NPDES PERMIT NO. NM0031135
FACT SHEET

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT

Farmington Electric Utility System - Bluffview Power Plant
101 N. Browning Parkway
Farmington, NM 87401

ISSUING OFFICE

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DATE PREPARED

November 1, 2024

PERMIT ACTION

Reissuance of a permit previously issued June 14, 2019, with an effective date of August 1, 2019, and an expiration date of July 31, 2024.

RECEIVING WATER – BASIN

San Juan River – San Juan River Basin

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

4Q3	Lowest four-day average flow rate expected to occur once every three-years
BAT	Best available technology economically achievable
BCT	Best conventional pollutant control technology
BPT	Best practicable control technology currently available
BMP	Best management plan
BOD	Biochemical oxygen demand (five-day unless noted otherwise)
BPJ	Best professional judgment
CBOD	Carbonaceous biochemical oxygen demand (five-day unless noted otherwise)
CD	Critical dilution
CFR	Code of Federal Regulations
cfs	Cubic feet per second
COD	Chemical oxygen demand
COE	United States Corp of Engineers
CWA	Clean Water Act
DMR	Discharge monitoring report
ELG	Effluent limitation guidelines
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FCB	Fecal coliform bacteria
F&WS	United States Fish and Wildlife Service
mg/l	Milligrams per liter
ug/l	Micrograms per liter
MGD	Million gallons per day
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMIP	New Mexico NPDES Permit Implementation Procedures
NMWQS	New Mexico State Standards for Interstate and Intrastate Surface Waters
NPDES	National Pollutant Discharge Elimination System
MQL	Minimum quantification level
O&G	Oil and grease
PFAS	Per- and polyfluoroalkyl substances
POTW	Publicly owned treatment works
RP	Reasonable potential
SIC	Standard industrial classification
s.u.	Standard units (for parameter pH)
SWQB	Surface Water Quality Bureau
TDS	Total dissolved solids
TMDL	Total maximum daily load
TRC	Total residual chlorine
TSS	Total suspended solids
UAA	Use attainability analysis
USFWS	United States Fish & Wildlife Service
USGS	United States Geological Service
WLA	Waste load allocation
WET	Whole effluent toxicity
WQCC	New Mexico Water Quality Control Commission
WQMP	Water Quality Management Plan
WWTP	Wastewater treatment plant

I. CHANGES FROM THE PREVIOUS PERMIT BACKGROUND

1. Added electronic reporting rules.
2. Added Sufficiently Sensitive Methods.
3. Updated WET language.
4. Updated loading limitations for TSS and O&G.
5. Updated Critical Dilution to .34%

II. DISCHARGE LOCATION

As described in the application, the City of Farmington Bluffview Power Plant (BPP) is located at 755 W. Murray Drive, Farmington, San Juan County, New Mexico.

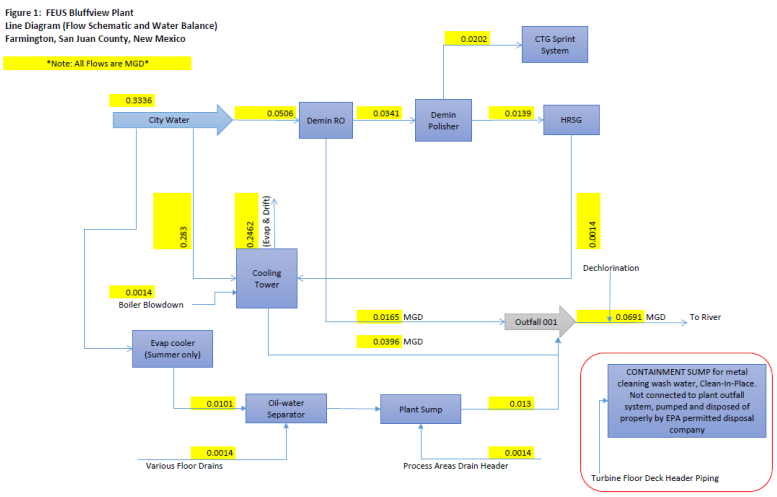
BPP is owned and operated by the City of Farmington Electric Utility System (FEUS) and is a natural gas-fired generation plant. The BPP was built in 2004 and consists of one combustion turbine, one heat recovery steam generator and one steam turbine. It can generate a nominal 62 megawatt of electricity. Outfall 001is designed for discharge of plant effluent directly to the San Juan River downstream of the confluence with the Animas River.

