JEFFREY JENKINS
Plant Manager
Four Corners Power Plant
P.O. Box 355, Station 4900
Fruitland, NM 87416
TEL (505) 598-8200
Jeffrey.Jenkins@aps.com

July 1, 2019

Via Email

Mr. Gary Sheth (WTR-2-3)
Water Division
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105
sheth.gary@epa.gov

RE: Comments on Proposed NPDES Permit No. NN000019 for Four Corners Power Plant

Dear Mr. Sheth:

Arizona Public Service Company appreciates the opportunity to provide the attached comments on the proposed NPDES permit NN000019 and draft fact sheet for the Four Corners Power Plant.

If you have any questions regarding this submittal, please do not hesitate to contact me.

Sincerely,

Jeffrey Jenkins
Plant Manager, Four Corners Power Plant

Enclosure

APS Comments on Proposed NPDES Permit NN000019
For Four Corners Power Plant

The Arizona Public Service Company (APS), applicant for Permit NN000019 for the Four Corners Power Plant (FCPP or Plant), provides the following comments in support of the U.S. Environmental Protection Agency (EPA) Region 9 (Region) Proposed Permit NN000019 and Draft Fact Sheet, published on May 30, 2019.

I. Background

FCPP provides electrical power primarily to utilities in Arizona and New Mexico. The Plant is located near Fruitland, New Mexico, within the Navajo Nation and is partially owned and operated by APS on behalf of itself as well as the Salt River Project Agricultural Improvement and Power District, the Navajo Transitional Energy Company (NTEC), Public Service Company of New Mexico, and Tucson Electric Power. FCPP began operations in 1963. It previously operated five generating units. Units 1, 2, and 3 were shut down in December 2013. FCPP now has two operational units, Units 4 and 5, and has a capacity of 1540 megawatts (MW). The Plant burns low-sulfur coal obtained from the adjacent Navajo Mine, owned by the NTEC and operated by Bisti Fuels Company, LLC.

The cooling water for Units 4 and 5 comes from an adjacent cooling pond, the wholly man-made Morgan Lake. APS operates a closed-cycle recirculating system, circulating approximately 1,000 to 1,700 million gallons of water per day (MGD) through Morgan Lake. APS withdraws an average of 14.3 MGD of water from the San Juan River as make-up water to replenish losses that have occurred due to blowdown, drift, and evaporation within Morgan Lake and the cooling system. Without these withdrawals from the San Juan River, which travel through a two mile pipeline to Morgan Lake, this cooling pond would dry up and cease to exist. In this respect, Morgan Lake functions to store cooling water for the FCPP, while also treating and storing water prior to blowdown through an outfall channel beneath its constructed dam.

FCPP has its own domestic treatment package plant with capacity of 30,000 gallons per day (GPD). Chemical metal cleaning and flue gas desulfurization (FGD) wastewater is sent to a series of two lined coal-combustion residual (CCR) surface impoundments, the lined-ash impoundment (LAI) and the lined-decant water pond (LDWP). Underflow from Units 4 and 5, metal cleaning wastes, and sanitary wastewater effluent from the package plant are combined before being sent to the Plant's CCR multi-unit, the LAI and LDWP. These two CCR surface impoundments operate in series. The first, the LAI, is a single-lined impoundment (60-mil HDPE geomembrane) where solids settle and floatables are removed and sold for revenue. The effluent from the single-lined pond is sent through a siphon drain system downhill to the double-lined impoundment, the LDWP. The second, double-lined impoundment (two 60-mil HDPE geomembranes above and below a leakage collection drainage geonet) serves as a retention basin holding the effluent before it is pumped back to the Plant for reuse within the FCPP's flue-gas desulfurization system for air pollution control.

Pursuant to the federal CCR regulations (i.e., 40 C.F.R. Part 257, Subpart D), both the LAI and the LDWP are considered "unlined"—notwithstanding that they were constructed with

synthetic lining, as described above—and must initiate closure by October 31, 2020. *See* 40 C.F.R. § 257.70(b)–(c). At that time, APS will commission the operation of a dry fly-ash and FGD wastewater blending system, which will allow the resulting waste material to be dry-disposed within the FCPP's dry-fly ash landfill system. A very small volume of residual liquid FGD waste, which remains after FGD wastewater and fly-ash blending, will then be diverted along with chemical metal cleaning wastewater into a new CCR surface impoundment, the so-called Return Water Pond (RWP), for temporary storage pending reuse by the Plant within the flue-gas desulfurization system. While this new system will continue the Plant's practice of not discharging these waste streams off-site, the new system will substantially reduce the volume of liquid waste materials that must be managed on-site.

APS received its first NPDES permit in 1983. As the Region noted in its public notice,[1] APS is currently operating under a January 2001 permit that has been administratively extended. APS filed a timely application for renewal of the NPDES permit on October 5, 2005. In response to an EPA request in February 2013, APS submitted a revised application that contained information on current operations at the time, a description of the planned shutdown of Units 1, 2, and 3 (which occurred in December 2013), and an analysis of likely impacts on surface water discharges to be regulated under a renewed NPDES permit. The Region released a draft permit in November 2014 and took public comments through February 2015. The Region issued a final permit on June 12, 2018, but withdrew it in December 2018 after it was appealed to the Environmental Appeals Board.

