

## EXHIBIT B-5 – Summary of Final EIS

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### INTRODUCTION

In 2009, Southline Transmission, L.L.C. (“Southline” or “Applicant”), a wholly-owned indirect subsidiary of Hunt Power, L.P., submitted an application to the Bureau of Land Management (“BLM”) for right-of-way (“ROW”) to construct, operate, and maintain the proposed Southline Transmission Project (“Project”) on public land administered by the BLM. The BLM initiated the National Environmental Policy Act (“NEPA”) process to address whether to grant an ROW permit. During 2011, Southline submitted a Statement of Interest to Western Area Power Administration (“WAPA”) for consideration of the Project and requested that WAPA consider providing financing for the Project using the borrowing authority provided to WAPA under the American Recovery and Reinvestment Act of 2009. Southline’s proposal prompted WAPA to initiate its own NEPA process to determine the environmental impacts of the Project and to inform WAPA’s decisions regarding the Project. WAPA and the BLM agreed to be joint lead agencies in accordance with NEPA, 40 Code of Federal Regulations (“C.F.R.”) 1501.5(b), for purposes of preparing the Environmental Impact Statement (“EIS”) for this Project.

The overall Project is an approximately 370-mile electric transmission line proposed to run through Federal, State, tribal, and private lands in southern New Mexico and southern Arizona. The Arizona portion of the Project for which Applicant seeks a CEC includes the construction of (i) approximately 66 miles of new double-circuit 345-kilovolt (“kV”) transmission line and less than 1 mile of 115-kV or 230-kV transmission line and associated facilities (the “CEC New Build Route”) and (ii) approximately 5 miles of new non-WAPA owned 138-kV and 230-kV transmission lines and associated facilities that would interconnect the upgraded WAPA 230-kV transmission lines to four existing substations owned and operated by other Arizona load-serving utilities (the “CEC Upgrade Route”).

As required under NEPA and Council on Environmental Quality regulations pursuant to NEPA, an EIS was prepared to analyze and disclose the potential effects of the Project. The Draft Environmental Impact Statement and Draft Resource Management Plan Amendment (Draft EIS/RMPA) document was issued in April 2014, while the Final EIS

was issued in November 2015. The BLM and WAPA both published their respective Records of Decision in April 2016.

BLM and WAPA invited 21 American Indian tribes and 33 agencies at the Federal, State, and local level to participate as cooperating agencies in preparation of the EIS. Seventeen agencies accepted, affording the BLM and WAPA the benefit of each agency's particular expertise and guidance, including: U.S. Army Corps of Engineers; Reclamation; Department of Defense ("DOD") Clearinghouse; U.S. Environmental Protection Agency; DOD Fort Huachuca; National Park Service; Forest Service (Coronado National Forest); U.S. Fish and Wildlife Service; Bureau of Indian Affairs Western Regional Office; Arizona Game and Fish Department; Arizona State Land Department; New Mexico Department of Game and Fish; New Mexico State Land Office; Cochise County, Arizona; Greenlee County, Arizona; Graham County, Arizona; and City of Sierra Vista, Arizona.

### **ALTERNATIVES**

Southline began investigating route alternatives for the proposed Project in 2009, and its efforts are documented in the April 2012 routing report (Southline 2012a); the routing report is available online.<sup>5</sup> As part of the routing process, Southline first identified the geographic study area within which feasible routes could be considered between the identified connection points at the Afton, Apache, and Saguaro Substations. Southline then performed siting studies in consultation with stakeholders, such as State and Federal agencies, county commissioners, tribal officials, local utilities, and private landowners, to identify routing opportunities and constraints and determine the most feasible routes within the study area.

Southline hosted a series of meetings and workshops with stakeholders between June and December 2011. Southline's public outreach efforts were conducted to understand initial public concerns from a wide range of project stakeholders so these concerns could be integrated into Southline's routing process from the outset. Initial outreach efforts focused on defining the study area, followed by meetings with stakeholders, which reviewed a number of potential route corridors. The route corridors were high-level route alignments looking at all potentially viable options (*see* Final EIS Figures 2-1a and 2-1b). These corridors were presented at a round of public information meetings, and stakeholders had an opportunity to provide feedback directly onto high-resolution maps regarding potential resource and land use conflicts to guide Southline's route selection.

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<sup>5</sup> [http://southlinetransmissionproject.com/files/Routing\\_Report\\_AppA\\_and\\_Figures\\_042412\\_final.pdf](http://southlinetransmissionproject.com/files/Routing_Report_AppA_and_Figures_042412_final.pdf).

Finally, Southline received additional feedback from stakeholders, including feedback received from a public informational meeting in Benson, Arizona, and simultaneously winnowed the potential route corridors into a select group of potential and alternative routes to submit to the BLM and WAPA to use in the environmental review process. This final set of potential and alternative routes submitted to BLM and WAPA for consideration in the NEPA process reflected a significant amount of feedback from stakeholders.

All routing efforts prior to the publication of the Notice of Intent were conducted to define the proposed Project and develop the basis for the proposed Project and associated NEPA analysis. The BLM and WAPA used Southline's routing efforts as the basis of the agency alternatives development process (*see* Final EIS Section 2.6).

The focus of the routing effort was to identify potentially viable options within the analysis area that would use previously disturbed areas by following existing linear features. Using previously disturbed areas minimizes new ground disturbance and new access road construction, reduces potential adverse environmental and social impacts, and concentrates development in previously developed areas. Linear features considered reasonable routing options included roads and highways, transmission and distribution lines, railroads, pipelines, Section 368 energy corridors, and cadastral or property boundaries.

The proposed Project consists of two sections. The New Build Section entails construction of approximately 249 miles of new double-circuit 345-kV transmission line to mitigate existing congestion by providing more transmission capacity between the Afton Substation, south of Las Cruces, New Mexico, and the Apache Substation, south of Willcox, Arizona. The existing voltage in the New Mexico facilities (Afton and Hidalgo Substations) is 345 kV; thus, the New Build Section is proposed as a 345-kV transmission line. The Upgrade Section will be an upgrade of approximately 121 miles of WAPA's existing Saguaro-Tucson and Tucson-Apache 115-kV transmission lines to a double-circuit 230-kV transmission line originating at the existing Apache Substation and terminating at the Saguaro Substation, northwest of Tucson, Arizona (*see* Exhibit A-1). The Upgrade Section is proposed as a double-circuit 230-kV line to utilize the existing 230-kV Arizona system voltage, as well as maximize the existing ROW, particularly through the more urban Tucson area, where a 345-kV structure was determined to be too large in terms of ROW requirements. One of two methods for the Upgrade Section will be used, depending on ROW constraints: either the tear-down and rebuild-in-place

method, or construction of new facilities adjacent to the existing facilities. The existing facilities would be removed after construction of the new transmission line.

Using the existing system voltage in both the New Build and Upgrade Sections optimizes Project performance and minimizes Project costs. The existing high-voltage system in southern New Mexico is 345 kV. The network of existing transmission lines in southern New Mexico does not include 230-kV or 500-kV voltage; therefore, the addition of a new voltage system would increase construction, operation, and maintenance costs for the proposed Project. Maintaining 345-kV voltage also provides technical benefits, as the proposed Project could use a double-circuit structure since it could more readily be absorbed into the existing system on a contingency. Higher voltages like 500 kV would require a greater project footprint, requiring two separate sets of structures as opposed to one double-circuit on a single set of structures. The Upgrade Section was designed as double-circuit 230 kV based on the width of the ROW. Further, 230 kV is also a standard voltage upgrade for WAPA and therefore would minimize operation and maintenance costs.

