645-01-P

DEPARTMENT OF ENERGY

Western Area Power Administration

Record of Decision for the Navajo Transmission Project (DOE/EIS-0231)

AGENCY: Western Area Power Administration, DOE.

ACTION: Record of Decision.

SUMMARY: Based upon the analysis and information contained in the Navajo Transmission Project (NTP) Draft and Final Environmental Impact Statements (EIS), the Department of Energy (DOE), Western Area Power Administration (Western), has decided that should the NTP be built, it should follow the preferred alternative described in the NTP Final EIS. This is the alternative identified in the EIS documents as the Kaibito 1 (K1) for the eastern half of the project area, and the Northern 1 West (N1W) for the western half. The K1 lies between the Shiprock Substation and either the Red Mesa, Copper Mine, or Moenkopi Substation sites. It parallels the existing Western 230-kilovolt (kV) Shiprock-to-Glen Canyon and 345-kV Glen Canyon-to-Pinnacle Peak transmission lines for most of its route. The N1W lies between the Moenkopi and Marketplace Substation sites and parallels an existing 500-kV transmission line for most of its route.

In making this decision, Western evaluated: (1) alternatives to the proposed project, and (2) alternatives that cover the reasonable range of options for siting and constructing a 500-kV transmission line. Western released the NTP Draft EIS in September 1996. The Notice of Availability for the Final EIS was published on August 8, 1997. This Record of Decision is pursuant to the Council on Environmental Quality regulations (40 CFR Parts 1500-1508), which implement the procedural provisions of the National Environmental Policy Act, and DOE's regulations (10 CFR Part 1021).

DATES: This decision will become effective October 31, 1997.

FOR FURTHER INFORMATION CONTACT: Mr. Nicholas Chevance, NTP EIS Project Manager, Corporate Services Office, Western Area Power Administration, 1627 Cole Boulevard, Golden, CO 80123-3398, (303) 275-1713.

SUPPLEMENTARY INFORMATION:

Background

Diné Power Authority (DPA), an enterprise of the Navajo Nation, requested assistance from Western in 1993 in planning for the construction, operation, and maintenance of a 500-kV transmission line from the Four Corners area in northwestern New Mexico across northern Arizona to a terminus in southern Nevada. As a Federal power marketing agency, Western is responsible for marketing and transmitting power from Federal power projects in the region. Since the 1960's, Western and its predecessor agency, the Bureau of Reclamation, have been assisting the Navajo Nation in meeting its energy needs through firm-energy agreements with the Navajo Tribal Utility Authority, a Navajo Nation enterprise providing utility services and various energy related projects. Western has provided technical assistance to DPA with the NTP, invested funds in the project, administered DOE grants to DPA for the project, and anticipates owning a portion of the NTP capacity commensurate with its final pro rata investment in the project.

The DPA proposal was developed in response to needs of the electric industry and of the Navajo Nation. These include the following:

- Relieve the constraints on the transmission of electricity west of the Four Corners area.
- Improve the operational flexibility and reliability of the extra-high-voltage transmission system in the region.
- Allow increased economical power transfers, sales, and purchases in the region.
- Improve economic conditions of the Navajo Nation.

- Facilitate the development of Navajo Nation energy resources and its participation in the electrical utility industry.

Western agreed to assist DPA in this endeavor by participating as the lead Federal agency for the preparation of the EIS. Federal involvement was provided because of the need to acquire rights-of-way across public lands, construction of the project could benefit Western and Western's customers, and because DOE supports the development of Native American energy programs pursuant to Title XXVI of the Energy Policy Act of 1992.

Development of Alternatives

The development of alternatives for the NTP EIS first focused on alternatives to the project proposed by DPA that might meet their needs. Six alternatives were developed: (1) achieve results through energy conservation and electric load management, (2) construct new generation facilities, (3) utilize the existing transmission system, (4) utilize alternative transmission technologies (different voltages, direct current versus alternating current, underground construction, and the use of new technologies), (5) no action, and (6) construct a new transmission line. The first four alternatives (1, 2, 3, and 4) were analyzed and found not to be responsive to the purpose and need for the project. While these would achieve some of the needs addressed by the proposal, none would satisfy all of them. Western then conducted a detailed analysis of the no action alternative and the proposed action alternative, which is to construct, operate, and maintain the transmission line. Western found that the no action alternative would not meet the needs addressed by the proposal.

