OMB Control Number: 2040-XXXX Approval Expires: 05/dd/2013

Plant ID: Insert Plant ID
Plant Name: Insert Plant Name



## **Steam Electric Questionnaire**

## **PART H - NUCLEAR POWER GENERATION**

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Plant ID: Insert Plant ID
Plant Name: Insert Plant Name

### PART H. NUCLEAR POWER GENERATION

#### **INSTRUCTIONS**

Complete Part H of the questionnaire for your plant. As you are completing the electronic form, note the following: When you enter your plant name and plant ID on the Part H TOC tab, all name and ID fields throughout Part H will automatically populate. Refer to the overall questionnaire instructions, the glossary, and the acronym list for assistance with completing Part H.

Please provide all free response answers in the highlighted yellow areas. Throughout Part H, you may need to make copies of certain sections/questions. Instructions are provided throughout Part H regarding making copies. Note that process wastewater codes or wastewater treatment system names must be populated on the copied tab or section, located in the upper right corner under "Plant ID" and "Plant Name", in order to correlate the requested information with the process wastewater or wastewater treatment system.

Use the Part H Comments tab to do the following: provide additional information as requested in certain questions within Part H; indicate atypical data (e.g., if 2009 information is not representative of normal operations); and note methods used to make best engineering estimates in the event that exact data are not available.

Note: The following acronyms are used throughout Part H:

PWR - Pressurized water reactor

BWR - Boiling water reactor

Plant ID: Insert Plant ID
Plant Name: Insert Plant Name

Part: H

Section Title: 1. Nuclear Generating Unit Data

Instructions: Complete Section 1 (Questions H1-1 through H1-3) for each nuclear electric generating unit that the plant operated during 2009. Provide

all free response answers in the highlighted yellow areas.

CBI? □ <sub>Yes</sub>	<b>H1-1.</b> Did the pl	ant operate one or more units using nuclear energy as the fuel source to generate electricity in 2009?
	○ Yes	(Continue)
	○ No	(Skip to next Questionnaire Part)
<b>CBI?</b> □Yes	that is as	ant generate any <i>process wastewater</i> (with the exception of wastewater from service water treatment systems) during 2009 sociated with the production of electricity from nuclear generating units? Examples include, but are not limited to, containment ter and water generated from cooling system leaks or loss of coolant accidents (LOCA).
	○ Yes	(Continue)
	○ No	(Skip to next Questionnaire Part)
CBI? Yes	generatin wastewat checked.	H-1, provide information for all <i>process wastewater</i> associated with the production of electricity from the nuclear electric g units that the plant operated during 2009. Indicate the nuclear generating unit(s) that are associated with each process er. [Check all boxes that apply.] If the process wastewater is associated with the entire plant, all nuclear units should be If the plant generated a process wastewater that is not in the drop down menu, include the name and description of the vastewater in the space provided and indicate the nuclear generating unit(s) that are associated with the process wastewater.

Table H-1. Process Wastewater Associated with Nuclear Electric Generating Units

Process Wastewater Code		Process Wastewater	Nuclear Unit(s) Associated with Process Wastewater
NUC-1	Process Wastewater  Other, specify:	Nonradioactive/Radioactive   .	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8 SE Unit 3 SE Unit 6 SE Unit 9 Other, specify:
NUC-2	Process Wastewater  Other, specify:	▼ Nonradioactive/Radioactive ▼	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8 SE Unit 3 SE Unit 6 SE Unit 9 Other, specify:
NUC-3	Process Wastewater Other, specify:	Nonradioactive/Radioactive V	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8 SE Unit 3 SE Unit 6 SE Unit 9 Other, specify:
NUC-4	Process Wastewater  Other, specify:	▼ Nonradioactive/Radioactive ▼	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8 SE Unit 3 SE Unit 6 SE Unit 9 Other, specify:
NUC-5	Process Wastewater Other, specify:	Nonradioactive/Radioactive V	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8 SE Unit 3 SE Unit 6 SE Unit 9 Other, specify:
NUC-6	Process Wastewater Other, specify:	Nonradioactive/Radioactive V	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8 SE Unit 3 SE Unit 6 SE Unit 9 Other, specify:
NUC-7	Process Wastewater Other, specify:	Nonradioactive/Radioactive V	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8 SE Unit 3 SE Unit 6 SE Unit 9 Other, specify:

NUC-8			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	Nonradioactive/Radioactive	SE Unit 2 SE Unit 5 SE Unit 8
			SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-9			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
		•	SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-10	_		SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
		•	SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-11			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
		Ι.	SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-12			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
			SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-13			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
	_	·	SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-14			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
			SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-15		· ·	SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
	011		SE Unit 3 SE Unit 6 SE Unit 9
NIIIO 40	Other, specify:		Other, specify:
NUC-16		•	SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	Nonradioactive/Radioactive	SE Unit 2 SE Unit 5 SE Unit 8
	Other area's		SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		☐ Other, specify:

NUC-17			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
	1 100000 Wasternater	· ·	SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-18			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	Nonradioactive/Radioactive	SE Unit 2 SE Unit 5 SE Unit 8
			SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-19			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	Nonradioactive/Radioactive	SE Unit 2 SE Unit 5 SE Unit 8
	Othor oppoints		SE Unit 3 SE Unit 6 SE Unit 9
NUC-20	Other, specify:		Other, specify:
NOG-20	, w	- u r v /o r v	SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	Nonradioactive/Radioactive	SE Unit 2 SE Unit 5 SE Unit 8  SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-21			SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
			SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-22		1	SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	Nonradioactive/Radioactive	SE Unit 2 SE Unit 5 SE Unit 8
		<u>'</u>	SE Unit 3 SE Unit 6 SE Unit 9
NULO 00	Other, specify:		Other, specify:
NUC-23		_11	SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	Nonradioactive/Radioactive	SE Unit 2 SE Unit 5 SE Unit 8
	Other, specify:		SE Unit 3 SE Unit 6 SE Unit 9 Other, specify:
NUC-24	Other, specify.		
1100 27	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8
			SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-25		l	SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	Nonradioactive/Radioactive	SE Unit 2 SE Unit 5 SE Unit 8
		l	SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:

Process Wastewater	NUC-26		SE Unit 1 SE Unit 4 SE Unit 7
Other, specify:   Other, specify:   SE Unit 1   SE Unit 5   SE Unit 8		Process Wastewater	
NUC-27		Other specify:	
Process Wastewater	NUC-27	Offier, specify.	
Other, specify:   Other, specify:   SE Unit 1   SE Unit 4   SE Unit 7   SE Unit 7   SE Unit 8   SE Unit 6   SE Unit 9   SE Unit 9   SE Unit 1   SE Unit 7   SE Unit 9   SE Unit 9   SE Unit 1   SE Unit 7   SE Unit 9   SE Unit 1   SE Unit 4   SE Unit 7   SE Unit 9   SE		Process Wastewater	
NUC-28    Process Wastewater			_
Process Wastewater	NII 10 00	Other, specify:	Other, specify:
SE Unit 3   SE Unit 6   SE Unit 9	NUC-28		
Other, specify:  NUC-29  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  NuC-30  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioactive  NuC-31  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  NuC-32  NuC-33  NuC-34  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioacti		Process Wastewater	
Process Wastewater    Nonradioactive/Radioactive   Se Unit 2   Se Unit 5   Se Unit 8   Se Unit 9		Other, specify:	_
SE Unit 3   SE Unit 4   SE Unit 7	NUC-29		SE Unit 1 SE Unit 4 SE Unit 7
Other, specify:   Other, specify:   Other, specify:		Process Wastewater	
NUC-30         Process Wastewater         ▼ Nonradioactive/Radioactive         □ SE Unit 1 □ SE Unit 2 □ SE Unit 5 □ SE Unit 8 □ SE Unit 9 □ Other, specify:           NUC-31         Process Wastewater         ▼ Nonradioactive/Radioactive         □ SE Unit 1 □ SE Unit 4 □ SE Unit 7 □ SE Unit 7 □ SE Unit 2 □ SE Unit 5 □ SE Unit 8 □ SE Unit 9 □ Other, specify:           NUC-32         □ Other, specify:         □ Other, specify:           NUC-33         □ SE Unit 1 □ SE Unit 4 □ SE Unit 7 □ SE Unit 2 □ SE Unit 5 □ SE Unit 8 □ SE Unit 9 □ Other, specify:           NUC-33         □ Other, specify:           NUC-34         □ Other, specify:           NUC-34         ▼ Nonradioactive/Radioactive         ▼ Nonradioactive/Radioactive         □ SE Unit 1 □ SE Unit 4 □ SE Unit 7 □ SE Unit 8 □ SE Unit 9 □ S		Other specify:	
Process Wastewater  Other, specify:  NUC-31  Process Wastewater  Other, specify:  NUC-32  Process Wastewater  Other, specify:  NUC-32  Process Wastewater  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioac	NUC-30	Other, specify.	
NUC-31  Process Wastewater Process Wastewater  Nuc-32  Nuc-32  Process Wastewater  Process Wastewater  Process Wastewater  Nuc-32  Process Wastewater  Process Wastewater  Nuc-33  Nuc-34  Process Wastewater  Nuc-34  Nuc-34  Nuc-35  Nuc-36  Nuc-37  Nuc-38  Nuc-38  Nuc-39  Nuc-39		Process Wastewater	
NUC-31  Process Wastewater  Process Wastewater  Other, specify:  NUC-32  Process Wastewater  Process Wastewater  Process Wastewater  Process Wastewater  Process Wastewater  Other, specify:  NUC-33  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  SE Unit 1   SE Unit 4   SE Unit 7   SE Unit 8   SE Unit 9			
Process Wastewater  Other, specify:  NUC-32  Process Wastewater  Other, specify:  NUC-33  Process Wastewater  Other, specify:  NUC-34  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  SE Unit 1	NII IO Od	Other, specify:	
Other, specify:  NUC-32  Process Wastewater Other, specify:  Nonradioactive/Radioactive	NUC-31	Drococc Wastowater	
NUC-32 Process Wastewater ▼ Nonradioactive/Radioactive SE Unit 1		Process Wastewater	
Process Wastewater  Nonradioactive/Radioactive  SE Unit 2		Other, specify:	
Other, specify:  NUC-33  Process Wastewater Other, specify:  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  SE Unit 3	NUC-32		SE Unit 1 SE Unit 4 SE Unit 7
Other, specify:  NUC-33  Process Wastewater Other, specify:  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  SE Unit 1		Process Wastewater	·
NUC-33  Process Wastewater  Other, specify:  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  SE Unit 1		Other specify:	
Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioactive  SE Unit 2   SE Unit 5   SE Unit 8    SE Unit 3   SE Unit 6   SE Unit 9    Other, specify:  NUC-34  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioactive  Nonradioactive/Radioactive  SE Unit 1   SE Unit 4   SE Unit 7    SE Unit 2   SE Unit 4   SE Unit 7    SE Unit 2   SE Unit 5   SE Unit 8    SE Unit 3   SE Unit 6   SE Unit 8    SE Unit 5   SE Unit 7    SE Unit 1   SE Unit 5   SE Unit 8    SE Unit 2   SE Unit 5   SE Unit 8    SE Unit 3   SE Unit 6   SE Unit 9	NUC-33	Offier, specify.	
Other, specify:  NUC-34  Process Wastewater  Nonradioactive/Radioactive  Nonradioactive/Radioactive  SE Unit 3 SE Unit 6 SE Unit 9  Other, specify:  SE Unit 1 SE Unit 4 SE Unit 7  SE Unit 2 SE Unit 5 SE Unit 8  SE Unit 3 SE Unit 6 SE Unit 9		Process Wastewater	
NUC-34  Process Wastewater  ▼ Nonradioactive/Radioactive  ▼ SE Unit 1  SE Unit 4  SE Unit 7  SE Unit 2  SE Unit 5  SE Unit 8  SE Unit 3  SE Unit 6  SE Unit 9			SE Unit 3 SE Unit 6 SE Unit 9
Process Wastewater  Nonradioactive/Radioactive  SE Unit 2 SE Unit 5 SE Unit 8  SE Unit 3 SE Unit 6 SE Unit 9	NII IO O I	Other, specify:	Other, specify:
SE Unit 3 SE Unit 6 SE Unit 9	NUC-34		
		Process Wastewater	
Uther, specify:		Other, specify:	Other, specify:

NUC-35	Process Wastewater	Nonradioactive/Radioactive	SE Unit 1 SE Unit 4 SE Unit 7 SE Unit 2 SE Unit 5 SE Unit 8
			SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:
NUC-36	-		SE Unit 1 SE Unit 4 SE Unit 7
	Process Wastewater	▼ Nonradioactive/Radioactive ▼	SE Unit 2 SE Unit 5 SE Unit 8
			SE Unit 3 SE Unit 6 SE Unit 9
	Other, specify:		Other, specify:

Plant ID: Insert Plant ID

Plant Name: Insert Plant Name

Process wastewater code: Process Wastewater Code

▼ [

Part: H

Section Title: 2. Process Wastewater Generation

**Instructions:** Complete Section 2 (Questions H2-1 and H2-2) for each *process wastewater* generated on site during 2009 that is associated with the operation of the nuclear generating units. Please provide all free response answers in the

highlighted yellow areas.

Make a copy of Section 2 for each type of process wastewater generated in 2009 and previously identified in Table H-1 using the "Copy Section 2" button below. Enter the process wastewater code from Table H-1 in the space provided above.

# **Copy Section 2**

# CBI?

Yes

**H2-1.** Indicate in Table H-2 if the *process wastewater* flow is continuous or not continuous. For process wastewater with a continuous flow, indicate the flow rate, typical volume generated annually, and duration for the process wastewater that was generated in 2009. For process wastewater without a continuous flow, indicate the typical flow rate, typical volume generated annually in gallons, duration, and frequency with which the process wastewater is generated.

**Table H-2. Process Wastewater Flows** 

	: Wastewater Flow	Flow Rate (gpm)	Typical Volume Generated Annually (gallons)	e Typical Frequence Typical Duration (e.g., 1 time every 3 y					
○ Cor	ntinuous			hŗ	pd		dpy		
○ Not	t Continuous			hp	pd		dpy	time(s) every	year(s

CBI? Yes	H2-2. Indicate how the untreated process wastewater is handled. If recycled, indicate to which process the process wastewater is recycled. [Check all boxes that apply.]
	Immediately recycled back to a plant process. Please describe how the process wastewater is reused
	☐ In cooling towers
	As reactor coolant (BWR)
	As primary coolant (PWR)
	As secondary coolant (PWR)
	Other specify:
	Discharged to surface water following on-site treatment, including those located on non-adjoining property.
	Please provide the NPDES permitted outfall number (from Part A Section 2.2)
	Discharged to surface water untreated. Please provide NPDES permitted outfall number (from Part A Section 2.2)
	Transferred to publicly or privately owned treatment works
	Transported to an offsite vendor waste processor
	Transported to approved licensed burial ground
	Other, explain:

Plant ID: Insert Plant ID

Plant Name: Insert Plant Name Wastewater Treatment System Name: Insert Treatment System Name Part: H Section Title: 3. Wastewater Treatment Systems Instructions: Complete Section 3 (Questions H3-1 through H3-7) for each wastewater treatment system that the plant operated in 2009 to treat any process wastewater associated with nuclear generating units and reported in Table H-1. Please provide all free response answers in the highlighted yellow areas. Make copies of Section 3 for each wastewater treatment system that the plant operated in 2009 using the "Copy Section 3" button below. Enter the wastewater treatment system name in the space provided above. **Copy Section 3** CBI? **H3-1.** Does this wastewater treatment system treat radioactive waste? Yes O Yes O No CBI? H3-2. Indicate all process wastewater that is treated with this wastewater treatment system using the codes provided in Table H-1. Yes [Check all boxes that apply.] NUC-1 NUC-5 NUC-9 NUC-13 NUC-33 NUC-17 NUC-21 NUC-25 NUC-29 NUC-6 NUC-14 NUC-2 NUC-10 NUC-18 NUC-22 NUC-26 NUC-30 NUC-34 ☐ NUC-7 NUC-23 NUC-3 NUC-11 ☐ NUC-15 NUC-19 NUC-27 NUC-31 NUC-35 NUC-4 NUC-8 NUC-12 NUC-16 NUC-20 NUC-24 NUC-28 NUC-32 NUC-36 CBI? H3-3. Provide the typical and maximum flow rate for the wastewater treatment system for 2009. In addition, provide the duration Yes and frequency of the discharges, and other dispositions off site, from the wastewater treatment system in 2009. If the flow rate in 2009 is not typical of previous years, please note this in the "Part H Comments" tab at the end of part. Typical flow rate in 2009, gpm Maximum flow rate in 2009, gpm Duration of effluent transfers from treatment system in 2009, hpd Frequency of effluent transfers from treatment system in 2009, dpy

Approved: May XX, 2010

CBI?

☐ Yes

H3-4. Complete a row in Table H-3 for each treatment technology used in this wastewater treatment system. If the technology is not listed, select other and identify it separately in the yellow box provided. Indicate the pollutants targeted for removal for each wastewater treatment technology. [Check all boxes that apply.] If you check "metals" or "other" specify the type of metal or type of other pollutant in the yellow boxes provided. Separate multiple entries with commas. Of the pollutants identified for each treatment technology, indicate up to three effluent limitations that drive/will drive the operation of this wastewater treatment technology. Provide the pollutant, the limitation, and the unit (mg/L, ug/L, or μCi/mL).

Table H-3. Characteristics of Wastewater Treatment Technologies Present in the Wastewater Treatment System

Wastewater Treatment Technology	Pollutants Ta	rgeted for Removal by the Technology	Which Efflue Drive the Ope Pollutant		
Wastewater Treatment Technology   ▼	Chlorine or other ox  Nitrogen compound Carbohydrazine Hydrazine Organic acids		Tondant	Limitation	Units ▼
Other, specify (below):	Oil and grease  Metals, specify:  Other , specify:	Other Radionuclides			Units <b>V</b>
Wastewater Treatment Technology	Carbohydrazine Hydrazine Organic acids	s (ammonia, nitrate, nitrite)  Boron  Tritium  Strontium-90			Units ▼
Other, specify (below):	TSS Oil and grease Metals, specify: Other , specify:	Cesium-137 Other Radionuclides			Units <b>▼</b>

	Chlorine or other oxi	dizing agents		
	Nitrogen compounds	s (ammonia, nitrate, nitrite)		
	Carbohydrazine	Boron		
Wastewater Treatment Technology	Hydrazine	Tritium		Units
	Organic acids	Strontium-90		Units ▼
	TSS	Cesium-137		Offics
	Oil and grease	Other Radionuclides		Units
Other, specify (below):	☐ Metals, specify:			
	Other , specify:			
	Chlorine or other oxi	dizing agents		
	Nitrogen compounds	s (ammonia, nitrate, nitrite)		
	Carbohydrazine	Boron		
Wastewater Treatment Technology	Hydrazine	Tritium		Units
	Organic acids	Strontium-90		Units ▼
	TSS	Cesium-137		Onics
	Oil and grease	Other Radionuclides		Units ▼
Other, specify (below):	Metals, specify:			
	Other , specify:			
	Chlorine or other oxi	dizing agents		
	Nitrogen compounds	(ammonia, nitrate, nitrite)		
	Carbohydrazine	Boron		
Wastewater Treatment Technology	Hydrazine	Tritium		Units $ extstyle  extstyle$
·	Organic acids	Strontium-90		Units ▼
	TSS	Cesium-137		UIIIG
	Oil and grease	Other Radionuclides		Units
Other, specify (below):	☐ Metals, specify:			
	Other , specify:			