Under the Proposed Permit, Outfall 001 discharges from Morgan Lake into No Name Wash through a blowdown structure at the base of the cooling pond's dam. APS mostly discharges in order to regulate total dissolved solids (TDS) built up in Morgan Lake, which is used for cooling, storing, and treating water. Those discharges are intermittent, with an average of 2.5 days per week of discharge for about 6 months in the year. About 2.5 miles away from the discharge point, the No Name Wash meets the Chaco Wash. And about 7 miles from where the No Name Wash meets the Chaco Wash, the Chaco Wash meets the San Juan River. The other three discharges that would be authorized by the Proposed Permit are from internal outfalls: 01A (Condenser Cooling Water Discharge), 01B (Chemical Waste Cleaning Wastewater, which is not currently in use), and 01E (Combined Waste Treatment Pond ["CWTP"] Discharge).

II. Corrections to Facility Descriptions

APS offers the following corrections to the Proposed Permit and Draft Fact Sheet. As for the Draft Fact Sheet, APS offers the following:

- Page 1 – Tom Livingston is no longer the FCPP Plant Manager. The current facility Plant Manager is Jeffrey Jenkins.

[1] EPA Region 9, Public Notice: Proposed NPDES Permit; APS Four Corners Power Plant; Fruitland, New Mexico (Apr. 30, 2019), https://www.epa.gov/npdes-permits/proposed-npdes-permit-aps-four-corners-power-plant-fruitland-new-mexico.

- Page 2 – El Paso Electric Company is no longer an FCPP co-owner. Instead, as of July 2018, NTEC acquired an ownership share of the FCPP equivalent to the shares previously owned by El Paso Electric Company.

- Page 2 – BHP Minerals no longer operates the Navajo Mine. Instead, North American Coal, Bisti Fuels currently operates the Navajo Mine on behalf of NTEC.

- Page 2 – In the first full paragraph of Part III., the Draft Fact Sheet states that the discharges by APS from Outfall No. 001 "*are intermittent with an average of 2.5 days per week of discharge for about 6 months in a year. The average flow rate for the discharge is 4.2 million gallons per day.*" (emphasis added). To be accurate and reflect current operations, this should be revised instead to read that the discharges from Outfall No. 001 "are intermittent, with an average of four days per week of discharges throughout the course of a year, resulting in an average flow rate of 4.2 million gallons per day."

- Page 3 – In the fourth paragraph of Part III., the Draft Fact Sheet states that the CWTP "*is a treatment lagoon that treats about 8-13 MGD of various waste streams, including in plant storm water runoff*" (emphasis added). To be accurate and reflect current operations, this should be revised instead to read that the CWTP "is a treatment lagoon that treats between 5 and 8 MGD of various waste streams, including in-plant storm water runoff."

- Page 3 – As described above, the two CCR surface impoundments used to treat and store FGD and chemical metal cleaning wastewater prior to reuse will be initiating closure and cease receiving wastewater as of October 31, 2020. The Draft Fact Sheet should be updated to reflect the new system that will then go into operation to facilitate fly-ash and FGD wastewater blending, hence reducing substantially the volume of liquid wastes generated and managed on-site at the FCPP.

With respect to the Proposed Permit, APS offers the following:

- Part I.B.2. (Page 12) – The first sentence of this part specifies that the Plant's surface seepage intercept systems "*shall be maintained and operated for existing unlined ash ponds*" (emphasis added). This refers to the LAI and LDWP, which operate as a multi-unit series of impoundments for FGD and chemical metal cleaning wastewater treatment and storage prior to wastewater recycling. While these units are actually lined with HDPE geomembranes, their construction specifications do not match those provided in the federal CCR regulations for lined CCR surface impoundments. *See* 40 C.F.R. § 257.70(b)–(c). As such, and as described in more detail above, these units must initiate closure and cease receiving wastewater by October 31, 2020. At that time, the LAI and LDWP will be replaced by a much smaller, approximately seven acre CCR surface impoundment constructed in compliance with federal requirements. This new CCR surface impoundment, the RWP, will be part of the Plant's overall system to managing and reusing FGD and chemical metal cleaning wastewater. Given the confusion that may result from the current language in Part I.B.2., we suggest replacing the quoted, italicized language (above) with the

following: "shall be maintained and operated for the FGD and chemical metal cleaning wastewater surface impoundments operated in accordance with 40 C.F.R. Part 257, Subpart D, as currently existing or to be constructed in the future."

- Part I.B.2. (Page 12) – The second sentence of this part specifies that the water collected by the plants surface seepage intercept systems "*shall be returned to the double lined water decant pond*" (emphasis added). While the water collected by the intercept system is currently returned to the LDWP, prior to being pumped back to the Plant for reuse as FGD make-up water, this current orientation will change by October 31, 2020, as described above. By that time, any water collected by the Plant's surface seepage intercept system will be stored for eventual Plant reuse in the RWP. As such, to address the current and eventual operating orientations for these systems, we suggest replacing the quoted, italicized language (above) with the following: "shall be returned to the power plant for reuse as make-up water for the facility's flue-gas desulfurization system."

