## Corridor 6-15

Colfax to Reno Corridor

## Corridor Purpose and Rationale

The corridor provides an east-west preferred pathway for interstate energy transport, connecting the Sacramento and San Francisco metro areas with energy resources and customers in the state of Nevada and other western states. This pathway was suggested by several key stakeholder organizations ${ }^{1}$ during the WWEC PEIS. A route with additional capacity for future electrical transmission buildout is anticipated to be critical under any scenario of renewable energy development in Nevada. A 500-kV planned transmission line generally follows the path of the corridor. Great Basin Energy, a 450-kV planned transmission line, generally would follow the path of the corridor.

## Corridor location:

California (Nevada, Placer and Sierra Co.) and Nevada (Washoe Co.)
BLM: Mother Lode Field Office
USFS: Tahoe and Humboldt-Toiyabe NFs
Regional Review Region: Region 5

## Corridor width, length:

Width $3,500 \mathrm{ft}$
27 miles of designated corridor 73 miles of posted route, including gaps

## Designated Use:

- corridor is multi-modal


## Corridor of concern ( N )



## Corridor history:

- Locally designated prior to 2009 (N)
- Existing infrastructure (Y)
- A 69- and two $115-\mathrm{kV}$ transmission
lines are within and adjacent to the entire length of corridor. A 120-kV transmission line is located at the east end of corridor.
- Adjacent to Interstate 80 for a portion of the corridor
- Energy potential near the corridor (Y)
- 6 hydroelectric power plants are within 3 mi .
Corridor changes since 2009 (N)

Figure 1. Corridor 6-15

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_Transmission Line *
——Pipeline *
- Substation *
- Renewable Power Plant
A Non-Renewable Power Plant
Abstract Corridor
Other Section 368 Energy Corridor
Solar Energy Zone
*) Data source: © 2018 S\&P
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## Surface Management Agency

Bureau of Land Management Bureau of ReclamationU.S. Department of Defense
U.S. Department of Energy
U.S. Fish and Wildlife Service

Local
National Park Service
Other
State
Tribal
U.S. Forest Service

Keys for Figures 1 and 2

Figure 2. Corridor 6-15 and nearby electric transmission lines and pipelines

## Conflict Map Analysis



Figure 3 reflects a comprehensive resource conflict assessment developed to enable the Agencies and stakeholders to visualize a corridor's proximity to environmentally sensitive areas and to evaluate options for routes with lower potential conflict. The potential conflict assessment (low, medium, high) shown in the figure is based on criteria found on the WWEC

## Information Center at

www.corridoreis.anl.gov. To meet the intent of the Energy Policy Act and the Settlement Agreement siting principles, corridors may be located in areas where there is potentially high resource conflict; however, where feasible, opportunity for corridor revisions should be identified in areas with potentially lower conflict.

Visit the 368 Mapper for a full view of the potential conflict map
(https://bogi.evs.anl.gov/section368/portal/)
Figure 3. Map of Conflict Areas in Vicinity of Corridor 6-15


Figure 4. Corridor 6-15, Corridor Density Map
Figure 4 shows the density of energy use to assist in evaluating corridor utility. ROWs granted prior to the corridor designation (2009) are shown in pink; ROWs granted after corridor designation are shown in blue; and pending ROWs under current review for approval are shown in turquoise. Note the ROW density shown for the corridor is only a snapshot that does not fully illustrate remaining corridor capacity. Not all ROWs have GIS data at the time this abstract was developed. BLM and USFS are currently improving their ROW GIS databases and anticipate more complete data in the near future.

## Corridor Review Table

Designated energy corridors are areas of land prioritized for energy transmission infrastructure and are intended to be predominantly managed for multiple energy transmission infrastructure lines. Other compatible uses are allowable as specified or practicable. Resource management goals and objectives should be compatible with the desired future conditions (i.e., responsible linear infrastructure development of the corridor with minimal impacts) of the energy transmission corridor. Land management objectives that do not align with desired future conditions should be avoided. The table below identifies serious concerns or issues and presents potential resolution options to better meet corridor siting principles.