	Chlorine or other oxi	dizing agents		
	Nitrogen compounds	s (ammonia, nitrate, nitrite)		
	Carbohydrazine	Boron		
Wastewater Treatment Technology	Hydrazine	Tritium		Units
	Organic acids	Strontium-90		
	TSS	Cesium-137		Units
	Oil and grease	Other Radionuclides		Units ▼
Other, specify (below):	Metals, specify:			
	Other , specify:			
	Chlorine or other oxi	dizing agents		
	Nitrogen compounds	(ammonia, nitrate, nitrite)		
	Carbohydrazine	Boron		
Wastewater Treatment Technology	Hydrazine	Tritium		Units
	Organic acids	Strontium-90		Units ▼
	TSS	Cesium-137		Offics
	Oil and grease	Other Radionuclides		Units
Other, specify (below):	Metals, specify:			
	Other , specify:			
	Chlorine or other oxi	dizing agents		
	Nitrogen compounds	(ammonia, nitrate, nitrite)		
	Carbohydrazine	Boron		
Wastewater Treatment Technology	Hydrazine	Tritium		Units
·	Organic acids	Strontium-90		11-3-
	TSS	Cesium-137		Units
	Oil and grease	Other Radionuclides		Units
Other, specify (below):	Metals, specify:			
	Other , specify:			

CBI?

☐ Yes

**H3-5.** Is the plant currently constructing/installing or planning to begin constructing/installing by December 31, 2020 any additional treatment technologies not mentioned in question H3-4 to the wastewater treatment system? If so, indicate in Table H-4 below the type of technology and the pollutants the technology will target. [Check all boxes that apply.] If you check "metals" or "other" specify the type of metal or type of other pollutant in the yellow boxes provided. Separate multiple entries with commas.

Table H-4. Characteristics of Planned Wastewater Treatment Technologies in the Wastewater Treatment System

Wastewater Treatment Technology	Pollutants Ta	rgeted for Removal by the Technology
	Chlorine or other ox	kidizing agents
	Carbohydrazine	Boron
Wastewater Treatment Technology	Hydrazine	Tritium
	Organic acids	Strontium-90
	TSS	Cesium-137
	Oil and grease	Other Radionuclides
Other, specify (below):	☐ Metals, specify:	
	Other , specify:	
	Chlorine or other ox	kidizing agents
	Nitrogen compound	ls (ammonia, nitrate, nitrite)
	Carbohydrazine	Boron
Wastewater Treatment Technology	Hydrazine	☐ Tritium
·	Organic acids	Strontium-90
	TSS	Cesium-137
	Oil and grease	Other Radionuclides
Other, specify (below):	Metals, specify:	
	Other , specify:	

	Chlorine or other oxi	dizing agents
	Nitrogen compounds	(ammonia, nitrate, nitrite)
	Carbohydrazine	Boron
Wastewater Treatment Technology	Hydrazine	Tritium
	Organic acids	Strontium-90
	TSS	Cesium-137
	Oil and grease	Other Radionuclides
Other, specify (below):	☐ Metals, specify:	
	Other , specify:	
	Chlorine or other oxi	dizing agents
		dizing agents s (ammonia, nitrate, nitrite)
Wastewater Treatment Technology ▼	Nitrogen compounds	(ammonia, nitrate, nitrite)
Wastewater Treatment Technology	☐ Nitrogen compounds ☐ Carbohydrazine	s (ammonia, nitrate, nitrite)
Wastewater Treatment Technology ▼	Nitrogen compounds Carbohydrazine Hydrazine	(ammonia, nitrate, nitrite)  Boron  Tritium
Wastewater Treatment Technology	Nitrogen compounds Carbohydrazine Hydrazine Organic acids	G (ammonia, nitrate, nitrite)  Boron  Tritium  Strontium-90
Wastewater Treatment Technology ▼  Other, specify (below):	Nitrogen compounds Carbohydrazine Hydrazine Organic acids TSS	Gammonia, nitrate, nitrite)  Boron  Tritium  Strontium-90  Cesium-137