III. APPLICANT ACTIVITIY

Under the Standard Industrial Classification Code 4911, the BPP is a steam electrical power plant. BPP is owned and operated by the City of Farmington Electric Utility System (FEUS) and is a natural gas-fired generation plant. The BPP was built in 2004 and consists of one combustion turbine, one heat recovery steam generator and one steam turbine.

IV. EFFLUENT CHARACTERISTICS

A flow schematic and water balance chart attached to the Application Form 2C indicates that the plant effluent consists of cooling tower blowdown, demineralization reverse osmosis wastewater, evaporative cooler (summer only), and various floor drains (including oily water header that is treated by an oil separator, and process areas drain header). Boiler blowdown and city water are used in the cooling tower. The applicant has provided effluent characteristics in the application.



V. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water," more commonly known as the "swimmable, fishable" goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

The BPP submitted a complete permit application signed on August 21, 2024. It is proposed that the permit be issued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The existing permit is administratively continued until this permit is issued.

VI. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

A. OVERVIEW OF TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 require that NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

1. General Comments

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two. In the absence of promulgated guidelines for the discharge, permit conditions may be established using BPJ procedures. EPA establishes limitations based on the following technology-based controls: BPT, BCT, and BAT. These levels of treatment are:

BPT - The first level of technology-based standards generally based on the average of the best existing performance facilities within an industrial category or subcategory.

BCT - Technology-based standard for the discharge from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and O&G.

BAT - The most appropriate means available on a national basis for controlling the direct discharge of toxic and non-conventional pollutants to navigable waters. BAT effluent limits represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

2. Effluent Limitation Guidelines

Technology based requirements for this type of discharger are contained in 40 CFR §423, Steam Electric Power Generating. The BPP generates electricity from natural gas fueled units installed after 1982 when ELGs were established in 1982 for BPT, BAT and new source performance standards (NSPS). The facility generates 62 MW, more than the 25 MW threshold for certain ELGs contained in 40 CFR §423. The ELGs for this type of facility are based on NSPS.

Based on 40 CFR §423.15 for NSPS, the permittee must achieve the following ELGs:

The pH of all discharges, except once through cooling water, shall be within the range of 6.0–9.0.

There shall be no discharge of polychlorinated biphenyl compounds (PCBs) such as those commonly used for transformer fluid.

The quantity of pollutants discharged from low volume waste sources shall not exceed the quantity determined by multiplying the flow of low volume waste sources times the concentration listed in the following table:

Pollutant	Effluent limitations	
	Daily Max (mg/l)	30-Day Avg (mg/l)
TSS	100	30
Oil & Grease	20	15

The term low volume waste sources means, taken collectively as if from one source, wastewater from all sources except those for which specific limitations are otherwise established in this part. Low volume wastes sources include, but are not limited to: wastewaters from wet scrubber air pollution control systems, ion exchange water treatment system, water treatment evaporator blowdown, laboratory and sampling streams, boiler blowdown, floor drains, cooling tower basin cleaning wastes, and recirculating house service water systems. Sanitary and air conditioning wastes are not included.

The quantity of pollutants discharged in chemical metal cleaning wastes shall not exceed the quantity determined by multiplying the flow of chemical metal cleaning wastes times the concentration listed in the following table:

Pollutant	Effluent limitations	
	Daily Max (mg/l)	30-Day Avg (mg/l)
TSS	100	30
Oil & Grease	20	15
Copper, total	1.0	1.0
Iron, total	1.0	1.0

The term chemical metal cleaning waste means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds, including, but not limited to, boiler tube cleaning.

For any plant with a total rated generating capacity greater than 25 MW, the quantity of pollutants discharged in once through cooling water shall not exceed the quantity determined by multiplying the flow of once through cooling water sources times the concentration listed in the following table:

Pollutant	Effluent limitations
	Daily Max (mg/l)
Total residual chlorine	0.2

The term once through cooling water means water passed through the main cooling condensers in one or two passes for the purpose of removing waste heat.