The preliminary information below is provided to facilitate further discussion and input prior to developing potential revisions, deletions, or additions.

## CORRIDOR 6-15 REVIEW

| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | $\begin{aligned} & \text { MILEPOST } \\ & (\mathrm{MP})^{1} \\ & \hline \end{aligned}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| :---: | :---: | :---: | :---: |
| BLM Jurisdiction: Mother Lode Field Office Agency Land Use Plan: Sierra RMP/ROD (2007) |  |  |  |
| The corridor intersects or follows the California NHT - The RMP does not mention the California NHT. This portion of the NHT includes the high potential Verdi to Steephollow Crossing segment. | MP 2 to MP 10 | The trail is within the corridor and follows the same general path <br> The National Trails System Act, as cited in the Comprehensive Plan for the California NHT (1999) ${ }^{3}$, states that the Secretary of the Interior or the Secretary of Agriculture may grant easements and rights-of-way upon, over, under, across, or along any component of the national trails system in accordance with the laws applicable to the national forest system, provided that any conditions contained in such easements and rights-of-way are related to the policy and purposes of this Act. <br> For high potential route segments, the National Trails System Act states: Federally owned sites and segments of these trails are considered federal protection components and should receive special attention by managing | NHT high potential segments may not be compatible with the corridor's purpose as a preferred location for energy infrastructure. However, collocation with existing infrastructure minimizes disturbance to other resources. In this location, the NHT generally follows the path of an existing transmission line and intersects with the corridor in several locations. Potentially, future infrastructure could be selectively located within the corridor, or segments of the corridor could be shifted, to minimize intersections with the NHT. <br> Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor. |

## CORRIDOR 6-15 REVIEW

| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | MILEPOST (MP) ${ }^{1}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| :---: | :---: | :---: | :---: |
|  |  | agencies to enhance their trail-related values. |  |
| USFS Jurisdiction: Tahoe National Forest Agency Land Use Plan: Tahoe NF LMP (1990) |  |  |  |
| The corridor intersects or follows the California NHT - The LMP does not reference NHTs because Congress established the California NHT in 1992 (National Trails System Act sec. 5 (a) (18)). This portion of the NHT includes the high potential Verdi to Steephollow Crossing segment and the Mule Spring High Potential Site. | MP 11, MP 21, MP 27 to MP 31, MP 39 to MP 40, and MP 54 to MP 58 | Corridor and trail intersect in multiple locations as they follow the same general path. <br> The National Trails System Act, as cited in the Comprehensive Plan for the California NHT (1999) ${ }^{3}$, states that the Secretary of the Interior or the Secretary of Agriculture may grant easements and rights-of-way upon, over, under, across, or along any component of the national trails system in accordance with the laws applicable to the national forest system, provided that any conditions contained in such easements and rights-of-way are related to the policy and purposes of this Act. <br> For high potential route segments, the National Trails System Act states: Federally owned sites and segments of these trails are considered federal protection components and should receive special attention by managing agencies to enhance their trail-related values. | NHT high potential segments may not be compatible with the corridor's purpose as a preferred location for energy infrastructure. However, collocation with existing infrastructure is preferred and can minimize disturbance to other resources. In this location, the NHT generally follows the path of an existing transmission line and intersects with the corridor in several locations. Potentially, future infrastructure could be selectively located within the corridor, or segments of the corridor could be shifted, to minimize intersections with the NHT. <br> Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor. |
| American River CA SRMA intersects with the corridor - The LMP does not mention SRMAs. | MP 15 to MP 16, and MP 21 to MP 22 | The corridor is collocated with I-80 at these locations. The corridor slightly overlaps the northern boundary of the SRMA. | The corridor location appears to best meet the siting principles considering the presence of existing infrastructure ( $1-80$ ); however, a corridor shift to avoid the California NHT could also avoid a portion of the overlap with the SRMA. |

