

DEPARTMENT OF ENERGY

Western Area Power Administration

TransWest Express Transmission Project Environmental Impact Statement (DOE/EIS-0450)

AGENCY: Western Area Power Administration, DOE

ACTION: Record of Decision

SUMMARY: The Western Area Power Administration (WAPA) and the U.S. Bureau of Land Management (BLM), acting as joint lead agencies, issued the proposed TransWest Express Transmission Project (Project) Final Environmental Impact Statement (EIS) (DOE/EIS-0450) on May 1, 2015. The Agency Preferred Alternative developed by WAPA and the BLM through the National Environmental Policy Act (NEPA) process and described in the Final EIS is summarized in this Record of Decision (ROD).

Because the BLM and WAPA were joint lead agencies in the preparation of the EIS, each agency will issue its own ROD(s) addressing the overall Project and the specific matters within its jurisdiction and authority. This ROD constitutes WAPA's decision with respect to the alternatives considered in the Final EIS. The U.S. Forest Service (USFS), Bureau of Reclamation (BOR), and Utah Reclamation Mitigation Conservation Commission (URMCC) are cooperating agencies in the proposed Project based on their potential Federal action to issue use permits across lands under their respective management. These agencies also will issue their own decisions regarding their specific agency actions. Additional cooperating agencies include Federal, state, tribal, and local agencies.

WAPA has selected the Agency Preferred Alternative identified in the Final EIS as the route for the Project. This decision on the route will enable design and engineering activities to proceed and help inform WAPA's Federal action(s) to consider any received or anticipated loan application permitted under its borrowing authority and/or exercise its options for participation in the Project. These considerations are contingent on the successful development of participation agreements as well as any and all documentation and commitments needed to satisfy financial underwriting standards.

FOR FURTHER INFORMATION CONTACT: For information on WAPA's participation in the Project contact Stacey Harris, Public Utilities Specialist, Transmission Infrastructure Program (TIP) Office A0700, Headquarters Office, Western Area Power Administration, P.O. Box 281213, Lakewood, CO 80228-8213, telephone (720) 962-7714, facsimile (720) 962-7083, email sharris@wapa.gov. For information about the Project EIS process or to request a CD of the document, contact Steve Blazek, NEPA Document Manager, Natural Resources Office A7400, Headquarters Office, Western Area Power Administration, P.O. Box 281213, Lakewood, CO 80228-8213, telephone (720) 962-7265, facsimile (720) 962-7263, email sblazek@wapa.gov. The Final EIS and this ROD are also available at <http://energy.gov/nepa/downloads/eis-0450-final-environmental-impact-statement>.

For general information on the Department of Energy (DOE) NEPA process, please contact Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance (GC-54), U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, telephone (202) 586-4600 or (800) 472-2756.

SUPPLEMENTARY INFORMATION: TransWest Express LLC (TransWest) is the TransWest Express (TWE) Transmission Project (Project) proponent. The Project is proposed as

an extra high voltage, direct current (DC) transmission system extending from south-central Wyoming to southern Nevada. The proposed transmission line (and alternatives) would cross four states (Wyoming, Colorado, Utah, and Nevada) encompassing lands owned or administered by the BLM, USFS, BOR, URMCC, National Park Service, various state agencies, Native American tribes, municipalities, and private parties. The Project would provide the transmission infrastructure and capacity necessary to deliver approximately 3,000 megawatts (MW) of electric power from renewable and/or non-renewable energy resources in south-central Wyoming to southern Nevada. The TransWest proposed action would consist of an approximately 725-mile-long, 600-kilovolt (kV), DC transmission line and two terminals, each containing a converter station that converts alternating current (AC) to DC or vice-versa. The northern AC/DC converter station would be located near Sinclair, Wyoming, and the southern AC/DC station near the Marketplace Hub in the Eldorado Valley, approximately 25 miles south of Las Vegas, Nevada. The Project would retain an option for a future interconnection with the existing Intermountain Power Project (IPP) transmission system in Millard County, Utah.

In April 2009, TransWest submitted a Statement of Interest (SOI) to WAPA for consideration of its Project under the authority provided to WAPA under the American Recovery and Reinvestment Act of 2009 amendment of the Hoover Power Plant Act of 1984. WAPA is considering whether to use its borrowing authority, if a loan application is submitted and successfully underwritten, to finance and/or exercise its options for partial ownership in the proposed Project. TransWest's SOI prompted WAPA to initiate a request to the BLM to become a joint lead agency for the development of the EIS to determine the environmental impacts of the Project.

TransWest also filed a Right-Of-Way (ROW) application with the BLM pursuant to Title V of the Federal Land Policy and Management Act of 1976, as amended, proposing to construct, operate, maintain, and eventually decommission a high-voltage electric transmission line on land managed by the BLM. The BLM initiated its own NEPA process to address whether to grant a ROW permit. Because both agencies had NEPA decisions to consider, WAPA and the BLM agreed to be joint lead agencies in accordance with NEPA, 40 CFR 1501.5(b), for the purpose of preparing the EIS for the Project. The agencies issued the Final EIS for the Project on November May 1, 2015.