For the New Build Section routing effort, two general types of routing criteria were considered: opportunities and constraints. Routing opportunities consisted primarily of existing linear features, existing access, and existing disturbed areas. Constraints consisted primarily of avoidance areas or sensitive areas, including wilderness areas, areas of high residential development, military reservation/installations, tribal lands, and sensitive lands (*e.g.*, ecologically, visually, and/or culturally). Through an iterative process, more than 1,300 miles of potentially viable routing options were identified. Through early input from the BLM, WAPA, and other stakeholders, those routing options were further assessed to determine whether they should be retained for detailed study by Southline or eliminated from further consideration. Following that assessment, before submittal of the SF-299 application, Southline selected proposed and alternative routes for the New Build Section.

Because the Upgrade Section of the proposed Project focused on interconnection with the 11 existing substations and upgrading an existing line, routing options were limited. Only two existing transmission lines between the Apache and Saguaro substations are available to be upgraded to a capacity that would allow transmission of up to 1,000 MW: the existing WAPA Saguaro–Tucson and Tucson–Apache 115-kV lines, and an Arizona Electric Power Cooperatives (“AEPSCO”) 230-kV line. The routing process for the Upgrade Section included review of the existing facilities and the land use constraints in the immediate vicinity of the existing lines. This resulted in an evaluation of

approximately 200 miles of viable routing options for the Upgrade Section. The AEPCO route was eliminated from further consideration because it did not connect to the 11 existing substations in the Upgrade Section, and due to highly restrictive land uses along portions of the ROW and less access to existing substations in the area.

As a result of this analysis, a range of alternative routes were identified and analyzed in the Draft EIS. For study purposes and comparison of alternatives, alternative routes were organized into four route groups or segments and then into subroutes within each route group. Route groups were established based on geography, common resource issues, and interconnection points, to allow for localized comparisons among subroutes and local alternatives (*see* Final EIS Section 2.7).

In the preparation of the Draft and Final EISs, an evaluation was made of a full range of alternatives. All reasonable alternatives were given further consideration by the BLM and WAPA, including alternatives to the transmission line option, new generation facilities, reliance on the existing transmission system, and alternative transmission technologies. Alternatives that were (1) ineffective (*i.e.*, did not meet the agencies' purpose and need), (2) technically or economically infeasible, (3) inconsistent with the basic policy objectives for management of the area (*e.g.*, resource management plans), (4) remote or speculative (*i.e.*, could not be analyzed), or (5) substantially similar in design or effects to another alternative being analyzed, were eliminated from detailed analysis. The BLM and WAPA selected the Agency Preferred Alternative Route as presenting in Section 2.10.5 of the Final EIS.

### **PROPOSED ROUTE**

As discussed above, WAPA and the BLM selected the Agency Preferred Alternative Route. The Agency Preferred Alternative Route best balances the meeting of the BLM's and WAPA's purpose and need with the limiting of environment impacts by the Project. The Agency Preferred Alternative Route also provides the best scenario for implementing mitigation to minimize or eliminate adverse impacts to resources. The Arizona portion of the New Build Section of the Agency Preferred Alternative Route and the approximately five miles of new transmission line associated with the Upgrade Section of the Agency Preferred Alternative constitute the CEC Proposed Route discussed in this Application.

## I. NEW BUILD SECTION

The Agency Preferred Alternative Route for the New Build Section consists of a combination of the Proponent Preferred and local alternative segments within route groups 1 and 2 contained in the Final EIS. The Agency Preferred Alternative Route for the New Build Section includes Proponent Preferred segments P1, P2, P3, P4a, P5b, P6a, P6b, P6c P7, P8, in combination with local alternatives LD3a and LD3b for a total of 249 miles (*see* Final EIS Figure 2). Approximately 85% of the Agency Preferred Alternative Route in the New Build Section parallels existing linear infrastructure such as transmission lines, gas line, and roadways.

This route was selected by the BLM and WAPA as the Agency Preferred Alternative Route because it:

- Uses existing linear ROWs by paralleling existing infrastructure and transmission lines;
- Eliminates the need for plan amendments through conformance with existing land use plans;
- Minimizes impacts to military operations at and near the Willcox Playa; and
- Minimizes impacts to sensitive resources, particularly near the Lordsburg Playa.

Segments P1, P2, P3, P4a, LD3a, and LD3b are all within New Mexico. Segment P5b begins in New Mexico at the segments' intersection with segment LD3b and extends west, crossing into Arizona and roughly paralleling an existing El Paso Natural Gas line for approximately 20 miles before connecting to P6a. At the point where link P5b crosses into Arizona, the CEC New Build Route for the purposes of this Application begins. The CEC New Build Route follows the Proponent Preferred route along segments P6a, P6b, and P6c (also along existing El Paso Natural Gas lines), P7 (paralleling an existing Southwest Transmission Cooperative 230-kV transmission line) around the southeast side of the Willcox Playa, and P8, which will connect to the existing Apache Substation. The total length of the CEC New Build Route is approximately 67 miles.

The Agency Preferred Alternative Route for the New Build Section is the same as the environmentally preferred alternative (described in Final EIS Section 2.10.6),<sup>6</sup> except for

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<sup>6</sup> The Environmentally Preferred Alternative is the "alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources." Council on Environmental Quality, 1981, Forty most

segments Gb, Gc, and WC1, which were not chosen by the BLM/WAPA because of their impacts to military operations.

## II. UPGRADE SECTION

As described in the Final EIS, the Agency Preferred Alternative Route for the Upgrade Section consists of a combination of the Proponent Preferred, the new route variation south of the Tucson International Airport, and local alternatives at Tumamoc Hill and near the Marana Regional Airport, within route group 3. The Agency Preferred Alternative Route for the Upgrade Section is approximately 121 miles, of which approximately 110 miles is the upgrade of WAPA's existing Saguario-Tucson and Tucson-Apache 115-kV transmission lines. Approximately 98% of the Agency Preferred Alternative Route in the Upgrade Section parallels existing or proposed linear infrastructure, such as transmission lines, gas line, and roadways.

This route was selected by the BLM and WAPA as the Agency Preferred Alternative Route because:

- Maximizes use of the existing right-of-way and facilities currently utilized for WAPA's existing Saguario-Tucson and Tucson-Apache 115-kV transmission lines;
- Reduces existing conflicts in the community of Summit, and minimize impacts to future Pima County economic development plans south of the Tucson International Airport;
- Addresses cultural resources and visual concerns regarding upgrading the existing WAPA line across Tumamoc Hill; and
- Minimizes impacts to military training operations at the Marana Regional Airport.

The Upgrade Section of the Agency Preferred Alternative Route will start at the existing Apache Substation south of Willcox, Arizona, and extends through Benson, upgrading the existing WAPA 115-kV line. The Agency Preferred Alternative Route between Apache and Del Bac substations includes Proposed Project segments U1a, U1b, U2, U3a, and U4 as well as route variation U3aPC. From the Del Bac Substation, the Agency

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asked questions concerning National Environmental Policy Act regulations (Question 6a), 16 Federal Register 18,026.