## CORRIDOR 6-15 REVIEW

| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | $\begin{aligned} & \text { MILEPOST } \\ & (\mathrm{MP})^{1} \\ & \hline \end{aligned}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| :---: | :---: | :---: | :---: |
| Sierra Nevada Yellow-legged Frog (ESA-listed endangered) critical habitat and the corridor intersect - The land use plan pre-dates the listing of this species and does not have specific guidance or objectives. | MP 23 to MP 41 | The Sierra Nevada yellow-legged frog was designated endangered in 2014, and its critical habitat was identified in 2016. <br> No species management plans were identified for Sierra Nevada Yellowlegged Frog; therefore, no management prescriptions related to utility corridors were identified for this species. | Energy transmission corridors for the Tahoe NF have been designated to accomplish known needs and the corridor is designated specifically as a utility corridor. The prescription for this corridor designates utilities as the dominant resource. <br> The Sierra Nevada yellow-legged frog critical habitat encompasses a broad area both north and south of the corridor, which cannot be avoided. The location appears to best meet the siting principles because collocation (l-80 and existing transmission line) is preferred. |
| Pacific Crest NST and the corridor intersect — The Pacific Crest Trail Management Plan (1982) has been incorporated by reference into the Forest Plan and the standards and guidelines for location, design, signing, user facilities, and management of the PCT will be in accordance with the criteria established in the PCT Comprehensive Plan, $1 / 18 / 82$. | MP 39 to MP 41 | The Pacific Crest NST Comprehensive Plan was finalized in 1982. The plan does not provide guidance or recommendations on new transmission lines being constructed across the NST. <br> Comment on abstract: analysis does not thoroughly address the potential impacts to the viewshed and nature and purposes of the Pacific Crest NST as it crosses the Trail from East to West. Corridor width at the NST crossing should be the minimum width, not the proposed width of 3,500 feet. <br> Comment on abstract: crossings of the NST should be kept perpendicular at 90 degree. | The corridor location appears to best meet the siting principles because the intersection of the corridor with the NST is approximately perpendicular (minimizing impact on trail values). To the extent practicable, new transmission lines should be located as close as possible to existing infrastructure. <br> The Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor. |
| USFS Jurisdiction: Humboldt-Toiyabe National Forest Agency Land Use Plan: Toiyabe NF LMP (1986) |  |  |  |
| VQO area - Maximum modification and the corridor intersect - In areas under this VQO, management practices may dominate the landscape but | MP 60 and MP 62 |  | There may be locations where the corridor could be shifted to avoid the VQO-Retention and VQO-Partial Retention areas. However, this would require either |

