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

**Re: SEMIANNUAL REPORT DOCUMENTING PROGRESS IN REMEDY SELECTION
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). Semiannual progress reporting supporting remedy selection began on July 15, 2019. The most recent update was provided in the *Annual Groundwater Monitoring and Corrective Action Report for 2020*, dated January 31, 2021. This Semiannual Report serves as the fifth update on remedy selection progress at the site and documents activities completed to date in 2021.

1. Summary of Activities Completed in 2021

Activities completed by APS in the first half of 2021 in support of remedy selection for Multiunit 1 and the URS include the following:

- *Continued Groundwater Monitoring in the Multiunit 1 Ash Disposal Area.* Monitoring of supplementary wells and additional water quality constituents in the vicinity of Multiunit 1 began in 2020 during the semiannual CCR monitoring events. This monitoring has continued with sampling conducted for the first 2021 semiannual CCR monitoring event in April 2021. These sampling events and subsequent sampling events in 2021 are being conducted to evaluate groundwater conditions within the area of Multiunit 1 and the intercept trench system downgradient of Multiunit 1 to assess both spatially and temporally heterogenous concentrations in cobalt and molybdenum. The evaluation is expected to be summarized in the second half of 2021 and included in the Annual Groundwater Monitoring and Corrective Action Report for 2021 (2021 GMCAR).
- *Continued Evaluation of Constituent of Concern Exceedances at MW-87.* In January 2021 Wood Environment and Infrastructure Solutions, Inc. (Wood) completed a technical memorandum to address two potential causes of elevated cobalt and molybdenum at MW-87:
 - insufficient completion of well development of MW-87, and;



- potential interactions between groundwater at MW-87 and surface water in Chaco Wash, located approximately 150 feet away.

The technical memorandum was included in the 2020 GMCAR and recommended additional investigation by analyzing groundwater samples collected from supplementary wells near MW-87 during the November 2020 semiannual CCR monitoring event. The same locations were also monitored during the April 2021 semiannual CCR monitoring event and are anticipated to be monitored again during the second half of 2021. The evaluation of analytical data from these sample events is currently underway and is expected to be summarized in the second half of 2021 and included in the 2021 GMCAR. If the data proves inconclusive, collection of surface water samples from Chaco Wash may be warranted to evaluate the potential for the surface water to affect groundwater quality at MW-87 (see section 2 below).

2. Future Planned Activities

APS plans to perform the following activities in support of remedy selection during the second half of 2021 (and in upcoming years, as noted):

- *Installation of a Stream Gauging Station at Chaco Wash.* To further evaluate the possibility of hydraulic connection between Chaco Wash and nearby Multiunit 1 wells (particularly MW-87), Wood has proposed installation of a flow gauging station within Chaco Wash. The gauging station would not only provide comparisons between stream stage and nearby groundwater elevations, but also insights into seasonal flow patterns to inform ideal timeframes for collection of surface water samples from Chaco Wash. The planning for installation of the flow gauging station is anticipated to take place in the second half of 2021.
- *Pilot Seepage Extraction Study at URS Extraction Wells.* In 2019, APS installed four extraction test wells (CM-01, CM-02, CM-03, and CM-04) downgradient of the URS. To date, Wood has designed a pilot-scale seepage extraction system for CM-01 and CM-02 to convey extracted water to a sump that discharges into the new Upper Retention Tank. This system is considered a corrective measures pilot study to evaluate the effectiveness of targeted extraction on fluoride concentrations in groundwater downgradient of the URS. The extraction systems are anticipated to be installed and in operation during the second half of 2021. This pilot study will serve as an interim response measure and will inform potential remedy selection and design to address groundwater impacts at the URS. A Construction Completion Report will be prepared when the installation is complete and operational.
- *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. As of the date of this Semiannual Report, the Navajo Nation (where the site is located) is permitting public gatherings of 25 persons or less within specific guidance as outlined in the Navajo Department of Health (NDOH) Public Health Emergency Order 2021-012, dated June 18, 2021, due to the COVID-19 pandemic. However, the assumption is a public meeting will need to accommodate significantly more people. If the COVID-19 pandemic continues to prevent an adequate in-person public meeting 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 CCR 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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