Preferred Alternative Route includes upgrading the existing WAPA 115-kV line north along segments U3b, U3c, and U3d. From the south side of Tumamoc Hill at Starr Pass Boulevard, the Agency Preferred Alternative Route connects segment U3d to local alternative TH1a west along Starr Pass Boulevard and then turn north along Greasewood Road. Local alternative TH1a connects to TH1-Option east along St. Mary's Road, connecting back up to the existing WAPA line and ROW at segment U3g. The Agency Preferred Alternative Route then includes the upgrade of the existing WAPA line north to the Saguaro Substation (segments U3h, U3i, U3k, U3l, U3m, and U4), except for reroute using local alternative MA1 near the Marana Regional Airport.

## **AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS**

The following is a summary of affected environment and environmental impacts. A more detailed summary and comparison of the potential impacts of the proposed Project and alternatives can be found in Tables 2-15, 2-16, 2-17, and 2-18 in Chapter 2 of the Final EIS.

### **I. AIR QUALITY**

Construction of the transmission lines and substations would result in emissions of air pollutants from equipment exhaust, vehicle exhaust from travel to and from construction areas, and fugitive dust from soil disturbance. Construction emissions would, however, be transient, short term, and spread over large distances and multiple airsheds. Emissions from operation and maintenance activities (*e.g.*, vehicle exhaust from travel to substations and the transmission line for routine inspection and/or repairs) would be similar in nature to those of construction emissions but would be much lower.

The proposed Project would lie within the boundaries of two nonattainment/maintenance areas, regardless of the action alternative chosen: the Rillito particulate matter 10 (PM10) nonattainment area and the Tucson carbon monoxide (CO) maintenance area. The closest Class I area to the Proponent Preferred route and/or local alternatives is Saguaro National Park outside Tucson, Arizona, located approximately 1 mile from the proposed route. Pima County incorporates the National Ambient Air Quality Standards (NAAQS) by reference; specific Pima County permitting and emission limitations regulations apply for Class I areas and nonattainment areas in Pima County.

Construction of any of the Project alternatives, including the Agency Preferred Alternative, would result in emissions of all regulated pollutants below the de minimis thresholds for conducting regionally significant conformity determinations in all

airsheds the proposed Project would cross or for which the Project would be within 31 miles of, including all nonattainment/maintenance areas. Additionally, pollutant emissions are predicted to be within regulatory limits (below the applicable National, Arizona, and/or New Mexico Ambient Air Quality Standards) for construction of any of the Project alternatives. The impact intensity of the proposed Project and alternatives on air quality would be minor, including the Agency Preferred Alternative.

## **II. NOISE**

Construction of any of the proposed Project alternatives, including the Agency Preferred Alternative, would result in audible noise from Project equipment and vehicles. Operation and maintenance activities would be similar in terms of the activities that would cause noise. However, during operation and maintenance these activities would occur much less frequently, include fewer individual noise point sources such as pieces of equipment and vehicles, and be of much shorter duration.

Unmitigated noise levels could result as high as 83 A-weighted decibels (dBA) to sensitive receptors near proposed Project construction activities (within 100 feet) under the Agency Preferred Alternative or any other Project alternative; however, construction noise would be short term, temporary, and intermittent in nature. Corona noise for both the New Build and Upgrade Sections of the proposed Project and alternatives would be highest in areas where the new lines would be constructed in close proximity to existing transmission lines. Overall, because of the relatively dry nature of the area crossed by the proposed Project, the overall level of operational noise would be minimal and would therefore represent a minor, but long-term, impact to ambient soundscapes. The impact intensity of the proposed Project and alternatives on noise would be major but temporary, including the Agency Preferred Alternative.

## **III. GEOLOGY AND MINERAL RESOURCES**

The proposed Project could have potential indirect impacts to mining districts during operation and maintenance. However, this impact would only have consequences in areas within active mining districts where active mines are located. Small areas of active and inactive mining districts are crossed by the New Build Section. Access to minerals can be accomplished between spans, or structures can be left on "islands," or the mining interests can have the transmission line locally rerouted. In this case, the proposed Project would not produce obvious changes in the baseline condition of the resource, and potential impacts would be local, short term, temporary, and minor. Therefore, no significant impacts to geological or mineral resources are expected. The impact intensity

of the proposed Project and alternatives on geology and mineral resources would range from no impact to minor, including the Agency Preferred Alternative.

#### **IV. SOIL RESOURCES**

Potential impacts to the soil resources include disturbance to fragile biological crusts, accelerated rates of erosion by water or wind, as well as loss of soil productivity due to the removal of soils during construction of access roads, and at structure and substation sites. Limited clearing of vegetation and topsoil would result in newly exposed, disturbed soils that could be subject to accelerated erosion by wind and water. The potential for accelerated rates of erosion would be higher in areas with highly erodible soils, such as Lordsburg and Willcox playas. Indirect impacts associated with soil removal may include sediment redistribution of the soil resource as a result of wind and water erosion, invasive plant colonization, soil erosion, and reduction of soil water retention due to compaction. However, no significant impacts to soil resources are expected with the implementation of appropriate Proponent Committed Environmental Measures (“PCEMs”) to control erosion, including stormwater run-on and runoff prevention, silt fences and/or retention basins, topsoil management and conservation practices, and revegetation activities. The impact intensity of the proposed Project and alternatives on soil resources would range from no impact to minor, including the Agency Preferred Alternative.

#### **V. PALEONTOLOGICAL RESOURCES**

Potential negative impacts to paleontological resources could result from the loss of important fossils due to ground-disturbing activities during construction in sensitive geological deposits. Potential positive impacts to paleontological resources could result from the discovery of important fossils that would otherwise be unavailable for study as an inadvertent result of ground-disturbing activities. The existing WAPA lines between the Apache and Saguaro substations cross deposits composed almost entirely of Low Sensitivity (Potential Fossil Yield Classification (“PFYC”) 1-2) for paleontological resources. If fossils are present, adverse impacts to paleontological resources would be mitigated in accordance with PCEMs, applicable laws, and regulations. The impact intensity of the proposed Project and alternatives on paleontological resources would range from no impact to moderate, including the Agency Preferred Alternative.

## **VI. WATER RESOURCES**

Potential impacts to water resources include the potential for discharge of pollutants, including sediment, to groundwater or surface water, the placement of larger structures within floodplains, and potential disturbance of WUS, including wetlands. Proper implementation of PCEMs and controls would prevent discharge of pollutants. Avoidance measures during final siting would prevent most disturbances of WUS or wetlands. Minor to moderate long-term impacts would occur to WUS and wetland areas that are too extensive to be fully avoided: Willcox Playa (segment P7); Stein's Creek (segment LD1); and the Santa Cruz River (segment TH3b).

In accordance with DOE regulations contained at 10 C.F.R § 1022, "Compliance with Floodplain and Wetlands Environmental Review Requirements," the Final EIS includes a floodplain assessment and statement of findings that analyzes the potential floodplain impacts associated with the proposed Project (*see* Final EIS Section 4.7 for a detailed discussion). WAPA has concluded that the proposed Project is consistent with the policies set forth in EO 11988 and EO 11990 and 10 C.F.R. § 1022, and conforms to applicable floodplain protection standards, provided that local approval by the floodplain administrator is received and permitting conditions are followed.

