

**For Discussion Purposes Only**

**Summary of Effluent Limitations Pages**

<b>Part</b>	<b>Outfalls</b>	<b>Discharges</b>
<b>Part I.A.</b> These effluent limitations and permit conditions apply during the period beginning on the effective date of this permit and lasting through the final date of the compliance schedule period for the applicable outfall(s), as specified in Section I.D of this permit.		
I.A.1	001	Chlorinated once-through cooling water from Unit No. 1 condenser (MK-1). Internal outfall discharges into the cooling canal.
I.A.2	002	Chlorinated once-through cooling water from Unit No. 2 condenser (MK-2). Internal outfall discharges into the cooling canal.
I.A.3	003	Discharge canal combined effluent from internal outfalls. Also referred to as “Waste Treatment Plant No. 2” by the applicant. The power spray modules are located here. Discharges to the Merrimack River.
I.A.4	003A	Wastewater treatment pond discharge. Internal outfall discharges into the cooling canal. Also referred to as “Waste Treatment Plan No. 4” by the applicant. Consists of various low volume wastewaters, including slag sluice water, slag tank overflows, yard and roof drains, Unit 1 boiler blowdown, boiler drains, treated FGD wastewater and non-contact cooling water from the treatment system,

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		and flows from Waste Treatment Plant No. 1 (including Internal Outfall 003B)
<p><b>Part I.B.</b> These effluent limitations and permit conditions apply during the period beginning on the final date of the compliance schedule period for the applicable outfall(s), as specified in Section I.D of this permit, and lasting through the expiration of the terms and conditions of this permit.</p>		
I.B.1	001 and 002	Chlorinated once-through cooling water from Unit No. 1 condenser (MK-1) and Unit No. 2 condenser (MK-2). Internal outfall discharges into the cooling canal.
I.B.2	003	Cooling canal combined effluent from internal outfalls. Also referred to as “Waste Treatment Plant No. 2” by the applicant. The power spray modules are located here. Discharges to the Merrimack River.
I.B.3	003A	Wastewater treatment pond discharge. Internal outfall discharges into the cooling canal. Also referred to as “Waste Treatment Plan No. 4” by the applicant. Consists of various low volume wastewaters, including slag tank overflows, yard and roof drains, Unit 1 boiler blowdown, boiler drains, treated FGD wastewater (Internal Outfall 003C) and non-contact cooling water from the treatment system, and flows from Waste Treatment Plant No. 1 (including Internal Outfall 003B).  Slag sluice water is removed from this

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		outfall description and may not be discharged to 003 or otherwise to the Merrimack River on or after December 31, 2023, except as specifically authorized in subpart I.B.3.
I.B.4	003C	New internal outfall to permit discharge of FGD wastewater, applicable on December 31, 2023, through the expiration of the terms and conditions of this permit. Internal outfall discharges into the settling pond (Outfall 003A)
<b>Part I.C.</b> These effluent limitations and permit conditions apply during the period beginning on the effective date of this permit and lasting through the expiration date of this permit.		
I.C.1	003B	Treated chemical metal cleaning waste prior to comingling with any other waste streams. Internal outfall discharges into the settling pond (Outfall 003A).
I.C.2	004A	MK-1 and MK-2 CWIS screen wash water
I.C.3	004B/C	Fire protection pump recirculation and fire hose sprays for CWIS maintenance
I.C.4	004D/E	MK-1 and MK-2 CWIS routine floor sumps
I.C.5	004F/G/H/I	MK-1 and MK-2 CWIS maintenance sump dewatering discharges (Two per CWIS)
<b>Part I.D.</b> Compliance Schedules		

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I.D.1	001, 002, and 003 from Part I.B.1. & I.B.2. of the permit	Establishing the compliance schedule for application of the new thermal effluent limitations to the facility's cooling water discharges
I.D.2	003A and 003C from Part I.B.3 & I.B.4. of the permit	Establishing the compliance schedule for application of EPA's Steam Electric Power Generating Effluent Guidelines to discharges of Bottom Ash Transport Wastewater & Flue Gas Desulfurization (FGD) Wastewater at the facility

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**Part I**

**A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**1. Outfall 001.** The permittee is authorized to discharge circulating cooling water from the MK-1 condenser outlet through Internal Outfall Number 001. The discharge through Outfall 001 shall be limited and monitored as specified below. The effluent limitations and permit conditions in this subpart of the permit apply during the period beginning on the effective date of this permit and lasting through the final date of the compliance schedule period as specified in Section I.D.1. of this permit. Samples shall be taken of Outfall 001 effluent after any and all treatment at a point that provides a representative sample of the effluent but prior to commingling with other effluent in Outfall 003.