The quantity of pollutants discharged in cooling tower blowdown shall not exceed the quantity determined by multiplying the flow of cooling tower blowdown times the concentration listed below:

Pollutant	Effluent limitations	
	Daily Max (mg/l)	30-Day Avg (mg/l)
Free available chlorine	0.5	0.2

Pollutant	Effluent limitations	
	Daily Max (mg/l)	30-Day Avg (mg/l)
The 126 priority pollutants (Appendix A) contained in chemicals added for cooling tower maintenance, except:	*1	*1
Chromium, total	0.2	0.2
Zinc, total	1.0	1.0

Footnote:

*1 No detectable amount.

The term blowdown means the minimum discharge of recirculating water for the purpose of discharging materials contained in the water, the further buildup of which would cause concentration in amounts exceeding limits established by best engineering practices. Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available or total residual chlorine at any one time unless the utility can demonstrate to the permit issuing authority, that the units in a particular location cannot operate at or below this level of chlorination.

At the permitting authority's discretion, instead of the monitoring in 40 CFR 122.11(b), compliance with the limitations for the 126 priority pollutants in Appendix A of Part 423 may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the final discharge by the analytical methods in 40 CFR Part 136.

3. Cooling Water Intake Structure

Regulations contained in CWA §316(b), requires that the location, design, construction and capacity of cooling water intake structures (CWIS) reflect the best technology available for minimizing adverse environmental impact. CWIS cause adverse environmental impact by pulling large numbers of fish and shellfish or their eggs into a power plant's or factory's cooling system. There, the organisms may be killed or injured by heat, physical stress, or by chemicals used to clean the cooling system. Larger organisms may be killed or injured when they are trapped against screens at the front of an intake structure.

Because BPP uses city water for cooling water make-up, it does not withdraw water from the waters of United States, so it causes no adverse environmental impact. It complies with the CWA 316(b) requirements. Therefore, no further permit conditions are established for operations of the

CWIS.

4. Draft Permit Effluent Limitation Guidelines

a. TSS and Oil & Grease (O&G)

Because the ELG of TSS and O&G for the low volume waste source applies to the discharges of cooling tower blowdown, RO waste and floor drains which are composed of the effluent at Outfall 001, EPA proposes to establish the ELG-based TSS and O&G limitations at Outfall 001, instead of at separate internal outfalls.

b. 126 Priority Pollutants

In accordance with the provision in section 423.15(a)(10), at EPA's discretion, a narrative restriction is proposed as "If cooling tower maintenance chemicals are required, the permittee must demonstrate through engineering calculations that the 126 priority pollutants (listed at 40 CFR §423, Appendix A) are limited in the discharge to "no detectable amount," except total chromium (0.2 mg/l) and total zinc (1.0 mg/l). The use of chemical additives which may contain any of the 126 priority pollutants or may adversely impact aquatic lives is not authorized unless approval is obtained and limitations are established on a case-by-case basis. Records of chemical applications and engineering calculations must be kept on site for three years or longer."

c. Chemical Cleaning Waste

EPA has established a narrative restriction of "There shall be no discharges of metal cleaning wastes or chemical metal cleaning wastes" to regulate metal cleaning wastes through the NPDES permit for all power plants in the State of New Mexico.

d. Total Residual Chlorine or Free Available Chlorine

Because the ELG for chlorine is to protect aquatic life in the receiving stream and also because the ELG concentration is higher than the applicable state WQS for total residual chlorine (TRC), the most stringent state acute aquatic life standard of 0.019 mg/l of TRC is established at Outfall 001.

5. Technology-Based Mass Limits

Regulations at 40 CFR §122.45(f)(1) require all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day for continuous dischargers. For Outfall 001, the highest monthly average flow is 0.0685 MGD. So, the mass limits for TSS and O&G are calculated as:

Mass Loads (lb/day) = Concentration Limits (mg/l) × 8.34 × Flow (MGD) where
8.34 is a conversion factor. Therefore,

	Monthly Average (Lbs/day)	Daily Maximum (Lbs/day)
TSS	17.24	57.13
O&G	8.57	11.43

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits. Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State WQS and applicable State water quality management plans to assure that surface WQS of the receiving waters are protected and maintained, or attained.

2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. State Water Quality Standards

The general and specific stream standards are provided in NMWQS (20.6.4 NMAC amended through August 11, 2017). The facility discharges into the San Juan River in segment number 20.6.4.401 of the San Juan River Basin. The designated uses of the receiving water are public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact, marginal coldwater aquatic life and warmwater aquatic life.

4. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. pH

Stream segment specific (20.6.4.403 NMAC) WQS for pH, 6.6 to 9.0 su, are established in the draft permit. These are more stringent than technology based limitations noted above. This pH limit range is in the current permit.

b. Total Dissolved Solids – Colorado Salinity Control Program

NMWQS section 20.6.4.54 COLORADO RIVER BASIN states that “For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado river basin

states and the federal government to support and implement the salinity policy and program outlined in the most current "review, water quality standards for salinity, Colorado river system" or equivalent report by the Colorado river salinity control forum.
A. Numeric criteria expressed as the flow-weighted annual average concentration for salinity are established at three points in the Colorado river basin as follows: below Hoover dam, 723 mg/L; below Parker dam, 747 mg/L; and at Imperial dam, 879 mg/L.
B. As a part of the program, objectives for New Mexico shall include the elimination of discharges of water containing solids in solution as a result of the use of water to control or convey fly ash from coal-fired electric generators, wherever practicable.
[20.6.4.54 NMAC - Rn, Paragraphs (1) through (3) of Subsection K of 20.6.4.12 NMAC, 05-23-05; A, 05-23-05]"

The discharge to the San Juan River is part of the Colorado River Basin where a basin wide Colorado River Salinity Control Program (CRSCP) was established by EPA in December 1974. The objective of the CRSCP, as provided in Sections I.A. and I.B., is to achieve "no salt return" whenever practicable for industrial discharges and an incremental increase in salinity over the supply water for municipal discharges.

Under the 2023 review of the NPDES permit program policy for implementation of Colorado River salinity standards, it provides a policy to regulate all new industrial sources as below:
"…"A new industrial source with operations and discharging facilities at multiple locations under common or affiliated ownership or management" shall be defined for purposes of NPDES permitting, as an industrial source that commenced construction on a pilot, development or production scale on or after October 30, 2002.

a. The permitting authority may permit the discharge of salt upon a satisfactory demonstration by the permittee that:

i. It is not practicable to prevent the discharge of all salt from the new construction or,

ii. In cases where the salt loading to the Colorado River from the new construction is less than one ton per day or 366 tons per year, or

iii. The proposed discharge from the new construction is of sufficient quality in terms of TDS concentrations that it can be considered "fresh water" that would have no adverse effect on achieving the adopted numeric standards for the Colorado River System…."

The BPP has reused city water and boiler blowdown for the cooling tower and such technologies are the best available technology under the CWA 316(b) and cause "zero" adverse impacts to aquatic life in terms of impingement and entrainment. The quantity of discharges from BPP has been minimized in comparison with once-through cooling water system. It may not be practicable to remove all salt from cooling tower blowdown prior to discharging. Therefore, EPA proposes to authorize the discharge to San Juan River with a Daily Maximum TDS limitation of < 2000 lb/day. A loading limit of 2000 lb/day is equivalent to 3501 mg/l concentration limitation based on 0.0685 MGD daily discharge. EPA proposes to maintain the previous limit of 3475 mg/l, which is more stringent.

c. TOXICS

i. General Comments

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2C, to apply for an NPDES permit or reissuance of an NPDES permit. The form is applicable to Existing Manufacturing, Commercial, Mining, and Silvicultural Operations. The forms were designed and promulgated to "make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

Based on the pollutant data provided by the facility and shown in Part IV of this Fact Sheet, a water quality screen has been run to determine if discharged pollutant concentrations demonstrate RP to exceed WQS for the various designated uses. If RP exists, the screen would also calculate the appropriate permit limit needed to be protective of such designated uses. The screen is based on the NMIP as of March 15, 2012. Stream TSS of 1218.6 mg/l and hardness of 143 mg/l are used for RP calculations. The water quality screen is included as an attachment to the Fact Sheet.

The permittee was informed to re-test the following metals listed in Application Form 2C: Acrolein and Acrylonitrile. The permittee re-submitted new testing results on August 21,2024. Residual Chlorine demonstrated RP to violate WQS consistent with the designated uses for the receiving water.

ii. Critical Conditions

The low flow or 4Q3 was provided by NMED. The calculated 4Q3 and harmonic mean flows are 204.51 MGD and 561.95 MGD, respectively. The gauge station to measure these flows is on the San Juan River downstream of the facility. The plant maximum daily flow is 0.0685 MGD. The flow was subtracted from the flow recorded at gauge station (204.44 MGD adjusted 4Q3).