The impact intensity of the proposed Project and alternatives on water resources would range from no impact to moderate. The intensity of impacts on water resources from the Agency Preferred Alternative would be minor.

## **VII. BIOLOGICAL RESOURCES**

### **A. Vegetation**

All action alternatives would involve the removal of vegetation during construction activities, resulting in the direct loss of plant communities. The primary direct and indirect impacts to vegetation and special status species during construction and operation of the proposed facilities would be associated with removal and/or crushing of vegetation communities from construction of transmission lines, substation expansions, temporary work areas, and access roads; decreased plant productivity from fugitive dust; and plant community fragmentation. Indirectly, removal of protective vegetation would also expose soil to potential wind and water erosion. This could result in further loss of soil and vegetation, as well as increased sediment input to water resources. There would also be indirect effects resulting from the fragmentation of connected vegetation types. Edge areas have different microclimatic conditions and

structure, which could lead to different species' composition than in the interior area. The introduction and colonization of disturbed areas by invasive exotic plant species also would lead to changes in vegetation communities, including the possible shift to more wildfire-prone vegetation, which favors invasive exotic species over native species.

PCEMs would be applied to reduce, avoid, or otherwise provide compensation for impacts to sensitive vegetation. Examples of these include the following: (1) vegetation disturbance would be minimized to the extent practicable; (2) a Reclamation, Vegetation, and Monitoring Plan would be developed and implemented; (3) a Plant and Wildlife Species Conservation Measures Plan would be developed and implemented; (4) clearing of riparian vegetation would be avoided where possible; (5) Noxious Weed Management Plan would be developed and implemented; and (6) construction equipment would be washed prior to moving onto the construction site to limit introduction and spread of noxious weeds. Additional mitigation provided by the AGFD for segment P7 is also considered.

The vegetation communities impacted by the action alternatives, however, are generally common and geographically widespread, and much of the proposed Project is located within an area of existing disturbance. Therefore, impacts to vegetation communities, special status species, and noxious weeds are unlikely to be significant. The impact intensity of the proposed Project and alternatives on vegetation would be minor, including the Agency Preferred Alternative.

## **B. Wildlife**

Potential Project-related impacts on wildlife include the loss, degradation, and/or fragmentation of breeding, rearing, foraging, and dispersal habitats; collisions with and crushing by construction vehicles; loss of burrowing animals in burrows in areas where grading would occur; increased invasive and noxious weed establishment and spread; increased noise/vibration levels; increased potential for migratory birds to strike transmission lines; and increased access for off-highway-vehicle ("OHV") users.

The transmission line ROW would serve as a movement corridor for some species and as a barrier to others. The proposed Project would increase the amount of edge habitat along the ROW. Effects from increased amounts of edge would include decreased habitat block size. Decreased habitat block size may negatively impact those species that require large blocks of contiguous habitat and benefit other species that use edge habitats or have more general habitat requirements. These impacts would be

minor/negligible in previously disturbed areas with low vegetative cover and would be minor in areas of new disturbance and higher vegetation density.

PCEMs to minimize impacts to wildlife habitat could include limiting the area of disturbance, restoring disturbed areas, and avoiding aquatic and riparian areas. PCEMs also include pre-construction surveys, erosion control measures, a worker training program, and measures to limit invasive species' establishment and spread. Line marking devices would be used to decrease the potential for birds striking transmission lines near Willcox Playa, where wintering sandhill cranes would have to cross the proposed Project during their daily migrations to the agricultural fields east of the playa to feed. Additional mitigation provided by the AGFD for segment P7 is also considered.

The following impacts to general wildlife and special status species may occur with construction and operation of the Agency Preferred Alternative:

- Habitat for the northern aplomado falcon (*Falco femoralis septentrionalis*), Sprague's pipit (*Anthus spragueii*), lesser long-nosed bat (*Leptonycteris curasoae yerbabuena*), Mexican longnosed bat (*Leptonycteris nivalis*), and Sonoran desert tortoise (*Gopherus morafkai*) would be impacted. Restoration of disturbed areas, measures to minimize invasive plant establishment and spread, and closure of access roads to OHV use would reduce impacts on habitat for these species.
- A known lesser-long nosed bat roost is within 0.7 mile of the proposed ROW in segment P5b (part of the Agency Preferred Alternative). Given the distance, the intervening topography and the PCEM of limiting loud construction noise (i.e., blasting) to the spring (preferably April 1 to May 31) within 0.5 mile of where the roost is located before the bats arrive at the roost would avoid direct impacts to the species and other bat species that use the area.
- Segment P7 would pass northwest of Crane Lake and through the AGFD managed Willcox Playa Wildlife Area. Mitigation (PCEMs) requested by the AGFD includes (1) funding the relocation of Crane Lake away from P7, (2) funding riparian emergent wetlands along Kansas Settlement Road, and (3) funding the management of non-native vegetation; these would be implemented to reduce the intensity of impacts to habitat in the Willcox Playa Wildlife Area.
- Potential mortality of wintering sandhill cranes (*Grus canadensis*) could occur at Willcox Playa where the proposed Project would intersect their daily

migration flights to feed in agricultural fields to the south and east. There is the potential for sandhill crane collisions with the transmission line during daily migration, which could impact individual sandhill cranes. Implementing PCEMs such as the relocation of Crane Lake (see above), and installation of line marking devices, where appropriate, would decrease the potential for birds striking transmission lines near Willcox Playa; as a result impacts on the species would be minor and both short and long term.

- Impacts to northern Mexican gartersnake (*Thamnophis eques megalops*) proposed critical habitat at the Cienega Creek and San Pedro River crossings would be avoided through project siting.
- Impacts on Gila chub (*Gila intermedia*) designated critical habitat downstream from the Cienega Creek crossing would be avoided through Project siting and erosion control measures.
- Habitat for BLM Sensitive Species, New Mexico Wildlife Conservation Act Species, New Mexico Species of Greatest Conservation Need, Arizona Wildlife Species of Concern, Arizona Species of Greatest Conservation Need, and migratory birds would be lost, fragmented, and degraded. Measures to limit ground disturbance, avoid aquatic and riparian habitats, limit invasive plant establishment and spread, and restore disturbed areas would reduce impacts on habitat for these species.

The wildlife and special status species habitat impacted by the action alternatives is common relative to the amount of surrounding available habitat, and much of the proposed Project occurs within areas of existing disturbance. In addition, the Project has been sited to avoid ground disturbance in both designated and proposed critical habitat, and PCEMs have been developed to address specific habitat impacts, such as those in the Willcox Playa Wildlife Area. Therefore, impacts to wildlife and special status species are not expected to be significant. The impact intensity of the proposed Project and alternatives on wildlife would be minor, including the Agency Preferred Alternative.

## **VIII. CULTURAL RESOURCES**

Potential impacts to cultural resources such as archaeological sites, historic built environment resources, trails, and American Indian traditional use areas and sacred sites could result from construction, operation, and maintenance of the proposed Project. Loss of integrity would be the primary adverse direct or indirect impact to cultural resources.