<b>Effluent Characteristic</b>	<b>Units</b>	<b>Discharge Limitations</b>			<b>Monitoring Requirements</b>	
		<b>Monthly Average</b>	<b>Daily Maximum</b>	<b>Seasonal Average</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Flow	MGD	---	69.1	---	Continuous	Calculate <sup>1</sup>
Total Residual Oxidant <sup>2,3</sup>	mg/l	---	0.2	---	1/Two Weeks (When in use)	Grab

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**2. Outfall 002.** The permittee is authorized to discharge circulating cooling water from the MK-2 condenser outlet through Internal Outfall Number 002. The discharge through Outfall 002 shall be limited and monitored as specified below. The effluent limitations and permit conditions in this subpart of the permit apply during the period beginning on the effective date of this permit and lasting through the final date of the compliance schedule period as specified in Section I.D.1. of this permit. Samples shall be taken of Outfall 002 effluent after any and all treatment at a point that provides a representative sample of the effluent but prior to commingling with other effluent in Outfall 003.

Effluent Characteristic	Units	Discharge Limitations			Monitoring Requirements	
		Monthly Average	Daily Maximum	Seasonal Average	Measurement Frequency	Sample Type
Flow	MGD	---	187.2	---	Continuous	Calculate <sup>1</sup>
Total Residual Oxidant <sup>2,3</sup>	mg/l	---	0.2	---	1/Two Weeks (When in use)	Grab

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**3. Outfall 003.** The permittee is authorized to discharge through Outfall Number 003 into the Merrimack River, via the Discharge Canal, the following wastewater: Internal Outfall 001, Internal Outfall 002, Internal Outfall 003A, and stormwater. The discharge through Outfall 003 shall be limited and monitored as specified below. The effluent limitations and permit conditions in this subpart of the permit apply during the period beginning on the effective date of this permit and lasting through the final date of the compliance schedule period as specified in Section I.D.1. of this permit. Samples shall be taken prior to discharge to the Merrimack River at a point that provides a representative sample of the effluent.

Effluent Characteristic	Units	Discharge Limitations		Monitoring Requirements	
		Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow	MGD	265.3	275.4	Continuous	Calculate <sup>4</sup>
pH Range <sup>5</sup>	SU	6.5 - 8.0		1/Week	Grab
<i>Whole Effluent Toxicity (WET)</i> <sup>6</sup>					
LC50; in percent	---	Report		1/Two Years	24-hr Composite
C-NOEC; in percent	---	Report		1/Two Years	24-hr Composite
Temperature <sup>7, 8</sup>	°F	Report		Continuous	Recorder

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**4. Outfall 003A.** During the period beginning on the effective date of the permit and lasting through December 30, 2023, the permittee is authorized to discharge treated effluent from the wastewater treatment pond (Waste Treatment Plant No. 4). The wastewater treatment pond discharge consists of stormwater; flows from Waste Treatment Plant No. 1 (including Internal Outfall 003B); flows from the slag settling area (Waste Treatment Plant #3); the FGD wastewater treatment plant treated effluent, as well as flows related to the FGD service water pump house, including screen and filter backwash and quench pump test water, and non-contact cooling water from the treatment system; MK-1 boiler blowdown and flows from roof drains; slag tank overflows, flows from boiler drains; and flows from yard drains. The discharge through Outfall 003A shall be limited and monitored as specified below. Samples shall be taken of Outfall 003A effluent after any and all treatment at a point that provides a representative sample of the effluent but prior to commingling with other effluent in Outfall 003.