For Outfall 001, the effluent flow Q_e is 0.0685 MGD. CD is expressed as the ratio of the effluent flow (Q_e) divided by the sum of the low flow (Q_a) and the effluent flow as follows:

$$CD = Q_e/[Q_e + Q_a]$$

The CD for the site based on this rate is:

$$CD = 0.0685/[204.44]$$
$$CD = 0.000335 \text{ or } 0.034\%$$

iii. TRC

The WQS for TRC is 11 µg/l for chronic conditions and 19 µg/l for acute. Since acute conditions do not allow dilution; the limit must be met at end-of-pipe, but chronic standards do allow dilution, the permit shall use the most stringent WQS for the permit limit. CD was calculated at 0.034%. The in-stream TRC concentration after allowing for dilution is; 11 µg/l ÷ .0034= 3,235 µg/l. Since this value is more than the 19 µg/l end-of-pipe acute standard, the 19 µg/l is more stringent and will be more protective. The draft permit shall maintain the 19 µg/l limit in the previous permit.

5. Total Maximum Daily Loads

The San Juan River in the segment number 20.6.4.401 from Navajo boundary at Hogback to Animas River is listed as not supporting for marginal coldwater aquatic life and primary contact uses. The probable causes of impairment are E. coli and sedimentation/siltation. According to the Assessment Rationale for the 2024-2026 State of New Mexico §303(d)/ §305(b) Integrated List the probable causes of impairment are E. coli and sedimentation/siltation. The probable sources include drought-related impact, municipal point source discharge, on-site treatment system, rangeland grazing, and unknown sources. Bacteria is not expected in the discharge and sanitary waste is not authorized in the permit, therefore limitations for bacteria are not required in the draft permit for the impairment.

6. Temperature

The stream segment number 20.6.4.401, the San Juan River from the Navajo Nation boundary at the Hogback upstream to its confluence with the Animas River, has a maximum criterion of 90 °F. The temperature of the cooling tower blowdown ranges from ~ 70 °F to 75 °F and the effluent will be significantly diluted when it mixes with the high volume of San Juan River stream, temperature will not be a concern at all. No monitoring for effluent temperature is required.

7. Monitoring Frequency for Limited Parameters

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1).

Flow is proposed to be estimated daily. pH and TRC are monitored daily using grab sample. Because the volume of discharge and technology-based, TSS and O&G effluent limitations are unlikely to cause adverse impact to the receiving water after the dilution, monitoring frequency of 1/month which is less than recommended frequency in the NMIP is proposed. Grab samples shall be used for TSS and O&G. TDS shall be sampled monthly using 12-hour composite samples. The TDS sampling frequency is 1/month (same frequency established for the Farming Animas Power Plant).

D. WHOLE EFFLUENT TOXICITY TESTING

Procedures for implementing WET terms and conditions in NPDES permits are contained in the NMIP, March 2012. Table 11 of Section V of the NMIP outlines the type of WET testing for different types of discharges. The critical dilution was calculated above and it was determined to be very low, 0.034%. The BPP is rated as a minor industrial facility discharging to a perennial waterbody with a CD ≤ 10%. Provisions in the NMIP for WET testing with this CD allows for a 10:1 acute to chronic ratio be used and allow the less expensive acute test. Using the 10:1 ratio

will allow an acute test of 0.34% CD. The draft permit will require WET testing using *Daphnia pulex* and *Pimephales promelas*. The test is to be done at a frequency of once per six-months for both species. The Implementation Guidelines allow for frequency reductions after the first full year of characterization in a permit cycle. The option to request a frequency reduction is included in this permit. The permittee may request a reduction after the first four tests for each species have been conducted. The reduction would last until the expiration date of the permit unless there are failures. There were eleven WET tests conducted during the previous permit cycle, with no failures of the previous critical dilution. The Reasonable Potential analysis indicates there is RP based on the increased critical dilution in this permit renewal, however all tests showed no toxicity at the highest dilution tested (0.24%) during the last five years. No WET limits are included in this permit. Discharges shall be limited and monitored by the permittee as specified below:

WHOLE EFFLUENT TOXICITY TESTING (48-Hr Acute Static Renewal/ NOEC) *	VALUE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Daphnia pulex	Report	Once/Six Months	24-Hr Composite
Pimephales promelas	Report	Once/Six Months	24-Hr Composite

FOOTNOTES:

* Monitoring and reporting requirements begin on the effective date of this permit. See Part II, Whole Effluent Toxicity Testing Requirements for additional WET monitoring and reporting conditions. Grab samples are allowed per method, if needed.

