4.20 Short-Term Use and Long-Term Productivity

Title 1, Section 102 (c)(iv) of NEPA requires that the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity be addressed. As such, this section addresses use of existing environmental resources to support the Proposed Action or alternatives and long-term impacts to the Project site and regional area resources after Project completion. Both short- and long-term impacts would be reduced by compliance with established requirements in applicable laws, regulations, plans, procedures, BMPs, and mitigations.

Short-term impacts are changes to the environment experienced during implementation of the Proposed Action or alternatives that generally would revert to pre-disturbance conditions within a few years after the disturbance occurred. Short-term uses of the environment associated with the alternatives include changes to the physical environment due to mining and from energy and utility use during the construction of facilities and roads associated with alternatives. For mining operations, short-term impacts are those that would occur from the time when mining begins in a mine resource unit through reclamation and re-establishment of vegetation in that unit. For the power plant and transmission lines, short-term impacts of the project are those that would occur immediately following approval of the lease renewal plus a reasonable period afterwards (approximately 5 years).

Long-term impacts are defined as those that would remain to a substantial degree beyond the Project's ground-disturbing activities. Long-term changes to land use and productivity are expected to be minor due to reclamation of mined lands, demolition of power plant facilities, and reuse of transmission lines after completion of the Proposed Action or alternatives. The primary pre-action productive land use is livestock grazing and wildlife habitat, which would be supported and potentially enhanced after reclamation of mined lands.

4.20.1 Short-Term Gains

No short-term gains would be realized under the No Action Alternative. Short-term gains associated with the Proposed Action or alternatives include:

- Coal would be mined to generate and distribute electricity to markets in the southwest through 2041.
- The Navajo Nation and the local surrounding workforce and economies would benefit from the continued operation of the power plant and transmission lines and the extension of the Navajo Mine and production of large quantities of commercially useful byproducts.
- The local population would benefit from increased safety resulting from realignment of Burnham Road.

4.20.2 Short-Term Losses

Under the No Action Alternative, short-term socioeconomic losses would be experienced due to lack of tribal and non-tribal jobs and current coal and energy production would be lost. Short-term losses associated with the Proposed Action and alternatives include:

- Construction, mining, and hauling coal would involve short-term increases in fugitive emissions and construction-generated noise and would increase the use of fossil fuels for operation of construction equipment.
- Use of borrow area materials would create short-term ground-disturbing impacts to land that would be reclaimed according to established procedures.
- Ground-dwelling species in the mining and construction footprints would be impacted in the short term. Mobile species would be expected to migrate to suitable habitat in the region.

- Short-term increases in the ambient noise would result from mining activities and construction at the FCPP ash disposal area and during the Burnham Road realignment.
- Construction and mining activities would result in short-term risks to surface water quality. To minimize these potential impacts, construction-specific BMPs would be implemented, and mandates of stormwater pollution prevention regulations would be followed to reduce the associated potential for erosion, runoff, and sedimentation.
- Existing grazing land would be lost during active mining operations, but would be reclaimed sequentially during the life of the project. Mined areas would be reclaimed per SMCRA specifications to again be suitable for livestock grazing and wildlife habitat.
- During mining operations, views would change in various parts of the regional viewshed where new mining operations occur.

4.20.3 Long-Term Gains

No long-term gains would be realized under the No Action Alternative. Long-term gains associated with the Proposed Action and alternatives include:

- Generation of direct and indirect revenues for the Navajo Nation, benefiting housing, health care, education, and other Navajo Nation initiatives.
- Electricity would continue to be distributed to utility subscribers.
- Following realignment of Burnham Road, the Navajo Nation would benefit from long-term use of the proposed upgraded road. Traffic conditions are expected to remain similar to existing conditions.

4.20.4 Long-Term Losses

Under the No Action Alternative, long-term socioeconomic losses would be experienced due to lack of tribal and non-tribal jobs and current coal and energy production would be lost. The No Action alternative could also result in (a) a substantial reduction in long-term, reliable, and uninterrupted baseload generation that thousands of consumers throughout the southwest rely upon; and (b) adverse effects on the reliability of the regional power transmission grid in the western United States. Long-term losses associated with the Proposed Action or alternatives include:

- During the life of the project, coal resources would be permanently removed from the geologic formation and the Navajo Nation's coal reserves.
- Long-term effects would be expected at areas containing cultural resources and historic properties; however, treatment plans would be in place in one of two PAs, one for the Navajo Mine and one for the FCPP and transmission lines. Three dwellings currently located in the mining lease area would be relocated; however, historic sense of place would be lost.
- Impacts to surface and sub-surface paleontological resources would be expected; however impacts would be minimized through implementation of the inadvertent discovery procedures to be included in the mine permit.
- Topographic features would be changed by proposed mining and construction activities; however, long-term losses would be expected to be mitigated through surface contouring in the reclamation plans.