III. Morgan Lake is Not a Jurisdictional "Water of the United States"

APS agrees with the Region that, as set forth in the Proposed Permit, the appropriate point of discharge is the discharge *from* Morgan Lake (Outfall Number 001). The Proposed Permit is consistent with how the Region has addressed the Plant's discharges in its previous NPDES permits. *See* Permit No. NN0000019 (2001). The proposed point of discharge is appropriate because Morgan Lake is not a jurisdictional "water of the United States" (WOTUS) under the Clean Water Act (CWA). Region 9 issued a memorandum in 2017 confirming for purposes of both APS's NPDES permit for the FCPP (NN0000019) and NTEC's NPDES permit for the Navajo Mine (NN0028193) that Morgan Lake is not a WOTUS. Gary Sheth, EPA Region 9, Memorandum to the Administrative Record for NPDES Permit NN0000019 and NPDES Permit NN0028193 (July 20, 2017) (2017 Sheth Memo).

Morgan Lake is a man-made cooling pond that was constructed wholly in upland areas for the purpose of dissipating heat from the Plant. Under the EPA's and the U.S. Army Corps of Engineers' (Corps') (together, the Agencies') 2015 Clean Water Rule, 80 Fed. Reg. 37,054 (June 29, 2015) (2015 WOTUS Rule),[2] Morgan Lake is excluded from WOTUS jurisdiction under the waste treatment system (WTS) exclusion. WTS features have been excluded from the WOTUS definition since 1979. *See* 44 Fed. Reg. 32,854, 32,858 (June 7, 1979) (WTS exclusion intended to exempt waters that are incorporated into an NPDES permit as part of a treatment system, including, but not limited to, holding ponds, cooling ponds, and closed-cycle lagoons). The current EPA regulations state that "[w]aste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act . . ." are *not* WOTUS even where they could otherwise be interpreted to fall into one of the jurisdictional categories of WOTUS. 40 C.F.R. § 122.2 (2015).

[2] For purposes of these comments, we assume that the Agencies' 2015 Rule is the applicable regulation for Morgan Lake. Although the 2015 WOTUS Rule has not been in effect in New Mexico, *North Dakota v. EPA*, 127 F. Supp. 3d 1047 (D.N.D. 2015), Morgan Lake is within the Navajo Nation, which is not subject to an order enjoining the 2015 Rule. Even under the regulations that were in place prior to the 2015 WOTUS Rule, Morgan Lake would not qualify as a WOTUS for the same reasons outlined in this section.

The preamble to the 2015 WOTUS Rule explained that cooling ponds, like Morgan Lake, that are part of an NPDES-permitted system "are subject to the waste treatment system exclusion" and would "remain excluded under the new rule." 80 Fed. Reg. at 37,099.[3] The Agencies have indicated their intent to preserve the WTS exclusion going forward, and have proposed to clarify in the regulatory text that cooling ponds are WTS features. The 2019 Proposed Revised Definition of "Waters of the United States" (2019 Proposed WOTUS Rule), would exclude "waste treatment systems," which "includes all components, including lagoons and treatment ponds (such as settling or ***cooling ponds***), designed to convey or retain, concentrate, settle, reduce, or remove pollutants, either actively or passively, from wastewater prior to discharge (or eliminating any such discharge)." 84 Fed. Reg. 4,154, 4,205 (Feb. 14, 2019) (emphasis added). Morgan Lake is exactly the type of feature for which the WTS exclusion is meant. As the Ninth Circuit has recognized, "The [WTS] exception was meant to avoid requiring dischargers to meet effluent discharge standards for discharges *into* their own closed system treatment ponds." *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 1001–02 (9th Cir. 2007). Imposing NPDES requirements at the discharge point *from* Morgan Lake into No Name Wash, as proposed, ensures that the permittee is not subject to an arbitrary requirement for FCPP to meet effluent standards for discharges into the Plant's own closed system treatment pond.

Moreover, even if Morgan Lake did not qualify for the WTS exclusion, it would be excluded from WOTUS jurisdiction under the 2015 WOTUS Rule's exclusion for "[a]rtificial, constructed lakes or ponds created by excavating and/or diking dry land such as farm and stock watering ponds, irrigation ponds, settling basins, log cleaning ponds, ***cooling ponds***, or fields flooded for rice growing." 40 C.F.R. § 122.2 (2015). The 2019 Proposed WOTUS Rule likewise excludes certain "artificial lakes and ponds constructed in upland." *See* 84 Fed. Reg. at 4,204.

Although further WOTUS analysis is not necessary given the applicability of the WTS and artificial lake and pond exclusions, APS notes that, as the Region has previously recognized, Morgan Lake does not qualify under the category of waters commonly referred to as "traditional navigable waters" (TNWs) or "commerce waters"—waters identified under the 2015 Rule and previous WOTUS regulations "which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce." 40 C.F.R. § 122.2 (2015). Under the landmark Supreme Court case, *Rapanos v. United States*, 547 U.S. 715 (2006), the waters to

[3] The 2015 WOTUS Rule eliminated from the § 122.2 WTS exclusion an obsolete cooling pond parenthetical—"(other than cooling ponds as defined in 40 CFR § 423.11(m) which also meet the criteria of this definition)"—that had been included in previous regulations. Over 30 years ago, EPA withdrew the technology-based cooling pond regulations and accompanying definition that the parenthetical was designed to reference. *See* 47 Fed. Reg. 52,290 (Nov. 19, 1982). And EPA has made it clear that cooling ponds can be and often are excluded as WTS components. *See* Memorandum from Robert Perciasepe, Assistant Adm'r, Office of Water, EPA, to W. Ray Cunningham, Dir., Water Mgmt. Div., EPA, "Waters of the United States" Determination for a Proposed Cooling Pond Site in Polk County, Florida, at 4-5 (Dec. 13, 1993), https://www3.epa.gov/npdes/pubs/owm0099.pdf, (1993 Perciasepe Memo) (explaining that EPA can, in light of the deletion of the steam electric cooling pond definition and prior EPA practice, "interpret[] the waste treatment system exclusion as encompassing all steam electric cooling ponds"). As such, EPA did not consider removal of the cooling pond parenthetical to be a "substantive change[]." 80 Fed. Reg. at 37,097.