VII. FACILITY OPERATIONAL PRACTICES

A. Operation and Reporting

The applicant is required to monitor the facility's discharge on a regular basis; and report the results monthly. The monitoring results will be available to the public.

Electronic Reporting Rule

The EPA published the electronic reporting rule in the federal register (80 FR 64063) on October 22, 2015. The rule became effective on December 21, 2015. One year after the effective date of the final rule, NPDES regulated entities that are required to submit DMRs (including majors and non-majors, individually permitted facilities and facilities covered by general permits) must do so electronically. All DMRs shall be electronically reported effective December 21, 2016, per 40 CFR 127.16. To submit electronically, access the NetDMR website at www.epa.gov/netdmr and contact the R6NetDMR@epa.gov in-box for further instructions. PA and authorized NPDES programs will begin electronically receiving these DMRs from all DMR filers and start sharing these data with each other.

Sufficiently Sensitive Analytical Methods (SSM)

The permittee must use sufficiently sensitive EPA-approved analytical methods (SSM) (under 40 CFR part 136 or required under 40 CFR chapter I, subchapters N or O) when quantifying the presence of pollutants in a discharge for analyses of pollutants or pollutant parameters under the permit. In case the approved methods are not sufficiently sensitive to the limits, the most SSM with the lowest method detection limit (MDL) must be used as defined under 40 CFR 122.44(i)(1)(iv)(A). If no analytical laboratory is able to perform a test satisfying the SSM in the region, the most SSM with the lowest MDL must be used after adequate

demonstrations by the permittee and EPA approval.

VIII. ANTIDEGRADATION & ANTIBACKSLIDING

The NMAC, Section 20.6.4.8 "Antidegradation Policy and Implementation Plan" sets forth the requirements to protect designated uses through implementation of the State water quality standards. The limitations and monitoring requirements set forth in the proposed permit are developed from the State water quality standards and are protective of those designated uses. Furthermore, the policy sets forth the intent to protect the existing quality of those waters, whose quality exceeds their designated use. The proposed permit is not an increased discharge. The permit requirements and the limits are protective of receiving waters, which is protective of the designated uses of that water, NMAC Section 20.6.4.8.A.2.

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 401(o) and 40 CFR §122.44(l), which states in part that effluent limitations must be as stringent as those in the previous permit. WQ-based effluent limitations may be changed due to new discharge flow rate, new stream flow rate, or new criteria.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at USFWS ECOS-Environmental Conservation Online System website, nine species in San Juan County are listed as endangered (E) or threatened (T): three fish, including the Colorado pikeminnow (*Ptychocheilus lucius*), (E) with critical habitat, the razorback sucker (*Xyrauchen texanus*), (E) with critical habitat, the Zuni bluehead Sucker (*Catostomus discobolus yarrowi*) (E), two birds including the yellow-billed Cuckoo (*Coccyzus americanus*) (T), the southwestern Willow flycatcher (*Empidonax trallii extimus*) (E), three plants including the Knowlton cactus (*Pediocactus knowltonii*) (E), Mancos milk-vetch (*Astragalus humillimus*) (E), the Mesa Verde cactus (*Sclerocactus mesae-verdae*) (T), and two mammals New Mexico Jumping Mouse(*Zapus hudsonius luteus*) (E) and Canada Lynx(Lynx canadensis) (T).

In accordance with requirements under section 7(a)(2) of the Endangered Species Act, EPA has reviewed this permit for its effect on listed threatened and endangered species and designated critical habitat. After review, EPA has determined that the issuance of this permit will have "*no effect*" on listed threatened and endangered species nor will adversely modify designated critical habitat on the previous consultation baseline. EPA makes this determination based on the following:

1. Plant Species. The authorized discharge is directly to San Juan River in New Mexico State Waterbody Segment Code 20.6.4.401, of the San Juan Basin, and therefore the permitting action has no effect on three plant species which are Knowlton cactus (*Pediocactus knowltonii*), Mancos milk-vetch (*Astragalus humillimus*), and Mesa Verde cactus (*Sclerocactus mesae-verdae*).