<b>Effluent Characteristic</b>	<b>Discharge Limitation</b>		<b>Monitoring Requirements</b>	
	<b>Average Monthly</b>	<b>Daily Maximum</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Flow (MGD)	Report	Report	Continuous	Recorder
Total Suspended Solids (mg/l)	30.0	100.0	Monthly	Grab
Oil & Grease (mg/l)	15.0	20.0	Monthly	Grab

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**B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

**1. Outfalls 001 and 002.** The permittee is authorized to discharge circulating cooling water from the MK-1 condenser outlet through Internal Outfall Number 001 and from the MK-2 condenser outlet through Internal Outfall Number 002. The combined discharges through Outfalls 001 and 002 shall be limited and monitored as specified below. The effluent limitations and permit conditions in this subpart of the permit apply during the period beginning on the final date of the compliance schedule period, as specified in Section I.D.1. of this permit, and lasting through the expiration of the terms and conditions of this permit. Samples shall be taken of Outfall 001 and Outfall 002 effluent after any and all treatment at a point that provides a representative sample of the effluent but prior to commingling with other effluent in Outfall 003.

Effluent Characteristic	Units	Discharge Limitations		Monitoring Requirements		
		Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Compliance Monitoring Location
Flow	MGD	Report	---	Continuous	Calculate <sup>1</sup>	Outfall
Total Residual Oxidant <sup>2, 3</sup>	mg/l	---	0.2	1/ Two Weeks (When in use)	Grab	Outfall

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**2. Outfall 003.** The permittee is authorized to discharge through Outfall Number 003 into the Merrimack River, via the Cooling Canal, the following wastewater: Internal Outfall 001, Internal Outfall 002, Internal Outfall 003A, and stormwater. The discharge through Outfall 003 shall be limited and monitored as specified below. The effluent limitations and permit conditions in this subpart of the permit apply during the period beginning on the final date of the compliance schedule period, as specified in Section I.D.1. of this permit, and lasting through the expiration of the terms and conditions of this permit. Samples shall be taken at the monitoring location specified below.

Effluent Characteristic	Units	Discharge Limitations			Monitoring Requirements		
		Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Compliance Monitoring Location
<i>Temperature-(Chronic)<sup>7</sup></i>							
January 1- April 30	°F	Report	---	---	Continuous	Recorder	S-4 <sup>12</sup>
May 1 – May 27 <sup>10</sup>	°F	---	69.8 <sup>11</sup>	---	Continuous	Recorder	S-4 <sup>12</sup>
May 28 – June 15 <sup>10</sup>	°F	---	72.9 <sup>11</sup>	---	Continuous	Recorder	S-4 <sup>12</sup>
June 16 – November 4 <sup>10</sup>	°F	---	77.2 <sup>11</sup>	---	Continuous	Recorder	S-4 <sup>12</sup>
November 5 – December 31	°F	Report	---	---	Continuous	Recorder	S-4 <sup>12</sup>

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<i>Temperature- (Acute)</i> <sup>7</sup>							
January 1 – April 30	°F	---	---	---	---	---	---
May 1 – June 15	°F	---	---	88.3 <sup>13</sup>	Continuous	Recorder	S-4 <sup>14</sup>
June 16 – July 31	°F	---	---	88.7 <sup>13</sup>	Continuous	Recorder	S-4 <sup>14</sup>
August 1 – December 31	°F	---	---	---	---	---	---
pH Range <sup>5</sup>	SU	6.5-8.0			1/Week	Grab	Outfall
<i>Whole Effluent Toxicity (WET)</i> <sup>6</sup>							
LC50; in percent		Report			1/Two Years	24-hour composite	Outfall
C-NOEC; in percent		Report			1/Two Years	24-hour composite	Outfall

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**3. Outfall 003A.** During the period beginning on December 31, 2023, (subject to the terms and conditions of Part I.D.2.a. of this permit) and lasting through the expiration date of the terms and conditions of this permit, the permittee is authorized to discharge treated effluent from the wastewater treatment pond (Waste Treatment Plant No. 4). The wastewater treatment pond discharge consists of stormwater; flows from Waste Treatment Plant No. 1 (including Internal Outfall 003B); the FGD wastewater treatment plant effluent, as well as flows related to the FGD service water pump house, including screen and filter backwash and quench pump test water, and non-contact cooling water from the treatment system; MK-1 boiler blowdown and flows from roof drains; slag tank overflows, and flows from boiler drains; and flows from yard drains. The discharge through Outfall 003A shall be limited and monitored as specified below. Samples shall be taken of Outfall 003A effluent after any and all treatment at a point that provides a representative sample of the effluent but prior to commingling with other effluent in Outfall 003.