In terms of historic properties, loss of integrity often stems from alterations of a resource's characteristics that make it eligible for the National Register of Historic Places. During construction, direct impacts would result from ground disturbance if resources are present and would be long term; indirect impacts would result from visual encroachment on a resource's setting during structure and facility installation and would be long term. During operation and maintenance, long-term visual impacts would occur from the presence of the transmission line if resources are present.

Once a route is selected, the route and its associated access roads and facilities would be inventoried in accordance with Section 106 of the National Historic Preservation Act. Resources would then be evaluated for their National Register of Historic Places eligibility.

The Agency Preferred Alternative could impact 157 previously recorded sites, including the following four listed properties: the Valencia Site, AZ BB:13:315(ASM), the Empirita Ranch Historic District, the Los Robles Archaeological Area, and the Tumamoc Hill Archaeological District and Desert Laboratory National Historic Landmark (Tumamoc Hill). The Agency Preferred Alternative would cross the Butterfield Trail and the Juan de Bautista de Anza National Historic Trail ("Anza NHT"). Potential impacts to both trails are also discussed in "Special Designations."

Visual impacts to Tumamoc Hill are expected; however, the Agency Preferred Alternative has been designed, in consultation with stakeholders, to go around rather than through Tumamoc Hill to minimize visual impacts from upgrading the existing WAPA line across Tumamoc Hill. The removal of the existing line, which does run through the Tumamoc Hill property, would also help minimize the line's current visual impacts to a degree; however, relocating the line off Tumamoc Hill to along Greasewood Road would still result in potential visual impacts.

Mitigation of adverse direct impacts to historical properties would be developed in accordance with the Section 106 Programmatic Agreement (PA) and Southline's Plan of Development ("POD"). Avoidance of resources through design and micro-siting would be the preferred mitigation measure. If avoidance is not feasible, other types of mitigation such as monitoring or data recovery would be needed. A Historic Properties Treatment Plan would be developed to outline all mitigation measures (PCEMs). The PA outlines steps by the agencies, the Project proponent, and other consulting parties to be taken prior to construction and during operation and maintenance of the proposed Project to comply with the National Historic Preservation Act. The final PA is included in Appendix L of the Final EIS. The impact intensity of the proposed Project and

alternatives on cultural resources would range from no impact to major, including the Agency Preferred Alternative.

## **IX. VISUAL RESOURCES**

The visual impact analysis included the characterization of the existing landscape and an analysis of changes to the landscape that may result from the proposed Project under each alternative and an assessment of impacts to sensitive viewers. Additionally, 106 key observation points (“KOPs”) were established along the potential Project routes and were used as representative viewpoints from which to assess impacts to sensitive viewers and whether the proposed changes to the visual landscape would meet BLM management objectives for visual resources. Together with scenic quality mapping, visual simulation, and field reconnaissance, each KOP was used to establish how the proposed Project would affect the existing aesthetic conditions of the landscape and how sensitive viewers would be impacted. The degree of change to the existing landscape was assessed in terms of visual contrast, based on 10 environmental factors for identifying and characterizing impacts related to viewer sensitivity and Project visibility.

The major visual impacts in Arizona resulting from the proposed Project would include:

- Scenic views from winery tasting rooms and private property along the Willcox Bench would be partially obstructed and within close proximity (less than 0.25 mile in places from route variations P7a, P7b, P7c, P7d).
- Travelers along the I-10 corridor would have sporadic views of new transmission line in some areas.
- Recreational areas such as Sentinel Peak, Anza NHT, Butterfield Trail, Arizona National Scenic Trail (“Arizona NST”), Santa Cruz River Bikeway, and Saguaro National Park would have varying degrees of visual impact resulting from the introduction of the proposed Project. In most cases, the proposed corridor is sited along areas that have been previously disturbed by similar structures or would replace existing structures, giving an opportunity to implement PCEMs to reduce visibility.
- The analysis of the Tumamoc Hill area, located in a historic, well-maintained residential area of Tucson, included a series of working group sessions intended to derive the best alternative to avoid impacts to the aesthetic, historic, and visually sensitive features of the area. The Agency Preferred

Alternative follows existing development to avoid additional visual impacts to Tumamoc Hill. Also, the existing “H” frame line that is located within the Tumamoc Hill would be removed, thus removing the visual impacts of the existing line.

Implementation of PCEMs would be applied to reduce visual impacts, preserve sensitive views, and minimize visual contrast. Included are methods of micro-siting the corridor to follow landform contours, clearing trees and vegetation to reduce visual contrast and blend into adjacent landscape, and implementing tower and facility design to reduce visibility of the structures. However, the structures would still be visible in many situations. The impact intensity of the proposed Project and alternatives on visual resources would range from minor to major, including the Agency Preferred Alternative.

## **X. LAND USE, INCLUDING FARM AND RANGE RESOURCES AND MILITARY OPERATIONS**

### **A. Land Use**

The proposed Project would be constructed across lands owned and managed by Federal, State, tribal, private, or other entities, under a variety of RMPs, comprehensive plans, or other land use plans. The proposed Project and alternatives cross large tracts of undeveloped land, as well as urban and suburban areas. Approximately 75 percent of the Project alternatives considered in detail in the EIS would be parallel to existing linear facilities in disturbed corridors, including transmission and distribution lines, roads, gas lines, and abandoned railroad right-of-ways.

Approximately 27 percent of the Agency Preferred Alternative route would cross public lands administered by the BLM; State lands in New Mexico and Arizona form approximately 35 percent of the route; and the remaining 38 percent would cross county, private, tribal, and other non-Federal or State lands. Right of way would be acquired on these lands, which are generally used for grazing, farming, recreation, and open space. BLM and State lands are primarily used for grazing or recreation in open space areas. Residential uses are located on private lands in rural areas and near small cities and towns within the analysis area. As noted previously, approximately 85 percent of the Agency Preferred Alternative in the New Build Section, and approximately 98 percent in the Upgrade Section, would be parallel to existing or proposed linear infrastructure such as transmission lines, gas line, and roadways.

In general, land use impacts are minimized where linear utilities are constructed within established or designated corridors. The alignment of the Agency Preferred Alternative route was sited to maximize the use of established utility corridors, and to minimize conflicts with incompatible land uses such as wilderness, national parks and monuments, special management areas, conservation areas, densely populated areas, and military installations. For all segments, impacts to land uses would occur in some form along any portions of the route that cross undeveloped lands, irrigated agricultural lands, domestic farm wineries, residential subdivisions, and areas used for industrial or military testing and training. PCEMs would be effective in avoiding or minimizing direct impacts with land uses in most conditions. There would be no direct displacement of existing land use authorizations or ROWs, residential, business, or industrial structures.

## **B. Farmland and Range**

Construction of the transmission line would have direct effects on farmlands and rangelands by removing land acreage from productivity. Except under extraordinary circumstances, all operation and maintenance activities would occur within the transmission line and access road ROWs. These activities would not directly or indirectly impact adjacent farmlands or rangelands. No direct effect would occur on farmlands and rangelands during the operation and maintenance phase of the proposed Project beyond the long-term loss of lands resulting from Project construction. The proposed Project would not significantly reduce farmlands or rangelands in the analysis area because farming and ranching operations are still allowable uses within the transmission line ROW. While permanent disturbance would result in a conversion of farmland to non-farmable land, temporary disturbance along the right-of-way would be returned to farmland. Much of the Agency Preferred Alternative parallels existing linear facilities, which have already resulted in conversion of land to non-farmable land.