2. Bird Species. The authorized discharge is directly to San Juan River and only contributes 0.0685 MGD, which is about 0.033% of stream flow during the 4Q3 low stream flow condition to the San Juan River. Therefore, it is unlikely to affect bird species: yellow-billed Cuckoo and southwestern Willow flycatcher. The authorized discharge is not within the critical habitats of flycatcher and the main causes of the decline in Southwestern willow flycatcher populations are extensive areas of suitable riparian habitat have been lost due to river flow-regulation and channelization, agricultural and urban development, mining, road construction, and overgrazing.

The permitting action does not contribute any decline factors as mentioned above. The Yellow-Billed Cuckoo's riparian habitat being converted to farmland and housing has been the main cause of population decline. The permitting action does not contribute to the destruction, destroy nor modify the yellow-billed cuckoo's habitat. Also, the permitting action is not within the list of USFWS Refuges in which this cuckoo population is known to occur: Bill Williams River National Wildlife Refuge, Bosque del Apache National Wildlife Refuge, Browns Park National Wildlife Refuge, Butte Sink Wildlife Management Area, Cibola National Wildlife Refuge, Hart Mountain National Antelope Refuge, Havasu National Wildlife Refuge, Imperial National Wildlife Refuge, Leslie Canyon National Wildlife Refuge, Little Pend Oreille National Wildlife Refuge, Maxwell National Wildlife Refuge, Ouray National Wildlife Refuge, Sacramento River National Wildlife Refuge, San Bernardino National Wildlife Refuge, Seedskadee National Wildlife Refuge, Sevilleta National Wildlife Refuge, Sheldon National Wildlife Refuge, Sutter National Wildlife Refuge.

3. Fish Species. On March 26, 1999, the US Fish and Wildlife Service (FWS) concluded Endangered Species Act consultation (Consultation #2-22-98-I-257) with EPA on the reissuance of NPDES Permit No. NM0020583. The FWS concurred with EPA's determination that the reissuance of the permit "may affect, but is not likely to adversely affect" the Colorado pikeminnow or razorback sucker; and "will not destroy or adversely modify their critical habitats." EPA determines that the proposed permitting action does not change the 2000 ESA consultation baseline. Furthermore, the record shows that the design flow rate of Farmington POTW was 5.8 MGD which is about 70-fold of BPP maximum monthly flow. The Zuni bluehead sucker was once common in the Little Colorado and Zuni River drainages. Scientists postulate that this subspecies may be a prehistoric hybrid of the Rio Grande sucker (*Catostomus plebeius*) and bluehead sucker (*Catostomus discobolus*). Now genetic isolation may be affecting the fish. The current range of the Zuni bluehead sucker has been reduced to less than 10 percent of its historic distribution. The fish is now restricted to three semi-isolated populations (totaling just three stream miles) in the upper Rio Nutria drainage in west-central New Mexico, and scattered areas along 27 miles of the Kinlichee (a.k.a. "Kin Li Chee") watershed in Arizona. Based on distribution information available, EPA determines that this permitting action is not within the species distribution areas. Also, this permitting action does not contribute any threat to the fish as described below: "The fish faces a host of threats, including habitat modification and stream siltation caused by logging, livestock grazing, road construction, residential development and reservoirs; reduced or discontinuous stream flow from water withdrawal for irrigation; application of piscicides (fish toxicants); and competition with and predation by exotic fishes and crayfish." Therefore, EPA determines the discharge from BPP has no effect on listed fish species.

4. Mammal Species. Lynx and snowshoe hares are strongly associated with moist, cool, boreal spruce-fir forests. Landscapes with high snowshoe hare densities are optimal for lynx survival and reproduction, and research suggests that hare densities consistently at or above 0.5 hares per hectare (0.2 hares/acre) are needed to support persistent lynx populations. Hares are most abundant in young regenerating or mature multi-storied forests with dense understory vegetation that provides food and cover. In the northern contiguous U.S. (i.e., the Lower 48 States), boreal forests become naturally patchy and marginal for lynx as they transition to temperate forest types that support lower hare densities. Such forests cannot support lynx populations, even though snowshoe hares may still be present. Snow also influences lynx distribution, and populations typically occur where continuous snow cover lasts four months or longer. Such areas are believed to provide lynx with a seasonal competitive advantage over other terrestrial hare predators like bobcats and coyotes (Canis latrans).