which both the plurality and Justice Kennedy refer when they discuss TNWs[4] are unmistakably clear from the cases they cite to describe them—*The Daniel Ball*, 77 U.S. 557 (1870), and *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377 (1940). These cases are cornerstones of well-established case law that define TNWs as waters that: (1) are navigable-in-fact and (2) together with other waters, form waterborne highways used to transport commercial goods in interstate or foreign commerce. *See The Daniel Ball*, 77 U.S. at 563. The TNWs as understood by the *Rapanos* plurality and concurring opinions are waters used to transport goods in interstate commerce.[5] They are not so broad as to include any water feature that can float a boat, and they do not include Morgan Lake. *Cf. In re Borden Inc./Colonial Sugars*, 1 E.A.D. at 907 n.26 ("[E]vidence of an occasional interstate traveler who engages in recreational fishing or hunting on the wetlands would be an insufficient basis[,] standing alone, to establish commerce clause jurisdiction."). In its 2015 Response to Comments on the previous iteration of the FCPP Proposed Permit (2015 RTC), the Region considered the boating and fishing uses of Morgan Lake, and appropriately determined that such uses "appear[] to be incidental" and "do[] not provide a sufficient nexus to interstate commerce to justify an assertion of federal jurisdiction." RTC at 15-16. Morgan Lake would not qualify as a TNW under the 2015 WOTUS Rule or previous WOTUS regulations.

For all of these reasons, the Proposed Permit appropriately clarifies that Morgan Lake is not a WOTUS and selects the appropriate point of discharge as the discharge *from* Morgan Lake.

IV. APS Supports the Proposed Permit's Selection of December 31, 2023, as the Compliance Deadline for Bottom Ash Transport Water Limits

APS supports the Proposed Permit's selection of December 31, 2023, as the date by which APS must meet EPA's new zero-liquid discharge standard for bottom-ash transport water (BATW). As discussed in more detail below, this selection is consistent with the Postponement Rule, allows for integrated planning for the Plant's compliance with the 2015 Effluent Limitation Guidelines (ELG) Rule and applicable RCRA Coal Combustion Residuals (CCR) requirements, and enables APS to account for uncertainty in the pending BATW ELG rulemaking.

EPA promulgated revisions to its steam electric ELGs in 2015. 80 Fed. Reg. 67,838 (Nov. 3, 2015) (2015 ELG Rule). The 2015 ELG Rule established several new effluent limitations applicable to the steam electric power generation industry based on EPA's selection of the "best available technology economically achievable" (BAT) under 33 U.S.C. §§ 1311(b)(2)(A) and 1314(b)(2)(B). Because BAT is "technology-forcing," *NRDC v. EPA*, 808 F.3d 556, 563-64 (2d Cir. 2015), EPA recognized that some of the 2015 ELG Rule's advanced technologies were not immediately "available" to industry, and thus their corresponding BAT limits would not be immediately achievable. 80 Fed. Reg. at 67,854 ("[T]he final rule takes this

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[4] *Rapanos*, 547 U.S. at 742 (plurality) (establishing that a wetland covered by the CWA requires a showing that "the adjacent channel contains a 'water of the United States,' (*i.e.*, a relatively permanent body of water connected to traditional interstate navigable waters)"); *id.* at 779 (Kennedy, J., concurring) ("[T]he Corps' jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense.")

[5] *See, e.g., United States v. Pozsgai*, 999 F.2d 719 (3d Cir. 1993) (canal used in the past as shipping route for coal and other commodities is jurisdictional traditional navigable water under 33 C.F.R. § 328.3(a)(1) (1992)).

approach in order to provide the time that many facilities need to raise capital, plan and design systems, procure equipment, and construct and then test systems."). Therefore, the 2015 ELG Rule prescribed a range of dates within which the technologies would be deemed "available" and the effluent limits would be "achievable" for individual plants. The BAT limits would apply to point sources in the industry as soon as they are achievable, as determined by the plant's permitting authority. *Id.* Among the revised standards finalized in the 2015 ELG Rule, EPA established a new ELG for BATW that would impose a zero-liquid discharge requirement. *See* 40 C.F.R. § 423.13(k)(1)(i). The new zero-liquid discharge limit for BATW was to apply to individual plants "as soon as possible" after November 1, 2018, but no later than December 31, 2023. *Id.*

In 2017, EPA announced that it would be undertaking a rulemaking to reconsider the limit for BATW as well as for flue gas desulfurization (FGD) wastewater.[6] Because EPA intends to conduct a rulemaking to potentially revise the limits for FGD wastewater and BATW, on September 18, 2017, EPA issued a final rule postponing the near-term applicability date for FGD wastewater and BATW from November 1, 2018, to November 1, 2020. 82 Fed. Reg. 43,494 (Sept. 18, 2017) (Postponement Rule). The purpose of the Postponement Rule is to authorize permit writers to select applicability dates that will avoid any expenditures to comply with the 2015 ELG Rule for FGD wastewater and BATW until EPA completes further rulemaking governing those waste streams, "which may result in substantive changes to the 2015 Rule." 82 Fed. Reg. at 43,496-98. EPA expects to complete its rulemaking for BATW and FGD wastewater by November 2020. *Id.*[7] The Postponement Rule did not modify the 2015 ELG Rule's "no later than" compliance deadlines, which remain December 31, 2023. 40 C.F.R. §§ 423.13(g)(1)(i), 423.13(k)(1)(i).