## **C. Military Operations**

Impacts to military operations could occur from construction, operation, and maintenance of the proposed Project where the transmission line, substations, and ancillary facilities intersect with military-owned, leased, or withdrawn (including Electronic Proving Ground/Bufalo Soldier Electronic Testing Range (“BSETR”) facilities. This could include military training visual routes (“MTRs”) or areas where training is for electronics and communications. Ground disturbance-based impacts on military uses would not be significant, as all operations/training occurring in visual routes is aerial in nature, and the BSETR is used for electronics and communications

testing. These impacts would be below the above-ground-level thresholds since the areas that may intersect military training visual routes include existing transmission line facilities that are already below above-ground-level thresholds, and the military operations have operated in conjunction with these facilities previously. Additionally, in accordance with PCEMs (*see* Final EIS Table 2-8), the Project would include the optional structure heights in areas intersecting some MTRs. Structures crossing the MTRs would also have anti-collision lighting to the maximum extent possible in order to make the hazard of transmission lines more apparent to pilots flying low altitude at night. These measures would mitigate impacts to military training and airspace usage, as well as contribute to the safe conduct of missions.

Within the Upgrade Section near Fort Huachuca, the proposed Project could include changes to the “zero point” level for electronics and communications testing purposes on the BSETR. An upgrade of the existing line would include a higher electronic load; however, any transmission line design would use best available technology to minimize electromagnetic interference. Therefore, upgrading the existing line could potentially reduce electromagnetic interference from current levels. Additionally the Department of Defense provided specific mitigation measures (“PCEMs”) considered in the analysis to minimize impacts to the BSETR. Any changes to EMF would require Fort Huachuca to revise its radio frequency emitter inventory for this area to account for the new design and operation of the line. Existing transmission lines that are currently in operation within the BSETR are already accounted for in the existing EMF calculations.

The impact intensity of the proposed Project and alternatives on land use, including farm and range resources and military operations, would range from no impact to moderate. The impact intensity for the Agency Preferred Alternative would be minor.

## **XI. SPECIAL DESIGNATIONS**

Potential impacts from construction activities that would be common to all action alternatives include direct ground disturbance and temporary increases in ambient noise levels in areas where the transmission line, substations, and ancillary facilities intersect with or are adjacent to special designations.

The only BLM special designations that would be intersected by the proposed Project would be National Trails and/or Trails Recommended as Suitable for National Trail Designation. The proposed Project crosses the Continental Divide National Scenic Trail (“NST”), Butterfield Trail, Arizona NST, Anza National Historic Trail, Sonoita Valley Acquisition Planning District, and approximately eight county or city parks. During

construction, increases in ambient noise levels, the presence of equipment, and dust would be temporary and would decrease with the completion of construction activities; therefore, the impact would be minor. There would be no expansion of the ROW in Pima County or the City of Tucson parks and conservation areas.

There would be no direct impacts on designated wilderness areas and wilderness study areas (“WSAs”), as no facilities would be sited within wilderness area or WSA boundaries. The short-term, indirect impacts to wilderness areas and WSAs during construction may include impacts to air quality, noise, visual, or other resources. Potential long-term, indirect impacts to wilderness areas or WSAs could include loss of outstanding opportunities for solitude or primitive and unconfined recreation as a result of changes to the visual character of the surrounding lands; these impacts are anticipated to be minor since existing facilities (*e.g.*, transmission lines, pipelines, roads) would also be visible. The impact intensity of the proposed Project and alternatives on special designations would range from no impact to minor. The impact intensity for the Agency Preferred Alternative would be minor.

## **XII. WILDERNESS CHARACTERISTICS**

The BLM Las Cruces District Office reviewed and updated previous inventories for the Wilderness Inventory Units (“WIUs”) that are included in the New Build Section of the analysis area to ensure consistency with previous conclusions for wilderness characteristics (*i.e.*, the area’s size; naturalness; outstanding opportunities for solitude or primitive, unconfined recreation; and supplemental values).

Potential impacts to WIUs in terms of the four criteria (size; naturalness; outstanding opportunities for solitude or primitive, unconfined recreation; and other supplemental values) that must be present in order for the land to be considered as containing wilderness characteristics are analyzed in this EIS. Potential impacts from construction activities that would be common to all action alternatives under route groups 1 and 2 include direct ground disturbance and temporary increases in ambient noise levels in areas where the transmission line, substations, and ancillary facilities intersect with lands that possess wilderness characteristics. Increases in ambient noise levels would be temporary and would decrease with the completion of construction activities. This would be a short-term, minor impact to the opportunities for solitude and primitive, unconfined recreation in the immediate area. Ground disturbance and temporary increases in ambient noise levels would be a minor, short-term impact to the naturalness of the immediate area. However, ground disturbance would not occur across the entire right-of-way.

Within route groups 1 and 2, the proposed Project and alternatives would intersect 10 inventoried WIUs. No WIUs would be intersected by the proposed Project and alternatives in route groups 3 and 4. Where the Agency Preferred Alternative intersects the WIUs, those units were determined not to include the requisite wilderness characteristics. Therefore, no impacts to lands with wilderness characteristics along the Agency Preferred Alternative are expected. If an alternative or combination of alternatives other than the Agency Preferred Alternative is chosen in the ROD, additional field verification may be required to evaluate lands with potential wilderness characteristics. The impact intensity of the proposed Project and alternatives on wilderness characteristics would range from no impact to moderate. There would be no impact to wilderness characteristics from the Agency Preferred Alternative.

### **XIII. RECREATION**

Construction of the proposed Project has the potential to have negligible to minor, short-term, direct, and indirect impacts to recreation opportunities or activities, desired recreation experiences, and the recreation setting. Where the proposed Project would parallel existing linear facilities (*i.e.*, transmission lines, gas lines, etc.), impacts would be negligible because these facilities are already factored into the existing recreation character. Where the proposed Project would not parallel existing linear facilities, the potential impacts would be minor where the existing conditions would change.

In particular, short-term, minor impacts would occur in at the intersections of the proposed Project with national trails and trails recommended as suitable for national trail designation, Aden Hills OHV area, Bar V Ranch, Tucson Mountain Park, Tumamoc Hill, Joaquin Murrieta Park, Santa Cruz River Park, and Christopher Columbus Park during construction. These short-term changes to the recreation setting would result from construction activities that would cause increased noise and fugitive dust.

Hunting opportunities (both big- and small-game) that could be disrupted by the construction of the proposed Project would not represent a significant impact to hunting overall, since the areas within game management units (“GMUs”) that are outside the proposed Project footprint would remain available for hunting, subject to applicable laws and regulations. BLM and WAPA would coordinate the timing of activities with State game and fish management agencies to further minimize impacts to hunters. The impact intensity of the proposed Project and alternatives on recreation would range from no impact to minor. The impact intensity for the Agency Preferred Alternative would be minor.

#### **XIV. SOCIAL AND ECONOMIC CONDITIONS**

In general, the proposed Project would not have a significant impact on regional population or housing as a result of construction or operation. The construction of the New Build Section would directly and indirectly support an estimated total of 481 jobs, approximately 235 of which would be expected to be filled by local workers. Construction of the Upgrade Section would directly and indirectly support an estimated total of 270 jobs, approximately 138 of which would be filled by local workers. The combined total of about 378 non-local construction workers for the New Build Section and the Upgrade Section has the potential to create isolated, short-term shortages in temporary housing. In particular, the more remote portions of the project along the western parts of the New Build Section and the eastern portion of the Upgrade Section would be the most likely to experience a temporary strain on housing resources.