Each agency will issue its own ROD(s) addressing the overall Project and the specific matters within its jurisdiction and authority. While WAPA's potential involvement relates to use of its borrowing authority, the decision at hand is a selection of project route.

Project Description

TransWest's Proposed Action would include:

- A 600-kV DC line, approximately 725 miles in length, extending across public and private lands in Wyoming, Colorado, Utah, and Nevada. The transmission line ROW would be approximately 250 feet wide;
- Two terminal stations located at either end of the transmission line; the Northern Terminal located near Sinclair, Wyoming, and the Southern Terminal at the Marketplace Hub in the Eldorado Valley, within Boulder City, Nevada. Terminal facilities would include converter stations and related substation facilities necessary for interconnections to existing and planned regional AC transmission systems;

- Access routes, including improvements to existing roads, new overland access, and new unpaved roads to access the proposed Project facilities and work areas during the construction, operation, and maintenance Project phases;
- Ancillary facilities including a network of 15 to 20 fiber optic communication regeneration sites and two ground electrode facilities; and
- Temporary construction sites that would include wire pulling/fly yards, material storage and concrete batch plant sites.

TransWest also identified and retained two design options to provide the Project with flexibility to adapt to potential regional transmission changes. The design options do not currently meet the interests and objectives of the Project; however, they could be considered if/when capacity becomes available on the Southern Transmission Systems.

Alternatives

An iterative, adaptive process was used for this Project to identify an adequate range of alternative transmission corridors that directly respond to addressing potential resource or siting constraints and help inform decision-makers. Due to the length of the transmission line, the alternative transmission routes were split into four distinct regions for the purpose of presenting clear impact comparisons between alternative segments:

- Region I: Sinclair, Wyoming, to Northwest Colorado near Rangely, Colorado;
- Region II: Northwest Colorado to IPP near Delta, Utah;
- Region III: IPP to North Las Vegas, Nevada; and
- Region IV: North Las Vegas to Marketplace Hub in Boulder City, Nevada.

One alternative within each of these regions is combined with the others to define a distinct end-to-end route from Wyoming to Nevada. A depiction of the four regions and the alternatives can be found as Figures 2-22 through 2-25 in Chapter 2 of the Final EIS.

Alternatives Facilities and Transmission Line Routes for Four Regions

Region I

Northern Terminal

The Northern Terminal would be located approximately three miles southwest of Sinclair, Wyoming (Carbon County) on private lands. The terminal would include an AC/DC converter station and adjacent AC substation. The AC/DC converter station would include a 600-kV DC switchyard; AC/DC conversion equipment; transformers; and multiple equipment, control, maintenance, and administrative buildings. Two buildings would house the AC/DC conversion equipment; smaller buildings would house the control room, control and protection equipment, auxiliary equipment; and cooling equipment. Connections to the existing transmission infrastructure also would be constructed. The three major components (AC/DC converter station, 500/230-kV AC substation, and 230-kV AC substation) are planned to be co-located and contiguous.

Alternative I-A Transmission Line Route (Proposed Action)

TransWest's proposed alignment would begin in Sinclair, Wyoming, and would travel west just south of the Interstate 80 (I-80) corridor to Wamsutter. At Wamsutter, it would turn south and generally follow the Carbon-Sweetwater county line along a corridor preferred by the Wyoming Governor's Office and Carbon and Sweetwater counties. It then would continue south-southwest across the Wyoming-Colorado state line and south along a corridor preferred by Moffat County and coordinated with the BLM Northwest Colorado District Office's ongoing greater sage-grouse planning effort. It would then intersect with U.S. Highway 40 (US-40) just

west of Maybell, Colorado. The alignment would then generally parallel US-40, turning southwest toward the Colorado-Utah border.

Alternative I-A is approximately 156 miles in length, 66 percent of which would be located on BLM lands. There would be 24 miles would be in BLM Resource Management Plan (RMP) utility corridors and 25 miles would be in West Wide Energy Corridors (WWECs). There would be approximately 201 miles of access roads associated with this alternative.

Alternative I-B Transmission Line Route (Final EIS Agency Preferred Alternative)

Alternative I-B as considered in the Final EIS would be the same as Alternative I-A for nearly its entire length, with one exception just north of the Wyoming-Colorado state line. A length of approximately 8 miles of Alternative I-B diverges to the southeast from Alternative I-A in this area to minimize potential impacts to areas eligible for historic trail designation.

Alternative I-B includes is approximately 158 miles in length, 67 percent of which would be located on BLM lands. There would be 24 miles would be in BLM RMP utility corridors and 25 miles would be in WWECs. There would be approximately 204 miles of access roads associated with this alternative.