Transport water from the slag settling area (Waste Treatment Plant #3) shall no longer be discharged through Outfall 003A or any other Outfall to the Merrimack River subject to the following exceptions:

- a. Low volume, short duration discharges of wastewater from minor leaks (e.g., leaks from valve packing, pipe flanges, or piping) or minor maintenance events (e.g., replacement of valves or pipe sections) are specifically excluded from the definition of “transport water” and such flows may continue to be discharged through Outfall 003A subject to the effluent limitations set out below.
- b. Transport water may be used in the FGD scrubber and discharged through Outfall 003C subject to the effluent limitations set out in Part.I.B.4. of this permit.

Effluent Characteristic	Discharge Limitation		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	Continuous	Recorder
Total Suspended Solids (mg/l)	30.0	100.0	Monthly	Grab
Oil & Grease (mg/l)	15.0	20.0	Monthly	Grab

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**4. Outfall 003C.** During the period beginning on December 31, 2023, (subject to the terms and conditions of Part I.D.2.b. of this permit) and lasting through the expiration date of the terms and conditions of this permit, the permittee is authorized to discharge treated effluent from the FGD wastewater treatment plant. The discharge from Outfall 003C shall be limited and monitored as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken of Outfall 003C effluent after any treatment is provided but prior to discharge to the wastewater treatment pond (003A) at a point that provides a representative sample of the effluent.

Effluent Characteristic	Discharge Limitation		Monitoring Requirements	
	Average Monthly	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	Continuous	Calculate <sup>9</sup>
Arsenic, total (ug/L)	---	4.0	1/Week	24-Hour Composite
Mercury, total (ng/L)	24.0	39.0	1/Week	24-Hour Composite
Selenium, total (ug/L)	---	5.0	1/Week	24-Hour Composite
TDS (mg/L)	24.0	50.0	1/Week	24-Hour Composite

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**C. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

The effluent limitations and permit conditions in Part I.C. apply during the period beginning on the effective date of this permit and lasting through the expiration of the terms and conditions of this permit.

**1. Outfall 003B.** The permittee is authorized to discharge chemical metal cleaning effluent (MK-1 and MK-2 water side boiler cleaning). The discharge from Outfall 003B shall be limited and monitored as specified below. Samples shall be taken of Outfall 003B effluent after any treatment is provided but prior to mixing with any other waste stream and prior to discharge to the wastewater treatment pond (003A). Samples must be taken at a point that provides a representative sample of the effluent.

<b>Effluent Characteristic</b>	<b>Discharge Limitation</b>		<b>Monitoring Requirements</b>	
	<b>Average Monthly</b>	<b>Daily Maximum</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Flow (MGD)	Report	Report	Daily	Calculate
Total Recoverable Iron (mg/l)	1.0	1.0	Daily	Grab
Total Recoverable Copper (mg/l)	1.0	1.0	Daily	Grab

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**2. Outfall 004A.** The permittee is authorized to discharge into the Merrimack River from Outfall Serial Number 004A flows consisting of MK-1 CWIS screen wash water and MK-2 CWIS screen wash water. The discharge from Outfall 004A shall be limited and monitored as specified below. Samples shall be taken prior to discharge to the Merrimack River at a point that provides a representative sample of the effluent.

<b>Effluent Characteristic</b>	<b>Discharge Limitation</b>	<b>Monitoring Requirements</b>	
	<b>Daily Maximum</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Flow (MGD)	Report	1/Year	Estimated
Oil & Grease (mg/l) <sup>15, 16</sup>	Report	Daily	Visual
pH (Range; standard units)	6.5-8.0 <sup>5, 17</sup>	1/Year	Grab

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**3. Outfalls 004B/C.** The permittee is authorized to discharge into the Merrimack River from Outfall Serial Numbers 004B & 004C flows consisting of fire protection pump recirculation and fire hose sprays for CWIS maintenance. The discharges from Outfalls 004B & 004C shall be limited and monitored as specified below. Samples shall be taken prior to discharge to the Merrimack River at a point that provides a representative sample of the effluent.<sup>18</sup>

<b>Effluent Characteristic</b>	<b>Discharge Limitation</b>	<b>Monitoring Requirements</b>	
	<b>Daily Maximum</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Flow (MGD)	Report	1/Year	Estimated
Oil & Grease (mg/l) <sup>15, 16</sup>	Report	Daily	Visual
pH (Range; standard units)	6.5-8. <sup>5, 17</sup>	1/Year	Grab