On April 4, 2019, APS submitted to the Region a NPDES ELG Compliance Summary for FCPP providing information regarding the three separate, yet interrelated projects that FCPP plans to implement to address compliance with the revised ELGs for BATW and requirements under EPA's CCR regulations:

1. Closure of FCPP's Combined Waste Treatment Pond ("CWTP") – The FCPP CWTP is the structure through which FCPP's BATW discharges flow and is a regulated CCR-management unit. Under the current CCR regulations, this unit must cease receiving CCR and non-CCR waste streams by October 31, 2020, and thereafter initiate closure

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[6] *See* Letter from Scott Pruitt, U.S. EPA Administrator, Re: Petitions for Agency Reconsideration and Stay of Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category (Aug. 11, 2017).

[7] For legacy wastewater, which is wastewater from five of the waste streams (FGD, fly ash, bottom ash, flue gas mercury control, and gasification wastewater) that is generated prior to the "as soon as" compliance deadline, the 2015 ELG Rule set a BAT that is equal to the pre-2015 ELG Rule standards (set forth in 1982 regulations). 82 Fed. Reg. at 43,496. This means that, under the 2015 ELG Rule, BATW generated prior to the FCPP's "as soon as" compliance date (December 31, 2023) is allowed to contain the same quantity of pollutants allowed since 1982. *See id.* As such, the U.S. Court of Appeals for the Fifth Circuit's recent decision vacating and remanding the 2015 ELG Rule's legacy wastewater standard, *Southwestern Elec. Power Co., et al. v. EPA*, No. 15-60821 (5th Cir. Apr. 12, 2019), does not require a change for this permit. As reflected in the Proposed Permit, the pre-2015 ELG Rule standards apply to BATW generated at FCPP prior to the "as soon as" compliance date.

procedures within 30 days. 40 C.F.R. §§ 257.60(a) and 257.101(b)(1), as revised pursuant to 83 Fed. Reg. 36,435 (July 30, 2018).[8]

2. BATW Holding and Treatment Tank Construction – A new system of concrete holding and treatment tanks will be constructed to manage BATW flows. Prior to the "as soon as" compliance deadline, the system of tanks will be used for holding, treatment, and discharge. After the BATW zero-liquid discharge requirement is in effect, the system will be used as part of a closed-loop BATW management system.

3. BATW Closed-Loop Recycling System – To comply with the 2015 ELG Rule's BATW zero-liquid discharge requirement, APS plans to develop a closed-loop recycling system for BATW.

40 C.F.R. § 423.11(t) instructs permit writers to determine the "as soon as possible" compliance date for BATW based on the following factors: (1) time to expeditiously plan (including to raise capital), design, procure, and install equipment to comply with the requirements; (2) changes being made or planned at the plant in response to other environmental regulations, including regulations that address the management and disposal of CCR, as provided in 40 C.F.R. Part 257, Subpart D; and (3) "[o]ther factors as appropriate." "Other factors" that are relevant for EPA's consideration include the substantial uncertainty surrounding the 2015 ELG Rule and the need for integrated planning decisions regarding compliance with the 2015 ELG Rule and other environmental rules identified in § 423.11(t). *See* 82 Fed. Reg. at 43,498; *Coosa River Basin Initiative v. Dunn*, Docket Nos. 1825406 and 1826761, at 13, Ga. Office of State Admin. Hearings (Oct. 4, 2018).

As explained in more detail in FCPP's ELG Compliance Summary, all three factors identified in 40 C.F.R. § 423.11(t) support the Region's determination that the BATW "as soon as" compliance deadline for FCPP is December 31, 2023. Integrated planning is required for changes to the FCPP to comply with applicable ELGs and CCR requirements. Altogether, APS estimates that these three projects will cost between $33.4 and $38.9 million. Because of the uncertainty surrounding the applicable effluent limits for BATW and CCR requirements, both of which could change as a result of EPA's further rulemaking and therefore could result in changes to the plans for these three projects, APS's preliminary plans have sequenced these three projects in a way that would allow APS to avoid major expenditures to comply with the BATW ELG until EPA completes its new rulemaking. The ELG Compliance Summary further details the project sequencing, and explains that the BATW holding and treatment tank system is an integral component of and must be completed before implementation of the BATW closed-loop recycling system. December 31, 2023, is the soonest date by which APS can close the CWTP, construct the BATW holding and treatment tank system, and implement the BATW closed-loop recycling system. For all of these reasons, APS supports EPA's determination that the BATW "as soon as possible" compliance deadline for FCPP is December 31, 2023.

[8] As APS understands it, EPA is currently reconsidering this deadline following the decision in *USWAG v. EPA*, 901 F.3d 414 (D.C. Cir. 2018).

