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Arizona Public Service Company
400 N. 5th Street
Phoenix, Arizona 85004

**Re: SEMIANNUAL REPORT DOCUMENTING PROGRESS IN REMEDY SELECTION
FOR MULTIUNIT 1 AND THE UPPER RETENTION SUMP
Four Corners Power Plant - Fruitland, New Mexico**

In accordance with 40 Code of Federal Regulations (CFR) Section (§) 257.97(a) of the Coal Combustion Residuals (CCR) Rule, this Semiannual Remedy Selection Progress Report (Semiannual Report) has been prepared on behalf of Arizona Public Service Company (APS) to document progress in selection of remedies for CCR units which have been identified as potentially impacting groundwater at the APS Four Corners Power Plant, located in Fruitland, New Mexico (the Site). Applicable site CCR units include Multiunit 1 (comprised of the Lined Ash Impoundment and the Lined Decant Water Pond) and the Upper Retention Sump (URS). Previous updates documenting progress in remedy selection are provided in a Semiannual Report dated July 15, 2019 and in the *Annual Groundwater Monitoring and Corrective Action Report for 2019*, dated January 31, 2020. This Semiannual Report serves as the third update on remedy selection progress at the site and documents activities completed to date in 2020.

1. Summary of Activities Completed in 2020

Activities completed by APS in the first half of 2020 in support of remedy selection for Multiunit 1 and the URS include the following:

- *Expansion of Groundwater Monitoring in the Multiunit 1 Ash Disposal Area.* Up to twenty-five (25) additional supplementary site monitoring wells located in the vicinity of Multiunit 1 were gauged and/or sampled during the first semiannual CCR groundwater monitoring event of 2020 conducted in June 2020 to evaluate groundwater conditions in the Multiunit 1 ash disposal area and the effectiveness of the groundwater intercept trench system downgradient of Multiunit 1. Analytical data from the sampling event will be evaluated in the second half of 2020 and summarized in the Annual Groundwater Monitoring and Corrective Action Report for 2020 (2020 GMCAR).
- *Evaluation of Constituent of Concern Exceedances at MW-87.* Groundwater monitoring well MW-87 was installed at the downgradient (i.e., western) property boundary of the site in November 2018 to characterize the nature and extent of potential contaminant releases from Multiunit 1; however, the well was dry at the time of installation. In March 2019, groundwater was first detected in the well and samples were collected which indicated elevated concentrations of cobalt and molybdenum that exceeded the respective Groundwater Protection Standards. Since these constituents were not present at elevated concentrations in groundwater immediately upgradient of MW-87, an investigation was conducted by Wood Environment and Infrastructure Solutions, Inc. (Wood) in the first half of 2020 to evaluate potential causes of the exceedances. The results of the investigation, which are documented in a technical



memorandum to be included as an appendix to the 2020 GMCAR, indicate that the exceedances may be attributable to:

- The lack of well development performed at MW-87 after its installation due to dry conditions at the well; and/or
- Interactions between surface water in nearby Chaco Wash and groundwater at MW-87.

The rise of water levels at MW-87 since its installation allow for well development to be attempted in July 2020. The impact of well development activities and an assessment of the ongoing data collected from MW-87 will be evaluated in the second half of 2020 and summarized in the 2020 GMCAR. If necessary, additional characterization activities to address exceedances will also be summarized in the 2020 GMCAR.

- *Pumping Tests at URS Pre-Design Investigation Extraction Wells.* In 2019, APS installed four extraction test wells (CM-01, CM-02, CM-03, and CM-04) downgradient of the URS. An aquifer test program for the wells was developed during the first half of 2020 and testing at the wells will be performed in July 2020 to evaluate the effectiveness of a groundwater extraction system as a potential remedy for the URS. The results of the pumping tests will be assessed and summarized in a Pre-Design Well Installation and Testing Report for inclusion as an appendix to the 2020 GMCAR.

2. Future Planned Activities

APS plans to perform the following activities in support of remedy selection during the second half of 2020:

- *Preparation of a Pre-Design Well Installation and Testing Report supporting remedy evaluation at the URS.* Wood will prepare a Report documenting the installation and testing of the extraction wells at the URS. The Report will include an evaluation of the effectiveness of a containment well system as a potential remedy for the URS.
- *Public Meeting.* Pursuant to 40 CFR §257.96(e), APS will conduct a public meeting with interested and affected parties at least 30 days prior to selection of remedies for Multiunit 1 and the URS. At the time of this Semiannual Report, the Navajo Nation (where the site is located) has prohibited public gatherings of any kind until further notice due to the COVID-19 pandemic. If the COVID-19 pandemic continues to prevent an in-person public meeting prior to remedy selection indefinitely, APS will explore alternative methods for conducting the public meeting while considering the communications infrastructure available for full accessibility and transparency in the process.
- *Remedy Selection Reports for Multiunit 1 and the URS.* After a public meeting to discuss the results of the corrective measures assessment occurs, APS will prepare a remedy selection report for each unit which will document how the selected remedy will meet the requirements of 40 CFR §257.97(b).

Respectfully submitted,
Wood Environment & Infrastructure Solutions, Inc.



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