For the proposed action alternative, several general alternative corridors (approximately 1,800 miles) were identified through a regional environmental feasibility study (June 1992) and introduced to agencies and the public during the scoping process for the EIS. This regional feasibility study evaluated the most reasonable means of placing a right-of-way corridor from proposed starting point to end point. It was assumed that to reduce impacts to all resources and issues associated with

transmission line construction, paralleling an existing utility corridor was preferable. Therefore, the majority of routes explored in the environmental feasibility study paralleled other power lines, fiber optic cables and buried pipelines wherever possible.

Scoping and public outreach employed on this project were extensive. A Notice of Intent to prepare an EIS was published in the Federal Register on July 13, 1993, that announced the intent to conduct public meetings. A total of 17 meetings were held in the project area, in addition to several letters, fact sheets, media releases and notices posted on and off the Navajo Nation. These resulted in public input that led to the development of five issues of concern, which were addressed in the Draft EIS: (1) need for the project, (2) benefits of the project, (3) siting issues, (4) rights-of-way issues, and (5) health and safety issues.

Also, a non-environmental factor, the cost to construct, was tracked throughout the analysis to make sure that the environmental analysis was not leading to a solution that could not be accomplished. While this was not the deciding factor, the cost of constructing the project was monitored over the 4 years it has taken to reach a decision on the project and was considered in the determination of the final preferred alternative.

Through scoping, some alternative routes were eliminated and some were added, resulting in approximately 2,200 miles of alternative routes studied in detail for the EIS. The alternative routes were then systematically analyzed considering human, natural, and cultural environmental factors including, but not limited to, land use, socioeconomics, visual/aesthetics issues, human and animal health and safety, air and water quality issues, soil erodibility, and paleontological, biological and cultural resources. This analysis resulted in narrowing the number of alternative routes addressed in the EIS.

Description of Alternatives Evaluated in Detail

Once the scoping process was completed, resource inventories were conducted for each of the alternative routes to establish the baseline information from which to evaluate potential impacts. As inventory information was collected, a process was begun to sort this information and make decisions about further information needs. The interdisciplinary teams ranked the potential impacts for each alternative route in terms of the resources that might be impacted, the likely mitigation measures that would be required, and the residual impacts remaining after mitigation. The team then made decisions to eliminate routes with high potential for impacts. The results were then presented to the public during a set of 20 meetings held throughout the project area to obtain comments prior to preparing the Draft EIS.

The alternative routes finally addressed in the Draft EIS included four alternative routes in the eastern portion of the project area and six alternative routes in the western portion. The project area seemed naturally to split into halves, with different concerns and issues in the eastern portion than in the western portion. In the east, of major concern were those residual impacts associated with Navajo and Hopi traditional cultural places, and to a lesser degree, impacts to land use patterns, which is also related to traditional land uses. In the west, concerns centered around Hualapai traditional cultural places and land use, as well as visual impacts and impacts to historic resources.

These alternative routes were chosen for detailed analysis since they had minimal resource impacts. Impacts on visual resources could be mitigated to some degree. Other impacts are associated with Navajo and Hopi traditional cultural places in the Marsh Pass/Northern Black Mesa area, and to Hualapai traditional cultural places in the western portion of the project area. Because of the sensitivity of these resources, specific locations of these resources were not known. Zones of potential impacts were very general. The direct impacts associated with the environmentally preferred

alternatives on specific resource locations, when known, can be lessened once engineering on a final route is completed.

The interdisciplinary team selected a single route in each half of the project area that avoided to the greatest degree possible impacts on these resources. The eastern alternative presented as the environmentally preferred alternative, the Kaibito 1 (K1) route, had the least amount of potential impacts on visual resources and Navajo and Hopi traditional cultural places. However, some impacts would result along a short segment of the proposed route in areas of new corridor (no existing transmission line) near Red Mesa, Black Mesa, Marsh Pass, and across the Kaibito Plateau. The Northern 1 West (N1W) route was chosen as the preferred alternative in the western half of the project area. Because of an issue associated with where the proposed line would cross the Colorado River, a termination at Marketplace was determined to be the least damaging. Therefore, this alternative would have no potential for significant impacts on resources.

