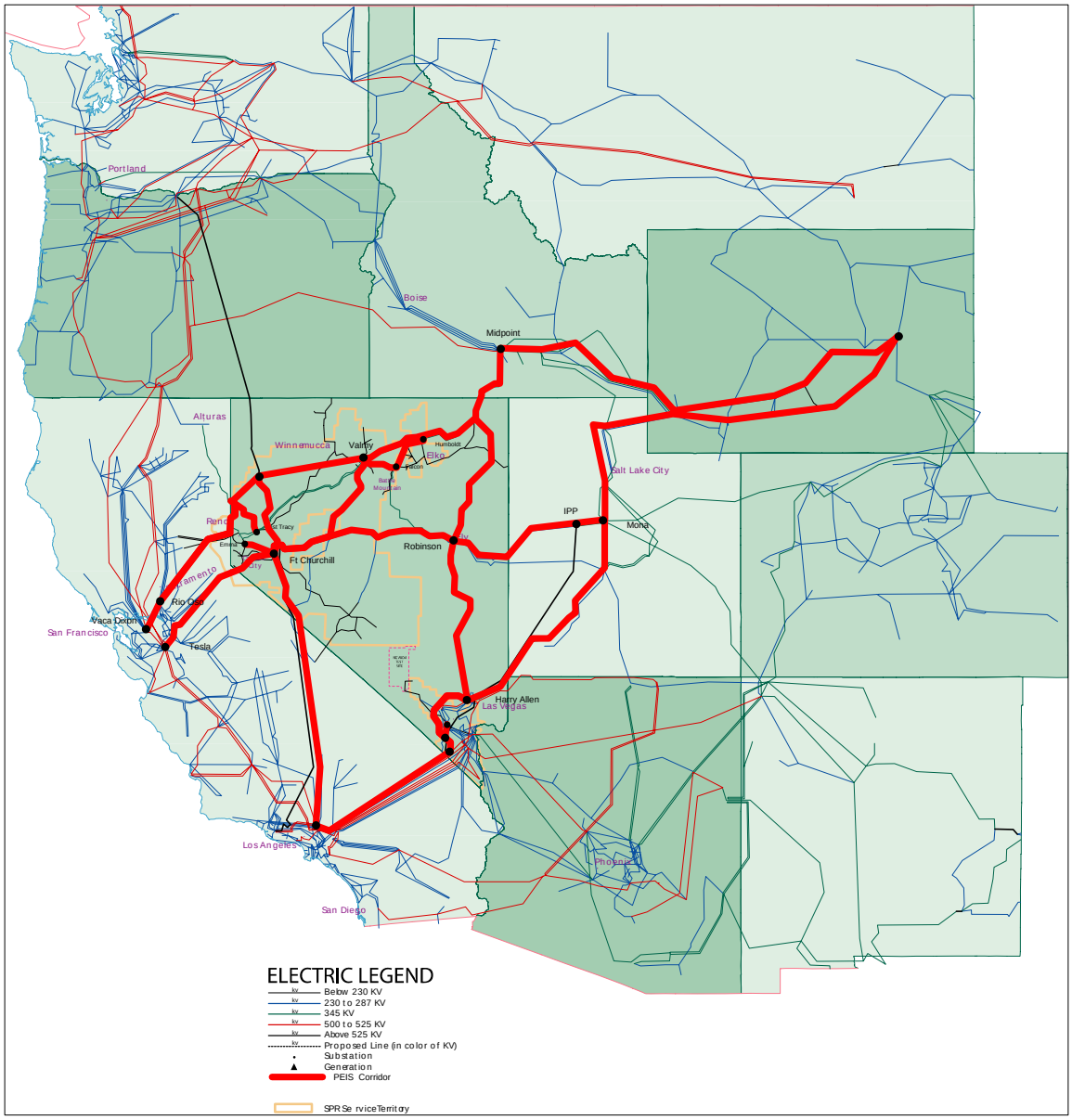
This corridor is from Dave Johnson substation, Wyoming connected to other corridors near Midpoint substation , Idaho and continuing to Vaca Dixon substation, California and is about 1,165 miles long. This corridor follows existing 345 kV, 120 kV, 115 kV, and 230 kV transmission lines for about 1,065 miles of the total length or 91%.

Mona – Harry Allen Corridor

This corridor is from Mona substation, Utah to Harry Allen substation, Nevada and is about 320 miles long. The route follows existing 345 kV lines for the whole route.

Granite - Ft Churchill – LA Corridor

This corridor is from a proposed Granite substation, Nevada, and Ft Churchill substation, Nevada to LA and is about 470 miles following existing transmission.



In conclusion, The Companies appreciate this opportunity for comments and are ready to assist the PEIS team as needed. Please feel free to contact us regarding any questions you may have.

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Definitions

In order to insure a common understanding of our comments, The Companies are providing the following definitions to explain our use of these specific terms within this document:

Corridor

A specific linear tract of land finitely located geographically that has been defined as suitable for siting of multiple utility energy facilities.

Right-of-Way Grant

A conferred grant to use a portion of a corridor for project specific facilities.

Easement

A land right of specific property for use by the holder of the easement.

Mutual inductance

An electrical phenomenon in which the electrical property of impedance of two parallel transmission lines is altered by the proximity of the lines to one another. This relationship is a function of separation. It can cause line protection miss-operation if not considered in the design work.

Induced current

The current that flows on a secondary conductor due to that conductor being within the magnetic field of a parallel transmission line. The conductor that has current induced on it may be another transmission or distribution line, a rail line, a fence, a pipe, or numerous other conducting paths. Improper treatment of parallel paths can result in extremely dangerous conditions.