Alternative I-C Transmission Line Route

This alternative was developed to reduce the overall proliferation of utility corridors and associated impacts by following existing designated utility corridors. Alternative I-C would begin by following Alternative I-A to near Creston, Wyoming, where Alternative I-C would turn south and parallel Wyoming State Highway 789 (SH-789) toward Baggs, Wyoming. From there, Alternative I-C would continue south, deviating from SH-789 to the east and passing east of Baggs. After crossing into Colorado, this alternative would parallel Colorado State Highway 13 into Craig, Colorado. Alternative I-C would pass east and south of Craig, turning to the west

after crossing US-40, generally paralleling the highway and joining with Alternative I-A to the end of Region I.

Alternative I-C is approximately 186 miles in length, 44 percent of which would be located on BLM lands. There would be 53 miles would be in BLM RMP utility corridors and 60 miles would be in WWECs. There would be 237 miles of access roads associated with this alternative.

Alternative I-D Transmission Line Route

Alternative I-D was developed to reduce multiple resource concerns, including impacts to visual resources and greater sage-grouse. It would follow the route of Alternative I-A, going west from Sinclair, Wyoming (Carbon County, Wyoming), basically paralleling I-80 in a designated WWEC, until turning south near Wamsutter. It would follow Alternative I-A south for approximately 15 miles. Alternative I-D then would diverge to the east, where it generally would parallel SH-789 at an offset distance of 2 to 5 miles to the west. Before reaching the Baggs area, Alternative I-D would turn west and follow the Shell Creek Stock Trail road for approximately 20 miles, where it would cross into Sweetwater County and again join Alternative I-A while turning south into Colorado (Moffat County).

Alternative I-D is approximately 168 miles in length, 70 percent of which would be located on BLM lands. There would be 24 miles would be in BLM RMP utility corridors and 25 miles would be in WWECs. There would be 213 miles of access roads associated with this alternative.

Alternative Variations, Connectors, and Micro-siting Options

There are no alternative variations within Region I. The Region I alternative connectors were removed from further consideration at the request of the lead agencies in response to public comments received on the Draft EIS.

Two micro-siting options have been developed to address specific land use concerns in all Region I alternative routes related to the Tuttle Ranch Conservation Easement and the Cross Mountain Ranch proposed conservation easement:

- Tuttle Ranch Micro-siting Option 3; and
- Tuttle Ranch Micro-siting Option 4.

Tuttle Ranch Micro-siting Option 3 would avoid the Tuttle Ranch Conservation Easement, but would cross the NPS Deerlodge Road west of US-40 and would cross the largest portion of the Cross Mountain Ranch property. Tuttle Ranch Micro-siting Option 4 would avoid the Tuttle Ranch Conservation Easement and the NPS Deerlodge Road, and would cross the least amount of the Cross Mountain Ranch property.

Ground Electrode Locations

One ground electrode system would be required within approximately 100 miles of the Northern Terminal to establish and maintain electrical current continuity during normal operations, and any unexpected outage of one of the two poles (or circuits) of the 600-kV DC terminal or converter station equipment. The ground electrode facility would consist of a network of approximately 60 deep earth electrode wells arranged along the perimeter of a circle expected to be about 3,000 feet in diameter. All wells at a site would be electrically interconnected and wired via approximately 10 low-voltage underground cable “spokes” to a small control building. A low voltage electrode line would connect the ground electrode facilities to the AC/DC converter stations. General siting areas and conceptual alternative site locations have been identified in Regions I; selection of specific location of the ground electrode systems would be identified during final engineering and design stages.

There are four potential locations for ground electrode systems in Region I (Bolten Ranch, Separation Flat, Separation Creek, and Eight Mile Basin). All locations would apply to all alternatives.

Region II

Alternative II-A Transmission Line Route (Proposed Action)

The TransWest proposed alignment would continue into Utah in a westerly direction, and then deviate south from US-40 toward Roosevelt, Utah. From Roosevelt, it would pass north of Duchesne, again paralleling US-40 for several miles, then turn southwest and cross the Uinta National Forest Planning Area¹ generally within a designated WWEC, then turn west along U.S. Highway 6 (US-6) and Soldier Creek. At the junction with U.S. Highway 89 (US-89), Alternative II-A would then turn south generally along US-89 where it would cross a portion of the Manti-La Sal National Forest. The alignment would pass through Salt Creek Canyon then north around Nephi. It would continue west and then turn southwest following a path north of and adjacent to IPP. Portions of this corridor have been identified as preferred in a joint resolution by representatives of Juab and Millard counties.

Alternative II-A would be approximately 258 miles in length, 45 percent of which would be located on BLM/USFS lands. There would be approximately 34 miles in BLM RMP utility corridors and 63 miles would be in WWECs. There would be approximately 395 miles of access roads associated with this alternative.