Decision Process

Following the release of the Draft EIS in early October 1996, 44 public hearings were held throughout the project area, which included hearings held at each of the 36 Navajo chapters crossed by the alternative routes. Each of these hearings was preceded by public information meetings, where information on the project was presented and questions and comments by the public could be addressed. In addition, 13 written comments were submitted by the public, and 20 letters from the public and other agencies were received. This information was summarized and addressed in the Final EIS, released to the public on August 8, 1997.

The verbal comments could be summarized into six issues of concern, expressed mainly but not exclusively by residents of the Navajo Nation. These were: (1) concerns over the distribution of project revenues to Navajo chapters, (2) concerns about extending the local electrical distribution system, (3) concerns for health and safety, (4) concerns over involving the public in the project status, (5) concerns over the

acquisition of rights-of-way, and (6) concerns for employment opportunities. In addition, a few comments identified other issues.

Each of the concerns expressed orally or in writing was addressed in the Final EIS, by providing a reference to a previous discussion in the Draft EIS, by expanding on those previous discussions in the Final, and/or by providing new information. A standard answer was provided to each of the six issues discussed above, rather than respond individually to multiple questions on the same issues. Only one minor modification to the environmentally preferred alternative in the eastern half of the project area was presented in the Final EIS. This was in response to concerns expressed by the public during and immediately following the public meetings. Local land users in the Dennehotso, Arizona area expressed concerns over the preferred alternative passing through areas of dispersed but common use, though the alternative would not impact any residences directly. The route of the alternative was modified slightly to satisfy these concerns.

The Decision

Western has decided that should the NTP be built, it should follow the preferred alternative described in the NTP Final EIS. The project would satisfy the needs identified in the EIS: it would relieve the constraints on the transmission of electricity out of the region; it would improve the flexibility and reliability of the existing system; it would allow the economical transfer, sales, and purchases of power in the region; and it would provide an opportunity for the Navajo Nation to improve economic conditions. Based upon the information gathered throughout the EIS process, Western provided the public and the decisionmaker with complete information on the environmental impacts associated with the project. Western analyzed several alternatives to the proposed action in terms of their ability to satisfy the identified needs. Western then analyzed many routing alternatives in order to arrive at the least environmentally damaging alternative routes.

The following factors were taken into account in arriving at the preferred alternative: (1) environmental acceptability, (2) siting and permitting requirements that vary by land status (i.e., Federal, state, tribal, and local), (3) public and agency preferences, especially those of the Cooperating Agencies, (4) electrical system considerations such as power flow and the impacts on system interconnections, (5) engineering factors leading to an increase in costs, such as the length of route, construction difficulty, accessibility, extent of mitigation required, and the extent of design modifications needed for mitigation, (6) rights-of-way acquisition considerations, and (7) consideration of the statutory obligations of the permitting agencies.

In making this decision, Western believes that all practicable means to avoid or minimize significant impacts have been presented in the NTP EIS in the form of standard and specific mitigation measures.

The Kaibab National Forest; Bureau of Indian Affairs, Navajo and Phoenix Area Offices; Bureau of Land Management, Arizona State Office (representing the state BLM offices in Arizona, Nevada, and New Mexico); and the National Park Service, Colorado Plateau Systems Support Office, participated in the NTP EIS as Cooperating Agencies. In addition to the Federal agencies, the Hopi Tribe, Hualapai Tribe, and the Navajo Nation participated as Cooperating Agencies. These agencies and tribes have decisions to make concerning the granting of rights-of-way for the alignment described in the EIS, provided a Construction, Operation, and Maintenance Plan for the construction of the NTP, including a plan for all necessary environmental mitigation, is prepared and agreed upon by all parties.

Mitigation Action Plan

The Final EIS presents reasonable and practicable mitigation measures to reduce the severity of the impacts associated with construction of the line. The preferred action, given the analysis process and the proposed mitigation, will not have a significant impact on environmental factors, with the exception of the potential for impacts on visual resources and Hopi, Hualapai, and Navajo traditional cultural places

as discussed above. Western will issue a Mitigation Action Plan (MAP), as required by DOE NEPA implementing procedures found at 10 CFR § 1021.331, at a later date. The MAP will detail the mitigation and monitoring required to reduce impacts to less than significant. Western's final decision is contingent upon the construction of the line consistent with the requirements of the MAP, and acceptance of the MAP by the Cooperating Agencies.

Dated:

Michael S. Hacskaylo
Acting Administrator