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**4. Outfall 004D/E.** The permittee is authorized to discharge into the Merrimack River from Outfall Serial Numbers 004D and 004E flows from MK-1 and MK-2 CWIS routine floor sumps. The discharges from Outfall 004D and 004E shall be limited and monitored as specified below. Samples shall be taken prior to discharge to the Merrimack River at a point that provides a representative sample of the effluent.<sup>18</sup>

<b>Effluent Characteristic</b>	<b>Discharge Limitation</b>	<b>Monitoring Requirements</b>	
	<b>Daily Maximum</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Flow (MGD)	Report	1/Year	Estimated
Oil & Grease (mg/l)	Report	1/Year	Grab
pH (Range; standard units)	6.5-8.0 <sup>5, 17</sup>	1/Year	Grab

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5. **Outfalls 004F/G/H/I.** The permittee is authorized to discharge MK-1 and MK-2 CWIS maintenance sump dewatering discharge effluent from Outfall Serial Numbers 004F/G/H/I into the Merrimack River. Such discharges shall be limited and monitored as specified below. Samples shall be taken prior to discharge to the Merrimack River at a point that provides a representative sample of the effluent.<sup>18</sup>

<b>Effluent Characteristic</b>	<b>Discharge Limitation</b>	<b>Monitoring Requirements</b>	
	<b>Daily Maximum</b>	<b>Measurement Frequency</b>	<b>Sample Type</b>
Flow (MGD)	Report	1 /Annual Outage	Total Annual Estimate
Oil & Grease (mg/l) <sup>15, 16</sup>	Report	Daily	Visual
pH (Range; standard units)	6.5-8.0 <sup>5, 17</sup>	1/Annual Outage	Grab

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**EXPLANATION OF SUPERSCRIPTS TO PART I.A. THROUGH PART I.C**

- (1) Based on pump curves, hours of pump operation, and a river level of 190 feet above sea level.
- (2) Chlorine or bromine may be used as biocide. No other biocide shall be used without written permission from the EPA and NHDES. The term chlorination will include bromination, if bromine is used.
- (3) Neither chlorine nor bromine may be discharged from any unit for more than two hours in any one day and not more than one unit may discharge free available or total residual chlorine at any one time. Sampling is only required during chlorination.
- (4) Flow at 003 shall be the sum of the flow from all internal outfalls that route through 003 for discharge to the Merrimack River.
- (5) This is a State of New Hampshire Certification requirement.
- (6) The permittee shall conduct chronic (and modified acute) Whole Effluent Toxicity (WET) tests biennially, with the first test occurring within the first year of the effective date of the permit. The chronic test may be used to calculate the acute LC50 at the 48 hour exposure interval. The permittee shall test the effluent samples using Fathead Minnows (*Pimephales promelas*) and Daphnid (*Ceriodaphnia dubia*) following the protocol in Attachment A (Freshwater Chronic Toxicity Test Procedure and Protocol, dated May 2007). Except as provided in subpart a., below, toxicity test samples shall be collected and tests completed during the first quarter of the year. Toxicity test results are to be submitted by April 30<sup>th</sup> each year. Reports shall include documentation of waste streams discharged during sample collection.
  - a. If the permittee has plans to discharge chemical metal cleaning wastes during any sampling year, the WET samples shall be collected at times when chemical metal cleaning waste is being discharged and the results timely submitted to EPA.
  - b. LC50 (Lethal Concentration 50 Percent) is the concentration of effluent which causes mortality to 50% of the test organisms. Therefore, a 100% limit means that a sample of 100% effluent (no dilution) shall cause no more than a 50% mortality rate.
  - c. The C-NOEC (Chronic-No Observed Effect Concentration) is defined as the highest concentration of toxicant or effluent to which organisms are exposed in a life-cycle or partial life-cycle test which causes no adverse effect on growth, survival, or reproduction at a specific time of observation as determined from hypothesis testing where the test results (growth, survival, and/or reproduction) exhibit a linear dose-response relationship. However, where the test

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results do not exhibit a linear dose-response relationship, report the lowest concentration where there is no observable effect