¹ In March 2008, the Uinta National Forest and the Wasatch-Cache National Forest were combined into one administrative unit (Uinta-Wasatch-Cache National Forest). Each of these forests continues to operate under individual forest plans approved in 2003. The term Uinta National Forest Planning Area is used to refer to that portion of the Uinta-Wasatch-Cache National Forest managed under the Uinta National Forest Land and Resource Management Plan.

Alternative II-B Transmission Line Route

Alternative II-B was developed to address impacts to private lands and to generally follow established utility corridors. These corridors are designated for underground utilities only and use of the corridor for the transmission line would require a plan amendment. The route would travel southwest in Colorado from the beginning of Region II, cross the Yampa River, and pass east of Rangely, Colorado. It would continue southwest where it would cross the Colorado-Utah state line and turn generally south, crossing back into Colorado in the Baxter Pass area. At that location, it would intersect the Interstate 70 (I-70) corridor, turning in a southwesterly and westerly direction, paralleling I-70. After passing south of Green River, Utah, Alternative II-B would diverge from I-70 and turn to the north along U.S. Highway 191 (US-191). This highway generally would be followed until just south of the Emery-Carbon county line, where Alternative II-B would turn west and pass near the county line for approximately 25 miles. Then it would generally turn south, pass west of Huntington, Utah, turn northwest, cross a portion of the Manti-La Sal National Forest, and pass northeast of Mount Pleasant, Utah. From there, it would pass through Salt Creek Canyon to Nephi, and then south around Nephi. It then would turn southwest and west adjacent to IPP, following a path south of Alternative II-A across a portion of the Fishlake National Forest.

Alternative II-A would be approximately 346 miles in length, 65 percent of which would be located on BLM/USFS lands. There would be approximately 136 miles would be in BLM RMP utility corridors and 33 miles would be in WWECs. There would be 492 miles of access roads associated with this alternative.

Alternative II-C Transmission Line Route

Alternative II-C also would decrease impacts to private lands and generally would follow established utility corridors as well as avoid USFS IRAs. Alternative II-C would follow Alternative II-B through Colorado, along I-70 into Utah, and north at US-191. Approximately 15 miles north on US-191, Alternative II-C would diverge from Alternative II-B and turn in a general westerly direction toward Castle Dale. Approximately 3 miles east of Castle Dale, this alternative would turn south and roughly parallel Utah State Highway 10 at a distance of approximately 3 miles to the east. The alternative would cross Utah State Route 10 near the Emery-Sevier county line and turn west, again generally following the I-70 corridor across a portion of the Fishlake National Forest into the Salina, Utah, area. Alternative II-C would pass south of Salina, turn north, and parallel U.S. Highway 50 toward Scipio, Utah. The alternative would turn west and pass Scipio on the south, again crossing a portion of the Fishlake National Forest, then turn north, passing east of Delta, Utah, continuing into IPP.

Alternative II-C would be approximately 365 miles in length, 67 percent of which would be located on BLM/USFS lands. Approximately 146 miles would be in BLM RMP utility corridors and 17 miles would be in WVECs. There would be 488 miles of access roads associated with this alternative.

Alternative II-D Transmission Line Route

This alternative was developed to avoid USFS IRAs and to provide additional northern route options to avoid impacts to historic trails and areas designated for special resource management along the southern routes (Alternatives II-B and II-C). It would begin along the same route as Alternative II-A. However, as it would enter Utah, it would diverge briefly to follow a designated utility corridor, causing it to zigzag once across Alternative II-A. It then would

diverge to the south of the designated utility corridor and turn west-southwest, skirting the edge of the Ashley National Forest. Alternative II-D would cross into Carbon County northwest of Price, and then turn southwest in the Emma Park area along US-191. It would follow this highway west of Helper, across a portion of the Manti-La Sal National Forest and then turn west toward Salt Creek Canyon where it would join and follow Alternative II-B, skirt the edge of the Uinta National Forest Planning Area, then join and follow Alternative II-A into IPP.

Alternative II-D is approximately 259 miles in length, 57 percent of which would be located on BLM/USFS lands. Approximately 71 miles would be in BLM RMP utility corridors and 46 miles would be in WWECs. There would be 422 miles of access roads associated with this alternative.

Alternative II-E Transmission Line Route

Alternative II-E also was developed to provide additional northern route options to address the previously mentioned resource impacts from the southern routes. This alternative would follow Alternative II-D into Utah and along the designated utility corridor, zigzagging across Alternative II-A. It then would rejoin Alternative II-A to continue west across the Uintah/Duchesne county line. Approximately 10 miles east of Duchesne, Alternative II-E would turn southwest and generally parallel SH-191, offset by 1 to 6 miles, through a utility window of the Ashley National Forest. At the Utah-Carbon county line, this alternative would turn west through the Emma Park area, then northwest along US-6 through a utility window of the Uinta National Forest Planning Area until rejoining Alternative II-A and following its siting through the Manti-La Sal National Forest to Salt Creek Canyon. At this canyon, Alternative II-E would begin to follow the alignment of Alternative II-B south of Nephi, then join and follow Alternative II-A adjacent and into IPP.

