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SECTION 4.0

Natural Gas Supply

Natural gas will be supplied to the Alamitos Energy Center (AEC) via the existing 30-inch-diameter pipelines that currently serve the Alamitos Generating Station. No new offsite natural gas supply pipelines will be necessary for the project. The existing natural gas pipelines are owned and operated by Southern California Gas Company (SoCalGas). The pipelines operate at a nominal 165 pounds per square inch and enter the existing Alamitos Generating Station site at two points: a pipeline runs parallel to the San Gabriel River to serve existing Units 5 and 6 at the northeast corner of the facility near the existing 230-kilovolt switchyard, and a second pipeline enters the site near the vehicle entrance along Studebaker Road to serve existing Units 1 through 4.

The AEC combustion turbine generators (CTG) will only combust natural gas. The total natural gas requirement during operation for the twelve CTGs at the site average ambient temperature¹ conditions is approximately 14,566 MMBtu/hr lower heating value basis. Section 2.7 describes the project's operating modes, fuel consumption, and energy production.

SoCalGas also owns and operates an existing onsite natural gas metering and valve station. The existing SoCalGas metering station will remain in service during AEC construction for continued operation of the existing Alamitos Generating Station Units 1 through 6 until they are decommissioned and then will be demolished.

As part of AEC construction, SoCalGas will construct a new gas metering station to support the AEC to be located in the northeastern corner of the site as shown in Figure 2.1-2. The potential environmental impacts associated with the construction of the new SoCalGas gas metering station are considered and analyzed in this Application for Certification.

Construction activities related to the new metering station will likely include minor grading; installation of aboveground and belowground piping, gas metering equipment, gas conditioning facilities, pressure regulation systems; and provisions for pigging facilities that may be added at the discretion of SoCalGas. A distribution power line also will be installed to provide power for metering station operation lighting and communication equipment. A chain-link fence will be installed around the gas metering station for security.

Natural gas will flow from the new SoCalGas metering station to an onsite AEC gas pressure-control station and gas scrubber/filtering equipment to be located in the northeastern corner of the site as shown in Figure 2.1-2. Prior to being supplied to the CTGs, the natural gas will be compressed, scrubbed, and filtered consistent with standard industry practices. A new natural gas pipeline will be routed between the AEC compressor station and each unit. The existing pipeline will be decommissioned and remain in place. The natural gas for the AEC building heating systems will flow through the metering station and gas pressure control station, and will not require compression or filtering.

¹ Referenced to site ambient average temperature (SAAT) conditions of 65.3°F dry bulb and 62.7°F wet bulb temperature without evaporative cooler operation.