- d. For each WET test the permittee shall report on the appropriate Discharge Monitoring (DMR), the concentrations of the Ammonia Nitrogen as Nitrogen, Hardness, Aluminum, Cadmium, Copper, Lead, Nickel and Zinc found in the 100 percent effluent sample. These chemical parameters shall be determined to at least the minimum quantification level shown in Attachment A, page 6, or as amended. Also, the permittee should note that all chemical parameter results must still be reported in the appropriate toxicity report.
- e. This permit shall be modified, or alternatively, revoked and reissued to incorporate additional toxicity testing requirements, including chemical specific limits, if the results of the WET tests indicate the discharge exceeds any State water quality criterion. Results from these toxicity tests are considered “New Information” and the permit may be modified as provided in 40 C.F.R. Section 122.62(a)(2).
- f. If after three consecutive sampling periods no test shows a  $LC50 < 100\%$ , the permittee may cease toxicity testing for the remainder of the term of this permit.

(7) Continuous river temperature monitoring stations shall be utilized in the vicinity of the Merrimack Generating Station on the following basis. At control Station N-10 and mixing zone Station S-4, monitors shall record temperatures at 15-minute intervals. The temperature monitoring probes at Stations N-10 and S-4 shall be removed from the river in the autumn when ambient river temperature drops below 40°F and returned to the river when ambient river temperatures rise above 50°F. Ambient river water temperatures for removal and installation of the probes are defined as measured at Station N-10 for the fall probe removal, and at the Merrimack Station CWIS for the spring probe replacement.

(8) When one or more units is operating, the Power Spray Module (PSM) System in the cooling canal shall be operated, as necessary, to maintain either a mixing zone (Station S-4) river temperature not in excess of 69°F, or a Station N-10 to S-4 change in temperature (Delta-T) of not more than 1°F when the N-10 ambient river temperature exceeds 68°F. All available PSMs shall be operated when the S-4 river temperature exceeds both of the above criteria.

(9) Flow may be recorded based on pump curves and hours of operation.

(10) The weekly average temperature limits (chronic) in Part I.B.2 apply and are enforceable from May 1 to September 30 of a given year only: (a) after the Station has, during this period, withdrawn from the Merrimack River for cooling purposes a total volume of water equivalent to a seasonal (May-September) rate of 172.2 MGD (i.e., 172.2 million gallons per day \* 153 days); and (b) during

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periods when Unit 1 and/or Unit 2 are in operation thereafter. To calculate water withdrawal volumes, the permittee shall continuously monitor cooling water intake volume at Units 1 and 2 and calculate flow based on pump curves and hours of pump operation. The permittee shall exclude from this calculation periods of generation during an OP-4 event as ordered by the ISO-New England in accordance with Operating Procedure No. 4 (Actions during a Capacity Deficiency) of the ISO-New England Operating Procedures, dated June 1, 2018, and any subsequent revisions. If the Station reaches the seasonal intake limit on a total volume basis in a given year, thereafter the weekly average limits in Part I.B.2 apply and are the enforceable effluent limitations during Unit operation, for the remaining weeks through September 30 for that calendar year.

(11) In the event that the weekly average ambient river temperature, as measured at Station N-10, exceeds or is within 4°F of the applicable temperature limit for Outfall 003, then the permittee shall be considered in compliance with the temperature (chronic) limitations in Part I.B.2. so long as the temperature rise above ambient is no greater than 4°F, measured as the difference (“Delta-T”) between the weekly average at N-10 and the weekly average at S-4.

(12) The permittee shall, within 18 months of the effective date of this permit, establish the sampling method(s), protocols, and specific locations(s) for the S-4 continuous monitor or monitors that provide data that is representative of river conditions at the S-4 transect with respect to the chronic temperature limitation in Part I.B.2 taking into consideration the characteristics of the critical aquatic species for the sampling period. If multiple probes are used to provide representative conditions, the results shall be reported as an average of all operating probes at S-4.

(13) The daily maximum temperature at S-4 shall be measured and reported for each day as the highest 6-hour average of the four 6-hour blocks during such day. The permittee shall exclude from this calculation any 6-hour block that includes an OP-4 event as ordered by the ISO-New England in accordance with Operating Procedure No. 4 (Actions during a Capacity Deficiency) of the ISO-New England Operating Procedures, dated June 1, 2018, and any subsequent revisions. In the event that the 6-hour average ambient river temperature, as measured at Station N-10, exceeds or is within 4°F of the applicable temperature limit for Outfall 003, then the permittee shall be considered in compliance with the temperature (acute) limitations in Part I.B.2. so long as the temperature rise above ambient is no greater than 4°F, measured as the difference (“Delta-T”) between the 6-hour average at N-10 and the 6-hour average at S-4.