V. The Proposed Permit Complies with EPA's § 316(b) Requirements for Cooling Water Intake Structures

The cooling water for Units 4 and 5 comes from the adjacent Morgan Lake. APS operates a closed-cycle recirculating system, circulating from approximately 1,000 to 1,700 MGD through Morgan Lake. The 1,200-acre Morgan Lake withdraws an average of 14.3 MGD of water from the San Juan River as make-up water to replenish losses that have occurred due to blowdown, drift, and evaporation within Morgan Lake and the cooling system. Approximately, 99 percent of the water withdrawn from the San Juan River is reused for cooling purposes. Cooling water passes through the FCPP condenser and other components of the cooling system and is reused for cooling multiple times. *See* FCPP Wastewater Flow Schematic, Attachment D to Proposed Permit.

The intake structure on the San Juan River consists of two 10-foot by 10-foot intake bays, placed perpendicularly to the flow of the river. The intakes are screens with an approximately 1-inch by 3-inch openings. The intake system is equipped with a weir and a channel with a gate. The control gate provides the ability to control water depths at the intake location. If the water in the river is too low at the intake screens to supply the pumps, the gate in the channel is lowered. The gate and the weir together increase the level at the intake screens to supply the pumps.

As a result of Endangered Species Act (ESA) section 7 interagency consultation between the U.S. Fish and Wildlife Service (FWS), EPA, and the Office of Surface Mining Reclamation and Enforcement (OSMRE), FWS issued a Biological Opinion for the FCPP and Navajo Mine Energy Project (Apr. 8, 2015) (BO). Pursuant to the 2015 BO, APS has implemented a Pumping Plan, which was approved by FWS and provided to the Region, to minimize impingement and entrainment of fish, fish larvae, and fish eggs at the San Juan intake system. BO at 144. First, pursuant to the Pumping Plan, APS has reduced the intake flow velocity. The Pumping Station has two independent pump trains with separate intake screens and suction sumps. APS connected the sumps, which has the effect of reducing the screen-approach and through-screen velocities by up to 50 percent during one train operation. With the closure of Units 1, 2, and 3, FCPP will maintain one pump train operation the majority of the time. Approach velocities toward the screens are now approximately 0.38 feet per second. Second, APS is implementing strategic pump outages during certain periods of the year to minimize inadvertent take of fish eggs and larvae, including periods when Colorado pikeminnow stocking occurs upstream of the pump station and when FWS determines that Colorado pikeminnow are spawning upstream. Third, APS commissioned an engineering investigation to evaluate optimal intake screen opening size, which concluded that the current screen size openings are optimal.[9] Finally, APS has agreed to fund substantial recovery actions in the San Juan River Basin to create, maintain, and/or improve habitat for endangered fish species. *See* BO at 146-47. These measures include (among others) funding of fish passage at the APS weir, monitoring and management of fish habitat, and funding of studies that will help recovery and adaptive management efforts. *See* BO

[9] As explained in the Pumping Plan, based on this engineering investigation, APS does not believe that reducing the current screen size openings would be beneficial for two reasons: (1) the screen opening cannot be reduced sufficiently (0.5mm) to exclude larvae; and (2) a smaller screen opening would not significantly protect small-bodied fish like the Colorado pikeminnow because such a reduction would increase approach velocity and through-screen velocity above the fish's sustained swimming speed.

at 146-48. The measures taken pursuant to the Pumping Plan have resulted in major changes to the San Juan River intake system.

APS agrees with the Proposed Permit's determination that FCPP's closed-cycle recirculating system and Pumping Plan constitute the best technology available (BTA) for impingement and entrainment pursuant to EPA's CWA § 316(b) regulations. For permits like the FCPP permit, which were applied for before October 14, 2014, and issued after October 14, 2014, the permit writer may make a BTA determination without requiring the facility to submit the information required in 40 C.F.R. § 122.21(r). *See* 40 C.F.R. § 125.98(g). EPA's regulations contemplate that, for such permits, the permit writer should require submittal of information necessary under 40 C.F.R. §§ 122.21(r) in the subsequent permit renewal. *See* 40 C.F.R. § 125.98(b)(ii)(6). That is exactly what the Region has done in the Proposed Permit, which would require APS to submit applicable materials under 40 C.F.R. § 122.21(r)(1)-(8) along with submission of the next FCPP renewal application. *See* Proposed Permit at 12. The 2015 BO and its supporting analyses provide extensive information on the facility's intake structure and a robust evaluation of potential environmental effects, which the Region has drawn upon for its BTA determination.

As the Proposed Permit recognizes, FCPP uses a "closed-cycle recirculating system," which is defined by EPA regulations as follows:

> Closed-cycle recirculating system means a system designed and properly operated using minimized make-up and blowdown flows withdrawn from a water of the United States to support contact or non-contact cooling uses within a facility, or a system designed to include certain impoundments. A closed-cycle recirculating system . . . includes a facility with wet, dry, or hybrid cooling towers, a system of impoundments that are not waters of the United States, or any combination thereof. A properly operated and maintained closed-cycle recirculating system withdraws new source water (make-up water) only to replenish losses that have occurred due to blowdown, drift, and evaporation.

40 C.F.R. § 125.92(c). As explained above, FCPP operates a system that uses minimized make-up and blowdown flows withdrawn from the San Juan River, a water of the United States, to support cooling uses within the facility. FCPP's system withdraws make-up water to replenish losses that have occurred due to blowdown, drift, and evaporation within Morgan Lake and the cooling system. 99 percent of the water withdrawn from the San Juan River is reused for cooling purposes. Cooling water passes through the FCPP condenser and other components of the cooling system and is reused for cooling multiple times. Accordingly, the Proposed Permit correctly determines that the FCPP's system falls squarely within the "closed-cycle recirculating system" definition set forth at § 125.92(c).