Alternative II-E is approximately 268 miles in length, 44 percent of which would be located on BLM/USFS lands. Approximately 40 miles would be in BLM RMP utility corridors and 66 miles would be in WWECs. There would be approximately 412 miles of access roads associated with this alternative.

Alternative II-F Transmission Line Route

Alternative II-F was adjusted in the Final EIS at the request of the lead agencies in response to public comments on the Draft EIS. This alternative combines portions of other alternatives in the region and contains unique segments in the Emma Park area that together would minimize impacts to USFS IRAs, Tribal and private lands, greater sage-grouse habitat, and avoid impacts to National Historic Trails (NHT). It would begin in southwest Moffat County (Colorado) by following Alternative II-A in designated WWEC and BLM utility corridors. As it enters Utah (Uintah County), it would separate from Alternative II-A to the northwest and follow the designated utility corridors, which then turn southwest and cross Alternative II-A. It then would diverge to the south off of the designated WWEC (still following the BLM-designated corridor) and turn west-southwest, crossing the Uintah and Ouray Indian Reservation. It then would cross into Duchesne County, where it would turn west-southwest out of the BLM utility corridor, skirt the Ashley National Forest and generally follow the southern county line. The alternative would follow Argyle Ridge west and US-191 to the southwest for a short distance and then would turn west and follow the base of Reservation Ridge. It would then turn northwest and cross US-6 at Soldier Summit where it would turn west-northwest and follow US-6 to Thistle (Utah County) through a portion of designated WWEC and BLM utility corridors and a utility window of the Uinta National Forest Planning Area. It then would turn south, following US-89 for about 10 miles and through a portion of the Manti-La Sal National Forest before cutting south-southwest

(Sanpete County) to Utah State Route 132. At this highway, it would turn west into Nephi (Juab County) and follow a path south around the community and continue west until turning southwest where it would parallel US-6 north of Lynndyl for a short distance, then diverging west, southwest and finally west along the southern edge of the Millard-Juab county line into IPP north of Delta (Millard County); the end of Region II.

Alternative II-F is approximately 265 miles in length, 55 percent of which would be located on BLM/USFS lands. Approximately 72 miles would be in BLM RMP utility corridors and 31 miles would be in WWECs. There would be approximately 455 miles of access roads associated with this alternative.

Alternative II-G Transmission Line Route (**Final EIS Agency Preferred Alternative**)

Alternative II-G is a reconfiguration of segments that are also included in multiple other alternatives, mainly Alternatives II-A and II-F. This specific alternative configuration was not included in the Draft EIS, but was added to the Final EIS to reflect the Agency Preferred Alternative in Region II. This alternative avoids crossing Tribal trust lands of the Uintah and Ouray Indian Reservation, while also avoiding NHT, maximizing avoidance of potential habitat of Federally protected plant species, and maximizing co-location with existing above-ground utilities. It would begin in southwest Moffat County (Colorado) by following the other alternatives in designated WWEC and BLM utility corridors. After entering Utah, this alternative would follow Alternatives II-F, II-D, and II-E and continue along the designated utility corridor, zigzagging across Alternative II-A. At this point, it would follow Alternative II-E to the northwest, and rejoin Alternative II-A to continue west across the Uintah/Duchesne county line. Alternative II-G would continue to follow Alternative II-A to near Fruitland. East of Fruitland it would diverge from Alternative II-A, but parallel closely to the south for several

miles avoiding a conservation easement, and then rejoin Alternative II-A. The alignment would then turn southwest and cross portions of the Uinta National Forest Planning Area, then turn west along US-6 and Soldier Creek, rejoining Alternative II-F. At the junction with US-89, Alternative II-G would then turn south generally along US-89 where it would cross a portion of the Manti-La Sal National Forest. The alignment would pass through Salt Creek Canyon. Here Alternative II-G would again diverge from Alternative II-A and pass south around Nephi. It would continue west and then turn southwest following a path north of and adjacent to IPP. Portions of this corridor have been identified as preferred in a joint resolution by representatives of Juab and Millard counties.

Alternative II-G is approximately 252 miles in length, 45 percent of which would be located on BLM/USFS lands. Approximately 32 miles would be in BLM RMP utility corridors and 63 miles would be in WWECs. There would be approximately 395 miles of access roads associated with this alternative.

Alternative Variations, Connectors, and Micro-siting Options

One alternative variation (Reservation Ridge Alternative Variation) was developed to address potential impacts to greater sage-grouse issues along comparable portions of Alternative II-F.