The proposed Project would generate State and local tax revenues during both the construction and the continued operation/maintenance stages. The construction of the New Build Section would generate approximately \$462,000 in additional sales tax and \$219,000 in State and local property taxes per year. Local governments would receive approximately \$150,000 and \$210,000 per year in sales and property taxes, respectively. Once Project construction is complete, the operation and maintenance of the New Build Section has the potential to initially generate approximately \$4.2 million per year in additional property tax revenues for local governments.

Construction of the Upgrade Section of the proposed Project would generate approximately \$309,000 in State and local sales tax and \$214,000 in State and local property taxes per year. Local shares are estimated to be approximately \$206,000 and \$200,000, respectively. The initial property tax revenues during operation and maintenance of the proposed Project could be around \$4.3 million per year. The impact intensity of the proposed Project and alternatives on social and economic conditions would be minor, including the Agency Preferred Alternative.

#### **XV. ENVIRONMENTAL JUSTICE CONDITIONS**

Sixteen of the 19 census tracts that would be crossed by any of the alternatives for the New Build Section, including the Agency Preferred Alternative, can be defined as environmental justice communities. In the Upgrade Section, 26 of the 37 census tracts potentially impacted by the Project can be defined as environmental justice communities. Compared with the states in which they are located, these communities have either higher minority populations or a greater proportion of residents living below the

poverty line, or both. These communities may be adversely affected by localized impacts, including noise and other disruptions during the construction phase and potentially diminished property values and visual characteristics during the operations and maintenance of the Project. However, few, if any, of these impacts would be characterized as “high.” As the proposed Project is not anticipated to result in the condemnation of multiple residential properties or result in new visual impacts in close proximity to residential properties in previously undisturbed corridors, these impacts are not expected to be high.

Environmental justice communities may also be positively affected by the benefits of the proposed Project, including the short-term economic stimulus from construction activities and expenditures, short-term and longer-term increases in tax revenues, and added capacity and reduced congestion for electricity transmission. However, because these benefits are likely to be more geographically dispersed than the localized adverse effects, it is uncertain whether or not low-income and minority populations would receive disproportionate benefits from the proposed Project. Given the prevalence of low-income and minority residents throughout the area, impacts on these groups are likely inevitable from any feasible transmission line alignment; however, these residents and the area were not unduly targeted in order to site the proposed Project. The impact intensity of the proposed Project and alternatives on environmental justice conditions would be minor, including the Agency Preferred Alternative.

## **XVI. PUBLIC HEALTH AND SAFETY**

Potential risks to public health and safety associated with construction activities would include, but would not be limited to, electrocution, exposure to extreme weather, falling, exposure to hazardous materials, and injury from equipment and materials. The implementation of Occupational Safety and Health Administration safety requirements through the use of PCEMs, along with other safety requirements, would minimize the chance that an accident could occur.

The potential for increased public exposure to EMF would occur in both the New Build and Upgrade Sections. While there are currently no Occupational Safety and Health Administration standards that address exposure to EMFs, nonbinding guidelines for EMF exposure have been developed by the International Commission on Non-Ionizing Radiation Protection, the Institute of Electrical and Electronics Engineers, and the American Conference of Governmental Industrial Hygienists. As noted in chapter 4 of the EIS, EMFs produced by the proposed Project are not expected to exceed these safety guidelines. In the New Build Section, transmission lines would be built in areas where

no current transmission lines exist and therefore would create the potential for public exposure to EMF where they did not previously occur. EMF impacts in the New Build Section would be negligible because the newly introduced EMFs would occur in areas that are sparsely populated, would not be adjacent to residential areas or areas where long-term public exposure would occur, and would be further reduced by the implementation of the PCEMs. Therefore, the potential increase of public exposure to EMFs from transmission lines in the New Build Section would be negligible, especially considering that EMF exposure guidelines would be met outside the right-of-way.

In the Upgrade Section, the EMFs currently created by the existing transmission infrastructure do not exceed EMF exposure guidelines within the right-of-way. Consequently, the existing transmission infrastructure is not impacting public health and safety. The upgraded lines would generate higher EMF levels within the ROW. However, EMF levels outside the right-of-way are expected to be comparable to EMF levels created by the existing transmission infrastructure as a result of the double-circuit configuration's phase cancellation effect. Therefore, any increased risk of public exposure to EMFs in the Upgrade Section would also be considered negligible.

The proposed Project would have both negative and beneficial long-term impacts to public health and safety. Potential long-term, negative impacts could occur as a result of increase of EMF in areas where they do not currently occur. However, with implementation of the PCEMs and proponent-proposed measures, the impacts to public health and safety would be expected to be negligible. Construction of the proposed transmission infrastructure would also have a long-term, beneficial impact to public health and safety by improving the reliability of electricity transmission to areas that would be served by the proposed infrastructure. In the Upgrade Section, the new facilities would be constructed to modern design standards, including modern hardware and grounding systems. These new facilities would require less frequent and less intensive maintenance work than the older facilities, resulting in decreased potential for occupational accidents to occur and a reduction in fire risks. The impact intensity of the proposed Project and alternatives on public health and safety would be minor, including the Agency Preferred Alternative.

## **XVII. HAZARDOUS MATERIALS AND HAZARDOUS AND SOLID WASTE**

The potential impacts to human health and the environment from preexisting hazardous materials that may be present along the proposed Project corridor, and from hazardous materials generated during construction or operation and maintenance of the Project, were analyzed. With adherence to PCEMs to ensure safe handling, storage, and use of

hazardous materials, no effects are anticipated from preexisting hazardous materials or the use of hazardous materials under any of the action alternatives. The PCEMs described above would be implemented to prevent spills and leaks of hazardous materials and provide for adequate containment and cleanup if spills and leaks do occur. There would be no impact from hazardous materials and hazardous and solid waste from the proposed Project and alternatives, including the Agency Preferred Alternative.

## **XVIII. TRANSPORTATION**

In general, the proposed Project would cross a sparsely populated rural area in the New Build Section and in the Upgrade Section with the exception of the Tucson metropolitan area. Traffic would be generated primarily during the construction, but also minimally during the maintenance and operation phases. However, given the existing low level of traffic on primary roadways within the New Build Section and the low level of anticipated traffic during construction, only short-term, minor impacts to traffic on primary roads would be anticipated. The additional traffic volume on primary roadways would represent a volume increase of 1 percent or less on various segments of I-10 in the New Build and Upgrade Sections.

Continued coordination with Federal, State, and local transportation agencies would ensure that the proposed Project would not impact transportation plans in the New Build and Upgrade Sections. Similarly, continued coordination with airports and the Federal Aviation Administration would ensure that the proposed Project would not interfere with flight paths or airport plans in the New Build and Upgrade Sections. Given the location of the proposed Project, it appears likely that the height of the proposed transmission structures (approximately 134 feet) would be below the runway approach surface elevations for all airports in both the New Build and Upgrade Sections.