EPA's § 316(b) regulations do not set a national BTA for entrainment. Instead, the permit writer is instructed to make a site-specific determination. EPA recognized in its 2014 rulemaking that "closed-cycle recirculating systems reduce entrainment (and impingement) to the greatest extent and are the most effective performing technology." 79 Fed. Reg. 48,300, 48,340 (Aug. 15, 2014) (2014 § 316(b) Rule). EPA's regulations provide that operation of a closed-cycle recirculating system can satisfy BTA for entrainment. *See* 40 C.F.R. § 125.94(d).

Here, the Region reasonably determined that FCPP's existing closed-cycle recirculating system, operated as set forth in the aforementioned Pumping Plan, is BTA for entrainment.

As to impingement mortality, EPA's § 316(b) regulations set forth seven compliance options for impingement mortality BTA. One of the compliance options is operation of a closed-cycle recirculating system, as defined at § 126.92(c), with an additional requirement to conduct daily intake flow monitoring or daily calculation of the cycle of concentrations. *See* 40 C.F.R. § 125.94(c)(1). The regulations also provide that "[i]f the [permit writer] determines that the site-specific BTA standard for entrainment . . . requires performance equivalent to a closed-cycle recirculating system . . . your facility will comply with the impingement mortality standard for that intake." 40 C.F.R. § 125.94(d). The preamble to EPA's 2014 § 316(b) Rule stated that a closed-cycle recirculating system will typically reduce impingement by more than 95 percent. 79 Fed. Reg. at 48,345 (Aug. 15, 2014). EPA anticipated that approximately 18 percent of intake structures already have an existing closed-cycle recirculating systems and would satisfy impingement mortality BTA with this compliance option. *Id.* The Region reasonably determined that FCPP's existing closed-cycle recirculating system, operated as set forth in the aforementioned Pumping Plan, is BTA for impingement.

Finally, under 40 C.F.R. § 125.94(g), the permit writer may establish additional control measures, monitoring requirements, and/or reporting requirements to protect Federally listed threatened and endangered species and critical habitat, including, for example, measures identified by FWS. In the Proposed Permit, the Region establishes several additional measures, including two measures identified in the 2015 FWS BO—implementation of the Pumping Plan, and sufficiently sensitive sampling methods for mercury and selenium—and additional monitoring requirements. *See* Proposed Permit at 12. APS supports the inclusion of these requirements in the Proposed Permit.

VI. The Region Has Fulfilled its ESA § 7 Consultation Obligations

As described in the Proposed Permit and Draft Fact Sheet, the Region has fulfilled its ESA § 7 consultation obligations. ESA § 7(a)(2) requires that a federal action agency, "in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of [listed] species or result in the destruction or adverse modification of [critical habitat]." 16 U.S.C. § 1536(a)(2).

EPA consulted with FWS as part of the OSMRE and EPA consultation for the FCPP and Navajo Mine Energy Project (also commonly discussed as the 2015 Lease Renewal), which explicitly included the FCPP NPDES permit action. BO at 26-27, 121. The 2015 BO evaluated impingement and entrainment at the FCPP intake. The BO determined that, with the conservation measures, the lease action (including the FCPP NPDES permit renewal) "is not likely to jeopardize the continued existence of the Colorado pikeminnow and the razorback sucker." BO at 133. It is appropriate for EPA to rely on the 2015 BO, and indeed the Region has incorporated the relevant reasonable and prudent measures identified by the 2015 BO into the Proposed Permit.

VII. APS Supports the Inclusion of the Seepage Management and Monitoring Plan

APS supports EPA's decision to include the Seepage Management and Monitoring Plan in the Proposed Permit in order to prevent and control potential discharges from the seepage intercept and water recycle system to navigable waters. As APS has explained, the seepage management system involves intercepting groundwater before seeps can emerge from the ground and travel over land, collecting the intercepted water in a containment trench, and then returning the captured water to the plant for reuse as make-up water for the plant's FGD system. The seepage management system is designed to prevent any discharges of waters collected by the system to the nearby Chaco River as well as to capture groundwater flows before they emerge as seeps that could enter that water, a jurisdictional water.

Because the FCPP is located in an arid region, reuse of available water is important to the operation of the plant. As a result, the Seepage Management and Monitoring Plan has been included in prior FCPP NPDES permits both to allow for this reuse and to address risks posed by potential discharges from the system to navigable waters. APS fully supports and expressly requests that the final permit include the Seepage Management and Monitoring Plan to allow for the continued operation of the seepage intercept and recycle systems.

In this regard, EPA has long interpreted the CWA to authorize NPDES permits to impose non-numeric "best management practices" to control pollution when "[n]umeric effluent limitations are infeasible." 40 C.F.R. § 122.44(k); *see also* Proposed Permit at 18 (defining "best management practices" to include "maintenance procedures, and other physical, structural and/or managerial practices to *prevent* or reduce pollution of waters of the U.S.") (emphasis added). For example, EPA has authorized the use of "management practices, control techniques," and other non-numeric standards in permits for discharges of stormwater from municipal separate storm sewer systems. 42 U.S.C. § 1342(p)(3)(B)(iii). Controlling the risks of seepage through the intercept and reuse system is akin to controlling unconventional discharges of stormwater during heavy rainfall events. Given the unpredictable nature of any potential discharges, numerical limits are not feasible to address them. Rather, best management practices are the correct approach under the NPDES program—in fact, based on many years of experience at the plant, the Seepage Management and Monitoring Plan has proven to be the best means to prevent potential discharges to jurisdictional waters, and that plan should remain in the permit to ensure ongoing protection.