Micro-siting options for Alternative II A and Alternative II-G have been developed to address concerns with construction in Uinta National Forest Planning Area IRAs at a location where the designated WWEC offsets from a continual corridor: Strawberry IRA Micro-siting Option 2 and Strawberry IRA Micro-siting Option 3.

Three micro-siting options for Alternative II-A and Alternative II-G were also developed and to address conflicts with siting through the Town of Fruitland, a Utah Division of Wildlife

Resources conservation easement, and greater sage-grouse habitat:

- Fruitland Micro-siting Option 1;
- Fruitland Micro-siting Option 2; and
- Fruitland Micro-siting Option 3.

Five alternative connectors were developed in Region II to provide the flexibility to combine alternative segments to address resource conflicts. One connector could be used with Alternative II-B, two connectors could be used with Alternative II-C and one could be used with Alternative II-E.

Region III

Alternative III-A Transmission Line Route (Proposed Action)

The TransWest proposed alignment would leave IPP to the west and turn south toward Milford, Utah, following the WWEC. For the remainder of Utah, the alignment roughly would parallel Interstate 15 (I-15) approximately 20 miles west of the highway. The alignment would pass west of Milford, then generally trend south-southwest, passing east of Enterprise, Utah, across a portion of the Dixie National Forest, and directly west of Central, Utah; exiting Utah just north of the southwest corner of the state. In Nevada, the alignment would cross I-15 west of Mesquite, Nevada, and remain on the south side of I-15 until reaching the North Las Vegas area northeast of Nellis Air Force Base.

Alternative III-A is approximately 276 miles in length, 84 percent of which would be located on BLM/USFS lands. Approximately 67 percent of the route would be within a designated RMP or WWEC (107 miles and 158 miles, respectively). There would be approximately 335 miles of access roads associated with this alternative.

Alternative III-B Transmission Line Route

Alternative III-B was developed to decrease resource impacts in southwestern Utah (including potential impacts to the Mountain Meadows National Historic Landmark and Site and IRAs in the Dixie National Forest). It would begin following Alternative III-A through Millard and Beaver counties. Near the Beaver-Iron county line, it would diverge toward the west. Alternative III-B would follow a west-southwest course, crossing into Lincoln County, Nevada, near Uvada, Utah, where it would turn to a general southerly direction, rejoining Alternative III-A to the northwest of Mesquite. It then would diverge to the west from Alternative III-A approximately 16 miles west of Mesquite, cross into Clark County, pass southeast of Moapa, Nevada, pass through the designated utility corridor on the Moapa Reservation, and rejoin Alternative III-A approximately 4 miles north of the end of Region III.

Alternative III-B is approximately 284 miles in length, 74 percent of which would be located on BLM lands. Approximately 54 percent of the route would be within a designated RMP or WWEC (103 miles and 80 miles, respectively). There would be approximately 320 miles of access roads associated with this alternative.

Alternative III-C Transmission Line Route

Alternative III-C also was developed to address the same resource impacts as Alternative III-B and to take advantage of an existing corridor with existing transmission line development, thereby potentially consolidating cumulative transmission line impacts. This alternative would follow Alternatives III-A and III-B before diverging from them shortly after traveling west out of IPP, where it would follow the existing IPP power line to the south for approximately 30 miles and then rejoin Alternative III-B to the Utah-Nevada state line. After passing into Nevada at Uvada, Alternative III-C would turn west away from Alternative III-B, passing north of Caliente,

Nevada; turning south approximately 15 miles west of Caliente. This alternative would follow that southern course, intersecting with U.S. Highway 93 and paralleling the highway for all but the last 15 miles into North Las Vegas. Alternative III-C would rejoin Alternative III-A northeast of Nellis Air Force Base at the end of Region III.

Alternative III-C is approximately 308 miles in length, 83 percent of which would be located on BLM lands. Approximately 63 percent of the route would be within a designated RMP or WWEC (160 miles and 121 miles, respectively). There would be approximately 338 miles of access roads associated with this alternative.

Alternative III-D Transmission Line Route (**Final EIS Agency Preferred Alternative**)

Alternative III-D was developed as a minor reconfiguration to Alternative III-B for the purpose of decreased resource impacts in southwestern Utah (including potential impacts to the Mountain Meadows NHL and Site and IRAs in the Dixie National Forest) as well as addressing concerns raised by the DOD. Alternative III-D would begin following Alternative III-B, and then diverge through Millard County to maintain co-location with the existing IPP power line to the south for approximately 30 miles, and then rejoin Alternative III-B through the remainder to the Region III.

Alternative III-D is approximately 281 miles in length, 75 percent of which would be located on BLM/USFS lands. Approximately 55 percent of the route would be within a designated RMP or WWEC (137 miles and 50 miles, respectively). There would be approximately 303 miles of access roads associated with this alternative.

