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A matrix comparing impacts of the Project with the No Project Alternative is presented in Table 6-1. The Project will not result in significant impacts with the implementation of mitigation measures. No adverse impacts are expected to result from the Project for Aesthetics, Agricultural Resources, Air Quality, Geology/Soils, Hazards and Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Mineral Resources, Noise, Population/Housing, Public Services, Recreation, and Utilities/Services Systems.

Minor, temporary impacts on Biological Resources may occur if one of the two Inland Route Transport Options for RSG transport is selected. These impacts are associated with areas of existing vegetation habitats that may be disturbed by road preparation and potential paving at several transition points along the transport route. Impacts at areas supporting ruderal or non-native grassland habitats will be minimal. These potential impacts on Biological Resources associated with the Inland Route Transport Options will not be significant with implementation of mitigation measures. They will occur on MCBCP, and therefore, will be addressed through the Federal permitting process through MCBCP. The Beach and Road Route Transport Option will not result in adverse impacts on Biological Resources and will not require mitigation measures. Within the Project, the Beach and Road Route Transport Option will result in fewer environmental impacts and is the environmentally preferred transport option. The Inland Route Transport Options are also viable transport options with regard to impacts on Biological Resources. No adverse impacts on Biological Resources will occur as a result of activities at SONGS 2 & 3.

There is some potential for unknown cultural resources to occur along the Inland Route Transport Options on MCBCP. If unknown cultural resources are found in areas of potential effect, the impacts of the Project are expected to be mitigated and not significant with mitigation. Otherwise, no adverse impacts on cultural resources will occur along these routes. These potential impacts, if Cultural Resources are present, will occur on MCBCP, and therefore, will be addressed through the Federal permitting process through MCBCP. The Beach and Road Route Transport Option will not result in adverse impacts on Cultural Resources and will not require mitigation measures. No adverse impacts on Cultural Resources will occur as a result of activities at SONGS 2 & 3. This page intentionally left blank.

Table 6-1Comparison of Impacts for theProposed Project and No Project Alternative

	Proposed Project Transport Options			SONGS 2 & 3 Site	No Project Alternative	
Resource Areas	Beach and Road Route Transport Option	I-5/Old Highway 101 Option	MCBCP Inland Option	Replacement Steam Generator Preparation; Original Steam Generator Removal, Staging, and Disposal; Replacement Steam Generator Installation and Return to Service	New Generation	New Transmission
Aesthetics	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Potential significant adverse impacts from generation structures and stacks.	Potential significant adverse impacts from towers and lines may not be readily mitigated.
Agricultural Resources	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Potential siting on agricultural land; however, may be avoidable.	Potential siting on agricultural land; however, may be avoidable.
Air Quality	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Expected significant adverse impacts associated with various air emissions and potential violation of standards.	No significant adverse impacts expected.
Biological Resources	No adverse impact	No adverse impact with mitigation; potential minor temporary impacts limited to MCBCP	No adverse impact with mitigation; potential minor temporary impacts limited to MCBCP	No adverse impact	Potential siting on land supporting sensitive Biological Resources; however, may be avoidable.	Potential siting on land supporting sensitive Biological Resources; however, may be avoidable.
Cultural Resources	No adverse impact	No adverse impact with mitigation; potential minor temporary impacts limited to MCBCP	No adverse impact with mitigation; potential minor temporary impacts limited to MCBCP	No adverse impact	Potential siting on land supporting sensitive Cultural Resources; however, may be avoidable.	Potential siting on land supporting sensitive Cultural Resources; however, may be avoidable.
Geology/Soils	No adverse impact	No adverse impact	No adverse impact	No adverse impact	No significant adverse impacts expected.	No significant adverse impacts expected.
Hazards and Hazardous Materials	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Potential impacts likely not significant with proper management of hazardous materials.	Potential impacts likely not significant with proper management of hazardous materials.
Hydrology/Water Quality	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Potential significant adverse impacts, with impacts on water supply that may not be readily mitigated. Other potential impacts are expected to be mitigable.	No significant adverse impacts expected.
Land Use/Planning	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Potential significant adverse impacts on adjacent land uses; however, may be mitigable.	Potential significant adverse impacts on adjacent land uses; however, may be mitigable.
Mineral Resources	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Potential significant adverse impacts; however, such impacts are unlikely with avoidance through siting.	No significant adverse impacts expected.