VIII. EPA's Proposed Waiver of CWA § 401 Water Quality Certification is Appropriate

Under CWA § 401, 33 U.S.C. § 1341, a federal agency cannot issue a federal permit or license for an activity that may result in a discharge to WOTUS until the state or authorized tribe where the discharge originates has granted or waived § 401 water quality certification. Federal licenses and permits subject to § 401 water quality certification include NPDES permits issued by EPA. EPA provides § 401 certification in cases where a state or interstate agency has no certification authority. 33 U.S.C. § 1341(a)(1); 40 C.F.R. § 131.5(c). As a result, EPA typically acts as the certifying authority on tribal lands where, as is the case for FCPP, the tribe lacks

certification authority.[10] The principal mechanism for establishing water quality standards for Indian reservation waters is through 33 U.S.C. § 1377(e), under which a tribe interested in establishing water quality standards must obtain "Treatment in the Same Manner as a State" (TAS) authority from EPA. Tribes with TAS designation are authorized to adopt and submit water quality standards to EPA for approval, where such standards must meet the same requirements applicable to states. 33 U.S.C. § 1377(e). Here, even though FCPP is located within the Navajo Nation, the TAS determination was structured such that EPA retained responsibility for Morgan Lake under CWA §§ 303(c) and 401.[11]

Although APS believes that CWA § 401 water quality certification requirements set forth at 40 C.F.R. Part 121 do not apply to NPDES permits,[12] it has been argued that APS, as the applicant, is required to submit a request to start the CWA § 401 water quality certification process for the permit. Therefore, out of an abundance of caution, on March 27, 2019, APS sent a letter to Mr. Tomás Torres, Director of EPA Region 9 Water Division, formally requesting that EPA, as the agency with CWA § 401 water quality certification jurisdiction, either certify that the discharges to be authorized by the Proposed Permit will not violate applicable water quality standards, or waive water quality certification. APS provided all of the application materials describing the project and its impacts to Gary Sheth in the Region 9 permits office. In its public notice, Region 9 proposes to waive § 401 certification "[g]iven the aquatic resources protected by the certification program are the same as the aquatic resources being protected pursuant to the Proposed Permit and the Proposed Permit contains conditions necessary to achieve compliance with the CWA . . . ." The Region asks for public comments on its proposed waiver.

It is appropriate for the Region to waive § 401 water quality certification for the Proposed Permit. The decision to deny, certify, or condition permits or licenses is based, in part, on the proposed project's compliance with water quality standards. 33 C.F.R. § 1341(a)(2); 40 C.F.R. § 124.53(e). "'The purpose of the certification mechanism ... is to assure that Federal licensing or permitting agencies cannot override State water quality requirements.'" *Sierra Club v. U.S. Army Corps of Eng'rs*, No. 18-1173, 2018 WL 6175671, at *8 (4th Cir. Nov. 27, 2018) (quoting S. Rep. No. 92-414, at 69 (1971)). Here, there are no state or Navajo Nation water quality

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[10] *See* EPA, *Clean Water Act Section 401 Water Quality Certification: A Water Quality Protection Tool for States and Tribes*, at 7 (2010), https://www.epa.gov/cwa-404/clean-water-act-401-handbook-2010, (Section 401 Handbook).

[11] In its TAS application for authority from EPA to administer its water quality standards program and for the purposes of water quality certifications, the Navajo Nation expressly requested that the area leased for the FCPP be excluded from TAS recognition. As such, EPA's TAS Decision Document provides, in relevant part, "This approval applies to all surface waters identified by the Tribe that lie within the exterior borders of the Navajo Indian Reservation, as described in the Application.... *The approval does not cover Morgan Lake*, a water body that the Tribe identified in an October 31, 2005 clarification letter as not requested for approval.... [Morgan Lake] is the only listed Tribal water within the areas leased by the Tribe for the Four Corners Power Plant and Navajo Generating Station." *See* EPA Region 9, Decision Document: Approval of the Navajo Nation TAS Application for Sections 303(c) and 401 of the Clean Water Act, at 2, 11 (Jan. 20, 2006) (emphasis added).

[12] APS maintains that the certification procedures applicable to NPDES permits (including federally issued permits) are governed by 40 C.F.R. Part 124, Subpart D (Specific Procedures Applicable to NPDES Permits). *See In re Ketchikan Pulp Co.*, 6 E.A.D. 675 (EAB 1996); Section 401 Handbook at 12.

standards applicable to Morgan Lake.[13] In its role as both the permit writer and certification authority, it is entirely appropriate for the Region to waive certification because it has imposed conditions in the Proposed Permit that are necessary to achieve compliance with the CWA.

IX. Conclusion

APS supports the Proposed Permit and appreciates the opportunity to provide public comments. APS urges the Region to finalize the Proposed Permit with the minor corrections suggested herein.

[13] The Proposed Permit appropriately relies on the approved narrative standards of the downstream jurisdiction, the Navajo Nation, pursuant to its "best professional judgment" authority under the CWA.