Alternative Variations, Connectors, and Micro-siting Options

Three alternative variations were developed to address potential impacts to the Mountain Meadows National Historic Landmark resulting from Alternative III-A: the Ox Valley East Variation, the Ox Valley West and the Pinto Alternative Variation.

Three alternative connectors were also developed in Region III to provide the flexibility to combine alternative segments to address resource conflicts. One connector could be used with Alternative III-A, two connectors could be used with Alternative III-B and III-D and one could be used with Alternative III-C.

Ground Electrode Locations

There are eight potential locations for ground electrode systems in Region III. Three of the locations would only apply to Alternative III-A (Mormon Mesa-Carp Elgin Rd, Halfway Wash - Virgin River, and Halfway Wash East); three would apply only to Alternative III-B or Alternative III-D (Mormon Mesa-Carp Elgin Rd, Halfway Wash-Virgin River, and Halfway Wash East), one would apply only to Alternative III-C (Meadow Valley 2) and one would apply only to Design Option 2 as discussed in the Final EIS.

Region IV

Southern Terminal

The Southern Terminal facilities would be located in the Eldorado Valley on private land, within the city limits of Boulder City, in Clark County, Nevada. The Southern Terminal would include an AC/DC converter station and adjacent AC substation. The AC/DC converter station would include a 600-kV DC switchyard and a converter building containing power electronics and control equipment.) The Southern Terminal would connect to all four of the existing 500-kV substations (Eldorado, Marketplace, Mead, and McCullough) located at the Marketplace Hub.

Connections to the existing transmission infrastructure at the Mead and Marketplace substations would be via the existing Mead–Marketplace 500-kV transmission line, and connections to the Eldorado and McCullough substations also would be constructed. The three major components (AC/DC converter station, 500/230-kV AC substation, and 230-kV AC substation) are planned to be co-located and contiguous.

Alternative IV-A Transmission Line Route (**Proposed Action and Final EIS Agency Preferred Alternative**)

The TransWest proposed action would follow a designated WVEC following existing transmission lines running to the south, passing North Las Vegas to the east, and through the Rainbow Gardens area. It would run between Whitney, Nevada, and the Lake Las Vegas development skirting the edge of Henderson, Nevada. It would then turn in a general southwest direction at Railroad Pass, and then in a southern direction to the Marketplace endpoint.

Alternative IV-A is approximately 37 miles in length, 92 percent of which would be located on Federally managed lands. There would be 11 miles of BLM RMP corridors and 14 miles of designated WVEC. There would be 49 miles of access roads associated with this alternative.

Alternative IV-B Transmission Line Route

Alternative IV-B would follow the proposed alternative for approximately seven miles, diverge to the southeast as it passed directly east of Nellis Air Force Base and travel south through the Lake Mead National Recreation Area (NRA), passing between the Lake Las Vegas development and Lake Mead. Along the south edge of Lake Las Vegas, it would turn southwest, north of the Boulder City, Nevada, then turn west and join with Alternative IV-A west of Henderson to the Marketplace endpoint. This alternative was originally developed to provide an

alternative that did not require crossing the recent congressionally released Sunrise Mountain Instant Study Area (ISA).

Alternative IV-B is approximately 40 miles in length, 55 percent of which would be located on Federally managed lands. There would be 5 miles of BLM RMP corridors and 5 miles of designated WWEC. There would be 51 miles of access roads associated with this alternative.

Alternative IV-C Transmission Line Route

Alternative IV-C would decrease impacts to populated areas. This alternative would follow Alternative IV-B through the Lake Mead NRA and between the Lake Las Vegas development and Lake Mead to north of the Boulder City. It would then continue south before it turned southwest around the southeast edge of the metropolitan area of Boulder City, and into the Marketplace endpoint. It also was originally developed to provide an alternative that did not require crossing the recent congressionally released Sunrise Mountain ISA. Alternative IV-C is approximately 44 miles in length, 55 percent of which would be located on Federally managed lands. There would be 5 miles of BLM RMP corridors and 5 miles of designated WWEC. There would be 54 miles of access roads associated with this alternative.

Alternative Variations, Connectors, and Micro-siting Options

One alternative variation (the Marketplace Variation) was developed to address impacts to private lands located on Alternative IV-B.

Five alternative connectors were developed in Region IV to provide the flexibility to combine alternative segments to address resource conflicts. Each of the five connectors could be used with Alternative IV-B and four would be used with Alternative IV-C.

No Action Alternative

Under the No Action Alternative, the BLM and USFS would not issue ROW grants or special use permits and the Project would not be constructed. Under the No Action Alternative, WAPA would not assume ownership interest or provide funding to the Project. No RMPs or Forest Plans would need to be amended if the No Action Alternative were selected.