The proposed Project in the New Build and Upgrade Sections would impact BLM roads and roadless areas by increasing opportunities for illegal access to roads/areas currently closed to public access. This impact would most likely occur from the construction of new access road types D (new down-ROW primary access) and E (spur roads). The impact of increasing access to BLM roads and BLM roadless areas would be considered minor. The impact intensity of the proposed Project and alternatives on transportation would be minor, including the Agency Preferred Alternative.

## **XIX. INTENTIONAL ACTS OF DESTRUCTION**

Intentional acts of destruction could include sabotage or terrorism. Predicting the occurrence of intentional acts of sabotage or terrorism or the potential damage from these acts is not possible. By constructing and operating new transmission lines, saboteurs and terrorists would have a new potential target to carry out their acts. Historically, acts of sabotage and terrorism on transmission infrastructure have been rare, and the effects of events that have occurred have not had a significant impact to adjacent lands or public health and safety. Moreover, the addition of transmission lines and associated facilities generally strengthens the reliability of delivering electricity to the general public, because if one line is affected by an intentional act of destruction or any other disruption, other lines would be available to continue the delivery of electricity. Therefore, the potential impacts from the unlikely event of an act of terrorism or sabotage would be considered minor. There would be no impacts from the proposed Project and alternatives in terms of intentional acts of destruction.

## **XX. PROPOSED RESOURCE MANAGEMENT PLAN AMENDMENTS**

No plan amendments would be required for any Project segments in Arizona. Additionally, the Agency Preferred Alternative would not require a plan amendment. In New Mexico, a plan amendment for the Mimbres Resource Management Plan (“RMP”) would be required for the portion of the alternative route segment (local alternative LD2 near the Lordsburg Playa) that parallels an avoidance area designated for the Butterfield Trail. A plan amendment would also be required for the Mimbres RMP that would change the VRM Class II designation to VRM Class III or IV for six Project segments within the New Build Section that intersect VRM Class II lands located in New Mexico.

Amending the Mimbres RMP would not itself result in ground disturbance or development; this action would not directly or indirectly impact many resources beyond the direct and indirect impacts described in Sections 4.2 through 4.19 of the Final EIS.

## **XXI. CUMULATIVE EFFECTS**

The effects of the proposed Project, when taken together with past, present, and reasonably foreseeable future actions, constitute the cumulative effects of the Project and are fully analyzed in Section 4.21 of the Final EIS. This analysis assumes that the proposed Project would be constructed and examines all action alternatives, including the Agency Preferred Alternative, agency local alternatives, and the Proponent Preferred

and Proponent Alternative routes. Because the Project was routed, and many agency alternatives were developed, along existing and proposed linear facilities, the cumulative effects analysis considers the past, present, and reasonably foreseeable future actions that may have cumulative effects, along with the proposed Southline Project. Approximately 85 percent of the Agency Preferred Alternative in the New Build Section would parallel existing or proposed linear infrastructure; virtually all of the Agency Preferred Alternative for the Upgrade Section would use WAPA's existing ROW, or parallel an existing road.

### **SCOPING, CONSULTATION, AND COORDINATION**

Though not part of the NEPA process, Southline also conducted a series of stakeholder meetings and workshops in 2011, prior to the formal scoping period. The goals of these meetings were to give the public early notification and to solicit public input from interested stakeholders that would help Southline develop a proposed Project that could be presented to the BLM in a formal right-of-way application. Southline met with local jurisdictions such as city administrators, county commissioners and supervisors, and State officials in both New Mexico and Arizona, as well as representatives from local community organizations and agencies within the Project area.

As required under the National Environmental Policy Act of 1969, the BLM and WAPA (in coordination with cooperating agencies) conducted scoping in the early stages of the EIS preparation, to encourage public participation and solicit agency and public comments on the scope and significance of the proposed Project (40 C.F.R. § 1501.7).

The public was informed about the formal application for the Project and public scoping period by an NOI published in the Federal Register on April 4, 2012. This initiated the NEPA process for the Project and began a 60-day public scoping period, during which the public had the opportunity to provide input on potential issues to be addressed in the EIS. As a result of public requests for an extension of the 60-day scoping comment period, the scoping comment period was extended by 30 days (ending on July 5, 2012). The completed Southline Transmission Line Project Environmental Impact Statement Scoping Summary (September 2012) can be found on Exhibit B-2.

The BLM and WAPA published an NOA for the Draft EIS/Draft RMPA in the Federal Register on April 11, 2014. The NOA announced the release of the Draft EIS and the beginning of a 90-day comment period. BLM and WAPA hosted three public open houses/hearings and one agency meeting in each state, for a total of six public open houses/hearings and two agency meetings. These were hosted to provide information

on the proposed Project, answer questions about the analysis in the Draft EIS, and encourage public comments on the Draft EIS.

Consultation and coordination with Federal and intergovernmental agencies, organizations, American Indian tribes, and interested groups of individuals are important to ensure that the most appropriate data have been gathered and employed for analyses, and that agency and public sentiment and values are considered and incorporated into decision making. Throughout the preparation of the EIS, formal and informal efforts were made by the BLM and WAPA to involve these groups in the scoping process and in subsequent public involvement activities, formal consultation, and review of the EIS.

### **OTHER DECISIONS TO BE MADE**

Approximately 35 percent of the proposed Project (including alternatives) would be located on BLM-administered public land. Other portions of the Project may be located on lands administered by Reclamation (Upgrade Section only), the U.S. Forest Service (Upgrade Section only), State (New Build and Upgrade Sections), and Tohono O’odham Nation (Upgrade Section only), as well as private lands.

Where the proposed Project would cross private and State lands, it would be subject to applicable land use planning regulations, zoning ordinances, or other requirements enforced by the State, county, or local jurisdiction, and Southline would need to secure any necessary permits. Acquisition of right-of-way on State lands would require application to the New Mexico State Land Office or Arizona State Land Department for right-of-entry and easements. Legal access or easements crossing private lands would need to be obtained from private landowners.

#### **I. U.S. BUREAU OF RECLAMATION**

A short (0.2-mile) segment of the existing WAPA 115-kV line and a segment of the Agency Preferred Alternative (segment U3i), as well as the existing WAPA owned and operated Rattlesnake Substation in urban Tucson, are located on Federal lands administered by Reclamation. Upgrade of the existing line and expansion of the Rattlesnake Substation on Reclamation lands would require Reclamation approval. Segment U3i is part of the Agency Preferred Alternative in the Final EIS.

## **II. DEPARTMENT OF DEFENSE**

A short (0.2-mile) portion of the Proponent Preferred Alternative on the east side of Willcox Playa (segment P7) could cross DOD lands, depending on how the proposed Project is micro-sited in this area. Any applications for use of rights-of-way or easements on DOD lands would require DOD approval.

## **III. TOHONO O'ODHAM NATION**

A 2.9-mile-long segment of WAPA's existing 115-kV line, as well as the Agency Preferred Alternative (segment U3a), crosses lands administered by the Tohono O'odham Nation, south of the existing Del Bac Substation in urban Tucson. Upgrade of the existing line on tribal lands would require approval by the Tohono O'odham Nation. WAPA is currently negotiating renewal of its existing right-of-way and the expansion needed for the upgrade to 230-kV for that portion of the line located on allotted tribal lands. Segment U3a is part of the Agency Preferred Alternative in the Final EIS.