## CORRIDOR 6-15 REVIEW

| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | $\begin{aligned} & \text { MILEPOST } \\ & (\mathrm{MP})^{1} \\ & \hline \end{aligned}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| :---: | :---: | :---: | :---: |
| activities should appear as natural occurrences in the background. |  |  | following the California NHT and Four Trails Feasibility Study Trail or deviating from existing infrastructure. |
| VQO area - Retention and the corridor intersect In areas under this VQO, management practices should not be evident to the casual observer. | MP 60 to MP 61 |  |  |
| VQO area - Partial Retention and the corridor intersect - In areas under this VQO, management practices should remain visually subordinate to the characteristic landscape. | MP 60 to MP 62 |  |  |
| ROS: Semi-Primitive Motorized and the corridor intersect - Areas under this ROS class are managed such that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is permitted. | MP 60 to MP 61, MP 71 to MP 73 |  | The corridor appears to best meet the siting principles as it is collocated with an existing transmission line. <br> Nonetheless, at MP 60 to MP 61, it may be possible to shift the corridor to avoid the ROS Semi-Primitive Motorized area. However, this would require either following the California NHT and Four Trails Feasibility Study Trail or deviating from existing infrastructure. At MP 71 to MP 73, there are no options to shift the trail to other federal lands with no ROS designations. |
| ROS: Roaded Natural and the corridor intersect Areas under this ROS class may have resource modification and utilization practices evident, but harmonized with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities. | MP 60 to MP 62, MP 71 to MP 73 |  | The corridor appears to best meet the siting principles as it is collocated with an existing transmission line. <br> Nonetheless, at MP 61 to MP 62, it may be possible to shift the corridor to avoid the ROS Roaded Natural area. <br> However, this would require either following the California NHT and Four Trails Feasibility Study Trail or deviating from existing infrastructure. At MP 71 to MP 73, there are no options to shift the trail to other federal lands with no ROS designations. |
| The corridor intersects or follows the California NHT. The LMP does not reference NHTs because it pre-dates the 1992 legislation establishing the California NHT (National Trails System Act sec. 5 (a) (18)). This portion of the NHT includes the high potential Verdi to Steephollow Crossing segment. | MP 62 | At MP 62, the corridor intersects with small segments of the California NHT and the Four Trails Feasibility Study Trail. A transmission line is also present at this location. <br> The National Trails System Act, as cited in the Comprehensive Plan for the California NHT (1999) ${ }^{3}$, states that | NHT high potential segments may not be compatible with the corridor's purpose as a preferred location for energy infrastructure. The corridor is collocated with existing infrastructure. However, the corridor location could be |

## CORRIDOR 6-15 REVIEW

| POTENTIAL COMPATIBILITY ISSUES or CONCERNS TO EXAMINE | MILEPOST (MP) ${ }^{1}$ | STAKEHOLDER INPUT and OTHER RELEVANT INFORMATION | POTENTIAL RESOLUTIONS BASED ON SITING PRINCIPLE ANALYSIS ${ }^{2}$ |
| :---: | :---: | :---: | :---: |
|  |  | the Secretary of the Interior or the Secretary of Agriculture may grant easements and rights-of-way upon, over, under, across, or along any component of the national trails system in accordance with the laws applicable to the national forest system, provided that any conditions contained in such easements and rights-of-way are related to the policy and purposes of this Act. <br> For high potential route segments, the National Trails System Act states: Federally owned sites and segments of these trails are considered federal protection components and should receive special attention by managing agencies to enhance their trail-related values. | shifted slightly, or a small segment deleted, to avoid the NHT to better meet the siting principles. <br> Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor. |
| Four Trails Feasibility Study Trail and the corridor intersect slightly-The LMP does not include the Four Trails Feasibility Study Trail since it pre-dates the 2009 legislation designating the Study Trail (Public Law 111-11). | MP 62 | At MP 62, the corridor intersects with small segments of the California NHT and the Four Trails Feasibility Study Trail. A transmission line is also present at this location. <br> The Act (Public Law 111-11; 2009) directs the Secretary of the Interior to revise the original feasibility studies of the Oregon, Mormon Pioneer, California, and Pony Express NHTs <br> BLM Manual 6280 directs the BLM to maintain the values, characteristics, and settings for which the trail is | The corridor is collocated with existing infrastructure. However, the corridor location could be shifted slightly, or a small segment deleted, to avoid the study trail. <br> Agencies could consider a new IOP for NSTs and NHTs to enhance BMPs for proposed development within the energy corridor. |

## CORRIDOR 6-15 REVIEW

| POTENTIAL |  | STAKEHOLDER INPUT and <br> OTHER RELEVANT <br> COMPATIBILITY ISSUES or <br> CONCERNS TO EXAMINE | MILEPOST <br> (MP) |
| :---: | :---: | :---: | :---: | | POTENTIAL RESOLUTIONS BASED ON SITING |
| :---: |
| PRINCIPLE ANALYSIS ${ }^{\mathbf{2}}$ |

