

**TECHNICAL REVIEW AND EVALUATION
FOR
AIR QUALITY PERMIT No. 69734
AS AMENDED BY PERMIT REOPENING No. 113040**

I. INTRODUCTION

Permit Reopening No. 113040 is intended to reopen Class I Significant Permit Revision No. 99677 to Operating Permit No. 69734, which was issued on August 29, 2024 to Arizona Electric Power Cooperative, Inc. (AEPCO) for the construction and operation of the Gas Turbines (GT) 5 and 6 at the Apache Generating Station. On September 18, 2024, the Sierra Club petitioned the United States Environmental Protection Agency (EPA) Administrator to object to the issuance of Significant Permit Revision. 99677 to Operating Permit No. 69734. On September 16, 2025, the EPA Administrator signed an Order that granted in part and denied in part the Sierra Club's petition to object. In the Order, the EPA stated that Arizona Department of Environmental Quality (ADEQ) must revise the Permit and/or permit record to ensure that the Permit contains sufficient testing and associated monitoring, recordkeeping, and reporting requirements to assure compliance with the particulate matter emissions limit for GT 5 and 6 during all operating scenarios, including startup and shutdown, and adequately justify the selected monitoring in the permit record.

ADEQ will accept public comments on permit conditions that are being amended in this permitting action and this technical support document. There are no changes in processes, equipment, applicable regulations, or emissions at Apache Generating Station associated with this reopening. Therefore, this permit reopening does not trigger minor or major New Source Review, ambient air impact analysis, environmental justice analysis, or a learning site evaluation. Information regarding the process description, applicable regulations, and potential to emit for Significant Permit Revision No. 99677 for the Apache Generating Station may be found in the associated application, permit, and technical support document for that permit revision.

A. Company Information

Facility Name: Apache Generating Station
Mailing Address: P.O. Box 670
Benson, AZ 85602
Facility Location: 3525 North Highway 191 South
Cochise, Arizona 85606

B. Attainment Classification

This Apache Generating Station is located in Cochise County, which is designated attainment or unclassified for all criteria pollutants.

II. RESPONSE TO DIRECTION: COMPLIANCE ASSURANCE FOR PARTICULATE MATTER EMISSIONS LIMIT FOR GT 5 & 6

Permit Conditions Changed or Incorporated: Conditions VI.C.1, VI.C.4, VI.D.2, and VI.D.3 of Attachment “B”

EPA noted that Condition VI.D.3 of Attachment “B” of the Permit does not set forth an adequately methodology or procedure to account for all emissions of particulate matter, particularly during periods of startup and shutdown. Based on EPA’s direction to ADEQ, the Department has revised or incorporated the Conditions referenced above in the Permit to include specific calculation procedures to account for all emissions of particulate matter, including emissions during periods of startup and shutdown. Calculation procedures for periods of startup and shutdown are based on manufacturer’s guarantees for emissions for operating hours with startup and shutdown events, and have been revised to account for variation in emission rates associated with the loads at which GT5 and 6 may operate at through the incorporation of emission factors established through performance testing representing various low, medium, moderate, and high load outputs for an operating hour. The maximum emission rate from all manufacturer testing scenarios was used as the basis for the emission factors. The overall maximum emission rate maximum manufacturer tested emission rate is used for startup and shutdown emission calculations.

III. LIST OF ABBREVIATIONS

ADEQ	Arizona Department of Environmental Quality
AEPCO	Arizona Electric Power Cooperative, Inc.
EPA	United States Environmental Protection Agency
GT	Gas Turbine