(14) The permittee shall, within 18 months of the effective date of this permit, establish the sampling method(s), protocols, and specific locations(s) for the S-4 continuous monitor or monitors that provide data that is representative of river conditions at the S-4 transect with respect to the acute temperature limitation in Part I.B.2 taking into consideration the characteristics of the critical aquatic species for the sampling period. If multiple probes are used to provide representative conditions, the results shall be reported as an average of all operating probes at S-4.

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(15) When discharging, a visual inspection of this outfall shall be conducted each business day (i.e., excluding weekends and recognized state and/or federal holidays). A log of these inspections, including observations, shall be kept and shall be made available to EPA and NHDES inspectors on request.

(16) If an oil sheen is detected at the outfall during daily observations, an effluent sample shall be immediately collected and tested for Oil and Grease.

(17) The pH of the discharge shall be in the range of 6.5 to 8.0 Standard Units (SU) unless the upstream ambient pH in the receiving water is outside of this range and it is not altered by the facility's discharge or activities. If the permittee's discharge pH is lower than 6.5 SU, the permittee may demonstrate compliance by showing that the discharge pH was no more than 0.5 SU lower than the ambient upstream receiving water pH. If the permittee's discharge pH is higher than 8.0 SU, the permittee may demonstrate compliance by showing that the discharge pH is no more than 0.5 SU higher than the upstream receiving water pH. For this demonstration the upstream receiving water sample must be collected on the same day as the discharge pH is measured. The location where the upstream ambient pH sample is collected shall be representative of upstream conditions unaffected by the facility's discharge(s) or activities.

(18) A sample from one of the applicable outfalls is sufficient and shall be deemed representative of the effluent from the other outfalls limited by the same subpart of the permit for the purpose of compliance with this permit.

**D. COMPLIANCE SCHEDULES**

**1. Thermal Effluent Limitations**

The permittee shall comply with the effluent limitations set out in Part I.B.1 and I.B.2 of this permit no later than 24 months after the effective date of the terms and conditions included in this permit applicable to thermal discharges from the facility. Any administrative and/or judicial stay(s) of any terms and conditions included in this permit applicable to thermal discharges from the facility shall toll the 24-month compliance period set out herein for an equal number of days as the administrative and/or judicial stay(s).

**2. Compliance with EPA's Steam Electric Power Generating Effluent Guidelines**

a. Bottom Ash Transport Wastewater

The permittee shall comply with effluent limitations applicable to bottom ash transport wastewater (e.g., slag sluice wastewater) set out in Part I.B.3. of this permit no later than December 31, 2023. The permittee may submit to EPA a request to modify this provision and Part I.B.3. of the permit, as well as any other permit provisions impacted by any conforming process and/or related infrastructure changes at the facility, within 180 days following the effective date of any EPA final rule revising 40 C.F.R. Part 423. Such request may include, but is not limited to, incorporating any new best available technology (BAT) effluent limitation standard established in EPA's final rule and/or a new date of compliance with the new BAT standard, to the extent the permittee can justify the need for a new compliance date based on criteria established in 40 C.F.R. Part 423 (e.g., the "as soon as possible" criteria). To the maximum extent practicable, EPA will timely address any such request for modification submitted by the permittee so as to avoid unnecessary compliance costs.

b. Flue Gas Desulfurization Wastewater

The permittee shall comply with effluent limitations applicable to flue gas desulfurization wastewater set out in Part I.B.4. of this permit no later than December 31, 2023. The permittee may submit to EPA a request to modify this provision and Part I.B.4. of the permit, as well as any other permit provisions impacted by any conforming process and/or related infrastructure changes at the facility, within 180 days following the effective date of any EPA final rule revising 40 C.F.R. Part 423. Such request may include, but is not limited to, incorporating any new best available

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technology (BAT) effluent limitation standard established in EPA's final rule and/or a new date of compliance with the new BAT standard either because EPA has established a new date for compliance with the Voluntary Incentives Program BAT effluent limitations or to the extent the permittee can justify the need for a new compliance date based on criteria established in 40 C.F.R. Part 423 (e.g., the "as soon as possible" criteria). To the maximum extent practicable, EPA will timely address any such request for modification submitted by the permittee so as to avoid unnecessary compliance costs.