Environmentally Preferable Alternative

The Council on Environmental Quality (CEQ) regulations (40 CFR 1505.2(b)) require the ROD to identify one or more environmentally preferred alternatives. An environmentally preferred alternative is an alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historic, cultural, and natural resources.

Because it would cause the least damage to the biological and physical environment, WAPA has determined that the No Action Alternative is the environmentally preferable alternative.

However, the No Action Alternative would not allow development of a project that would potentially transmit renewable and conventional energy, and would not meet WAPA's purpose and need, including the facilitation of delivery of renewable energy. For these reasons WAPA has not selected the No Action Alternative.

Identification of the environmentally preferable alternative among the action alternatives involves some difficult judgments regarding tradeoffs between different natural and cultural impacts and values. After considering these tradeoffs, WAPA has determined that the Agency Preferred Alternative is the environmentally preferable action alternative. Among other things, WAPA selected the Agency Preferred Alternative because it:

- Maximizes use of existing utility corridors and co-location with existing transmission to the extent practicable;

- Avoids or minimizes impacts to physical, biological, and cultural resource that are regulated by law (Endangered Species Act, Clean Water Act, etc.);
- Minimizes impacts to sage-grouse habitat;
- Minimizes impacts to big game crucial winter range;
- Avoids desert tortoise habitat in Utah, and minimizes impacts to desert tortoise in Nevada;
- Avoids potential habitat for threatened and endangered plant species, including Uintah Basin hookless cactus;
- Minimizes impacts to modeled potentially suitable clay phacelia habitat;
- Minimizes impacts to the Overland Trail and Cherokee trail by crossing the trails at segments that are not eligible for the National Register of Historic Places (NRHP);
- Minimizes impacts to important and sensitive cultural and historic resources in southwestern Utah by avoiding the crossings in and near the Dixie National Forest, which has the highest known and expected density of archaeological sites among the alternatives. These resources include three sites of particular cultural importance: Yellow-Springs cultural complex, Mountain Meadows National Historic Landmark, and the Old Spanish NHT; and
- Avoids the Old Spanish NHT in the Moab and Price BLM Field Office areas.

Section 7 and Section 106 Consultation

The BLM, as the main affected Federal land management agency, retained the lead role for Section 7 and Section 106 consultation. Consultation with the U.S. Fish and Wildlife Service resulted in the issuance of a final Biological Opinion on November 10, 2015. The requirements of the Biological Opinion will apply to the entire Project. The Biological Opinion is provided as Appendix C of the BLM ROD. WAPA executed the Project Programmatic Agreement as an

invited signatory to the Section 106 process. The Programmatic Agreement will govern Section 106 actions as they apply to the entire Project and is provided as Appendix E of the BLM ROD.

Mitigation Measures

Minimization of environmental impacts was an integral part of Project design, routing, and planning. Appendix C to the Final EIS was a compilation of all involved Federal agencies' best management practices, design features, specific stipulations, standards, and guidelines to minimize Project impacts that were considered by the appropriate agencies. Informed by Appendix C to the Final EIS, TransWest and the BLM have developed an extensive Plan of Development (POD) (Appendix B to the BLM ROD). All practicable means have been adopted to avoid or minimize environmental harm. WAPA may implement applicable provisions of the POD and its attached framework plans on State and private lands as appropriate.

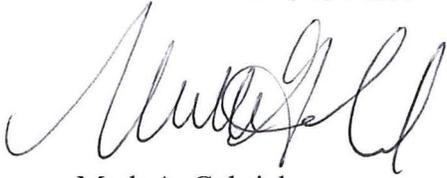
WAPA's Decision

Informed by the analyses and environmental impacts documented in the Final EIS, WAPA has selected² the Agency Preferred Alternative identified in the Final EIS as the route for the Project. The Agency Preferred Alternative route will be the basis for design and engineering activities that will finalize the centerline, ROW, and access road locations. Additionally, this ROD commits WAPA and TransWest to implement mitigation measures committed to in the project POD, as practicable, to minimize environmental impacts. WAPA will continue coordination of the detailed POD with TransWest, the BLM and other applicable land-managing agencies. Selection of the Agency Preferred Alternative will help inform WAPA's Federal action(s) to consider any received or anticipated loan application permitted under its borrowing authority and/or exercise its options for participation in the Project. These considerations are

²On November 16, 2011, DOE's Acting General Counsel restated the delegation to WAPA's Administrator all the authorities of the General Counsel respecting environmental impact statements.

contingent on the successful development of participation agreements as well as any and all documentation and commitments needed to satisfy customary financial underwriting standards. This ROD was prepared in accordance with the requirements of the CEQ regulations for implementing NEPA (40 CFR parts 1500-1508) and DOE NEPA regulations (10 CFR part 1021).

Dated: JAN 12 2017

A handwritten signature in black ink, appearing to read 'Mark A. Gabriel', written in a cursive style.

Mark A. Gabriel
Administrator