Significant Environmental Impacts and Comparison of Alternatives

Table 6-1Comparison of Impacts for theProposed Project and No Project Alternative(continued)

	Proposed Project Transport Options			SONGS 2 & 3 Site	No Project Alternative	
Resource Areas	Beach and Road Route Transport Option	I-5/Old Highway 101 Option	MCBCP Inland Option	Replacement Steam Generator Preparation; Original Steam Generator Removal, Staging, and Disposal; Replacement Steam Generator Installation and Return to Service	New Generation	New Transmission
Noise	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Potential significant impacts on adjacent receptors; however, noise controls should prevent such impacts.	No significant adverse impacts expected.
Population/Housing	No adverse impact	No adverse impact	No adverse impact	No adverse impact	Potential significant impacts; however, this is unlikely in most areas.	No significant adverse impacts expected.
Public Services	No adverse impact	No adverse impact	No adverse impact	No adverse impact	No adverse impacts anticipated in most situations, except for potential significant impacts on water supply.	No significant adverse impacts expected.
Recreation	No adverse impact	No adverse impact	No adverse impact	No adverse impact	No adverse impacts anticipated in most situations.	Potential significant adverse impacts, especially during construction; however, such impacts could be mitigable.
Transportation/Traffic	No adverse impact with mitigation; minor impacts on I-5 at transition to I-5 to bypass Skull Canyon (segment F)	No adverse impact with mitigation; substantial impact on traffic in southbound lanes of I-5 (segments M,S, and F) reduced to not significant with mitigation	No adverse impact with mitigation; substantial impacts on traffic on I-5 in southbound lanes of I-5 (segment AB) reduced to not significant with mitigation	No adverse impact	Potential significant adverse impacts, especially during construction; however, such impacts should be mitigable.	Potential significant adverse impacts, especially during construction; however, such impacts should be mitigable.
Utilities/Services Systems	No adverse impact	No adverse impact	No adverse impact	No adverse impact	No adverse impacts anticipated in most situations.	No significant adverse impacts expected.

Significant Environmental Impacts and Comparison of Alternatives

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Potentially significant impacts on traffic will occur on I-5 for the transport options. The Beach and Road Route Transport Option will have the least impact on traffic on I-5 because it requires only a very brief transition onto and then off I-5. Therefore, potential disruption of traffic on I-5 will be of very short duration. The Inland Route Transport Options have the potential for more substantial impacts on traffic on I-5 (Table 6-1). Implementation of detours and/or reduced lane use by normal traffic during off-peak transport periods on I-5 will mitigate these adverse impacts on traffic to levels that are not significant. No adverse impacts on traffic or transportation are associated with activities at SONGS 2 & 3 or with disposal of the original steam generators.

The Project will not result in adverse impacts on the environment with the implementation of mitigation measures. The combination of the Beach and Road Route Transport Option with activities at SONGS 2 & 3 will generally result in no adverse environmental impacts, whereas use of either of the two Inland Route Transport Options will result in potentially significant impacts that will be reduced to less than significant with mitigation, especially related to Biological Resources (potential), Cultural Resources (potential), and Transportation/Traffic (expected). The impacts of the Project on MCBCP will be addressed in the Federal permitting process through MCBCP, although no adverse significant impacts are expected on MCBCP.

The potential impacts of the No Project Alternative are also summarized in Table 6-1. The New Generation component is expected to result in significant impacts on air emissions. These impacts may be mitigated with adequate controls and purchase of emission offsets. However, they represent a substantial increase in emissions relative to the Project. Significant adverse impacts are potential for all other resources areas evaluated for New Generation; however, careful siting is likely to result in the avoidance or minimization of such significant impacts in many situations. It is still possible that a number of significant impacts on various resources would not be reduced to a level below significance in some cases because avoidance and minimization of adverse impacts through siting will focus on the primary impacts, but may not be able to address all impacts simultaneously. For instance, use of wet cooling may adversely affect water supply and such impacts are difficult to avoid in the xeric southwestern United States. Use of dry cooling to compensate for demand on water supply may affect generation efficiency and emissions. Sensitive visual receptors may be present in many locations and significant visual impacts may be unavoidable. Sensitive biological receptors may occur in the drift patterns of emission plumes.

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The New Transmission component is expected to result in some significant adverse environmental impacts. Visual impacts may have the greatest potential impacts for new transmission lines in the designated study area. Design modifications may reduce these potential impacts to less than significant levels; however, it is unlikely that they will be eliminated. Most other potential adverse impacts should be avoidable or minimized through appropriate siting and construction controls. Increased use of existing access roads and construction of new access roads may increase impacts from erosion and sedimentation, although appropriate road management and use of appropriate best management practices should avoid or minimize such impacts. Tower siting in some areas, such as mountainous areas, may require placement of some towers in areas such that adverse impacts on biological or cultural resources cannot be avoided or even minimized.

The overall impacts of the Project are minor and temporary in nature. No long-term significant adverse environmental impacts are expected for the Project. The No Project Alternative is expected to result in significant adverse impacts on air quality, and is also likely to adversely affect visual resources and several other environmental resources, depending on final siting requirements. Therefore, the Project is the environmentally preferred alternative in comparison to the No Project Alternative. Within the Project, the Beach and Road Route Transport Option will result in fewer environmental impacts and is the environmentally preferred transport option. The Inland Route Transport Options are also viable transport options.