${ }^{1}$ Mileposts are rounded to the nearest mile.
${ }^{2}$ Siting Principles include: Corridors are thoughtfully sited to provide maximum utility and minimum impact on the environment; Corridors promote efficient use of landscape for necessary development; Appropriate and acceptable uses are defined for specific corridors; and Corridors provide connectivity to renewable energy generation to the maximum extent possible, while also considering other generation, in order to balance the renewable sources and to ensure the safety and reliability of electricity transmission. Projects proposed in the corridor would be reviewed during their ROW application review process and would adhere to Federal laws, regulations, and policy.
${ }^{3}$ Full Title: Comprehensive Management and Use Plan / Final Environmental Impact Statement - California National Historic Trail and Pony Express National Historic Trail. Management and Use Plan Update/Final Environmental Impact Statement - Oregon National Historic Trail and Mormon Pioneer National Historic Trail.

## Additional Compatibility Concerns

The issues and concerns listed below are not explicitly addressed through agency land use plans or are too general in nature to be addressed without further clarification. Although difficult to quantify, the concerns listed have potential to affect future use and/or development within this designated corridor. The Agencies have provided a preliminary general analysis, shown below. The information below is provided to facilitate further discussion during stakeholder review.

## Jurisdictional Concerns:

- Blue Canyon - Nyack Airport and the corridor intersect at MP 16.
- Reduce corridor width between MP 0 and MP 73 (entire length of corridor) to correspond with footprint of existing facilities (comment on abstract).

Analysis: Future development within the corridor near MP 16 would be unlikely given the presence of the airport at this location. There is no existing energy transport infrastructure and there does not appear to be a viable option to re-route the corridor on federally administered lands. Regarding reducing corridor width, maintaining the higher width for the corridor may be environmentally preferable, because it allows avoidance of more sensitive areas within the corridor if they are identified during project-level planning.

## Tribal Concerns:

- The area between MP 71 and MP 72.9 is important to Washoe Tribe and Reno-Sparks Indian Colony.

Analysis: Existing IOPs require tribal engagement early in the planning process for any proposed project in the corridor.

## Visual Resources:

- Portions of the corridor traverse highly scenic landscapes near Donner Summit and the Town of Truckee (approximately MP 40 to MP 50). Visual impacts on the Forest and/or proximate private lands could be a concern.

Analysis: Adherence to existing IOPs for visual resources would be required.

## Ecology:

- Consult with USFWS to avoid adverse modification to Webber Ivesia designated critical habitat within 2 km (RFI comment).
- Portions of the corridor cross large wetland and meadow complexes that have jurisdictional wetlands and sensitive habitats.

Analysis: The corridor is within 2 km of critical habitat but does not intersect. Section 7 consultation with USFWS would be commensurate with agency determination of potential affect to threatened or endangered species. Existing IOPs and BMPs would be required. In general, the corridor follows existing infrastructure.

## Military Concerns:

- MTR - Slow-speed Route and the corridor intersect from MP 29 to MP 37.

Analysis: Adherence to existing IOP regarding coordination with DoD would be required. The Agencies could consider a revision to the existing IOP to include height restrictions for corridors in the vicinity of DoD training routes.

## Abstract Acronyms and Abbreviations

BLM = Bureau of Land Management; BMP = best management practice; CAISO = California ISO; DoD = Department of Defense; ESA = Endangered Species Act; GIS = geographic information system; IOP = interagency operating procedure; LMP = land management plan; MP = milepost; MTR = Military Training Route; NF = National Forest; NHT = National Historic Trail; NPS = National Park Service; NST = National Scenic Trail; PCT = Pacific Crest Trail; PEIS = Programmatic Environmental Impact Statement; RFI = request for information; RMP = Resource Management Plan; ROS = Recreation Opportunity Spectrum; ROW = right-of-way; SRMA = special recreation management area; USFS = U.S. Forest Service; USFWS = U.S. Fish and Wildlife Service; VQO = Visual Quality Objective; WWEC = West-wide Energy Corridor.


[^0]:    ${ }^{1}$ Input regarding alignment from the Frontier Line, National Grid, Pacific Gas and Electric Company, and Western Utility Group during the WWEC PEIS suggested following this route.