Lynx are broadly distributed across most of Canada and Alaska, which combined encompass about 98% of the species breeding range. The contiguous U.S. distinct population segment (DPS) accounts for the other 2% and includes resident breeding populations in northern Maine, northeastern Minnesota, northwestern Montana/northern Idaho, and north-central Washington. An introduced population also occurs in western Colorado, and several other areas may have historically supported small resident populations (e.g., northern New Hampshire, Isle Royale, Michigan, northeastern Washington, and the Greater Yellowstone area of southwestern Montana and northwestern Wyoming). Lynx also have occurred temporarily in many other states, typically during irruptions (mass dispersal events) from Canada when northern hare populations underwent dramatic cyclic declines roughly every 10 years.

The New Mexico meadow jumping mouse (jumping mouse) is endemic to New Mexico, Arizona, and a small area of southern Colorado. The jumping mouse nests in dry soils, but uses moist, streamside, dense riparian/wetland vegetation up to an elevation of about 8,000 feet. The jumping mouse appears to only utilize two riparian community types: persistent emergent herbaceous wetlands; and scrub-shrub wetlands. It especially uses microhabitats of patches or stringers of tall dense sedges on moist soil along the edge of permanent water. Home ranges vary between 0.37 and 2.7 acres (0.15 and 1.1 hectares) and may overlap. The jumping mouse is generally nocturnal, but occasionally diurnal. It is active only during the growing season of the grasses and forbs on which it depends. During the growing season, the jumping mouse accumulates fat reserves by consuming seeds. The jumping mouse hibernates about 9 months out of the year, longer than most other mammals.

Based on information available, EPA determines that this permitting action has no effect on the listed mammals.

5. Conclusions. First, based on the previous consultation determination and new analyses made above, the reissuance of this permit will have "no effect" on listed species and any designated critical habitat either by itself or based upon the previous consultation conclusion. Second, WET testing requirements are established at the outfall that will provide a solid indicator of impacts to the receiving waters, especially to the aquatic species. And, third, the authorized discharge only contributes 0.012% of stream harmonic mean flow, so the discharge itself will have no effect on listed species and will not adversely modify the critical habitat for those species.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

XI. ENVIRONMENTAL JUSTICE

As part of the Permit development process, the EPA conducted a screening analysis to determine whether this Permit action could affect overburdened communities. The EPA used EJScreen 2.1 a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify Permits for which enhanced outreach may be warranted. It was determined that the Farmington Electric Utility System - Bluffview Power Plant El is not considered to be discharging in a potential EJ community. Tribal consultation was offered to the Navajo Nation, which was identified as a downstream tribe.

XII. NEW SOURCE NEPA REVIEW

This permitting action is to reissue a National Pollutant Discharge Elimination System (NPDES) individual permit for a new source facility under the Steam Electric Power Generating Point Source (40 CFR Part 423) located onshore New Mexico and discharging to San Juan River. EPA's reissuance of a new source NPDES permit is a federal action requiring compliance with the National Environmental Policy Act (NEPA), 42 USC §§4321-4370(f). In accordance with Council on Environmental Quality regulation, if a project is not categorically excluded, but also is not obviously a major Federal action significantly affecting the quality of the human environment, it must be subjected to an "Environmental Assessment" (EA). EPA prepared an EA for this permitting action and determines "Finding of No Significant Impact" (FONSI) for the action.

XIII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards are promulgated or revised. In addition, if the State develops a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. The permit may also reopened and modified pursuant to the provisions of 40 CFR §124.5.

XIV. VARIANCE REQUESTS

No variance requests have been received.

XV. CERTIFICATION

The permit is in the process of certification by the State Agency following regulations promulgated at 40 CFR 124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

XVI. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XVII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA Application Form 2C dated April 10, 2024. Revised information dated May 30, 2024 and August 21, 2024.

B. 40 CFR CITATIONS

Citations to 40 CFR are as of March 1, 2019.

C. STATE OF NEW MEXICO REFERENCES

New Mexico State Standards for Interstate and Intrastate Surface Water, 20.6.4 NMAC, as amended by the New Mexico Water Quality Control Commission (WQCC) on September 24, 2022 and approved by the U.S. Environmental Protection Agency (EPA) on February 8, 2023.

Procedures for Implementing National Pollutant Discharge Elimination System Permits in New Mexico, March 2012.

2024-2026 State of New Mexico Clean Water Act 303(d)/305(b) Integrated Report.

Colorado River Basin Salinity Control Forum. 2023 Review Water Quality Standards for Salinity Colorado River System