CBI? ☐ Yes	H3-6. What is the ultimate destination of the <u>treated</u> process wastewater from this wastewater treatment system? If recycled, indicate how the treated process wastewater is recycled. [Check all boxes that apply].	
	Recycled back to a plant process. Please describe how the treated process wastewater is reused	
	☐ In cooling towers	
	As reactor coolant (BWR)	
	As primary coolant (PWR)	
	As secondary coolant (PWR)	
	Other specify:	
	Discharged to surface water following on-site treatment, including those located on non-adjoining property.	
	Please provide the NPDES permitted outfall number (from Part A Section 2.2)	
	Transferred to publicly or privately owned treatment works	
	☐ Transported to an offsite vendor waste processor	
	☐ Transported to approved licensed burial ground	
	Other, explain:	
CBI? ☐ Yes	<b>H3-7.</b> If you indicated in question H3-6 that the ultimate destination of the treated process wastewater was to recycle part of it back to the plant, but not all of it, indicate the typical and maximum flow rates during 2009 for the recycled part of the treated process wastewater. In addition, provide the duration and frequency of the effluent transfers from the wastewater treatment system in 2009 for the recycled portion of the treated process wastewater. If the flow rate in 2009 is not typical of previous years, please note this in the "Part H Comments" tab at the end of part.	
	Typical flow rate in 2009, gpm	
	Maximum flow rate in 2009, gpm	
	Duration of effluent transfers from treatment system in 2009, hpd	
	Frequency of effluent transfers from treatment system in 2009, dpy	

Plant ID: Insert Plant ID
Plant Name: Insert Plant Name

Part: H

Section Title: Part H Comments

Instructions: Cross reference your comments by question number and indicate the confidential status of your comment by checking the box

next to "Yes" under "CBI?" (Confidential Business Information).

	Question Number	Comment
CBI?		
CBI? □ Yes		
CBI? ☐ Yes		
<b>CBI?</b> □ Yes		
<b>CBI?</b> □ Yes		
CBI?		
<b>CBI?</b> □ Yes		

Steam Electric Questionnaire	Part H. Nuclear Power Generation

CBI? ☐ Yes	
CBI?	
CBI?	
CBI? ☐ Yes	
CBI? ☐ Yes	
CBI? ☐ Yes	
CBI?	
CBI? ☐ Yes	
CBI?	
CBI? ☐ Yes	

## **Part H Drop Downs**

Process Wastewater
Process Wastewater
Select
Auxiliary building sump/drain wastewater
Boiler blowdown
Boiler metal cleaning waste
Chemical and volume control system (CVCS) purge (PWR)
Condensate clean-up system purge (PWR)
Containment/drywell building sump/drain wastewater
Contaminated stormwater
Filter backwash
lon exchange wastewater
Laboratory drain wastewater
Laundry wastewater
Leachate
Leaks from primary coolant system (PWR)
Leaks from radiological waste treatment system(s)
Leaks from reactor coolant system (BWR)
Loss of coolant accidents
Personnel and equipment decontamination wastewater
Primary coolant purge (PWR)
Reactor coolant purge (BWR)
Reactor water clean-up system purge (BWR)
Reverse osmosis reject water
Sample station drain wastewater
Secondary coolant purge (PWR)
Solidification process wastewater
Steam turbine cleaning washwater
Turbine building floor drain wastewater
Yard drain wastewater
Other (specify name and description)

Process Wastewater Code
Process Wastewater Code
Select
NUC-1
NUC-2
NUC-3
NUC-4
NUC-5
NUC-6
NUC-7
NUC-8
NUC-9
NUC-10
NUC-11
NUC-12
NUC-13
NUC-14
NUC-15
NUC-16
NUC-17
NUC-18
NUC-19
NUC-20
NUC-21
NUC-22
NUC-23
NUC-24
NUC-25
NUC-26
NUC-27
NUC-28
NUC-29
NUC-30
NUC-31
NUC-32
NUC-33
NUC-34
NUC-35
NUC-36

Nonradioactive/Radioactive
Nonradioactive/Radioactive
Select
Nonradioactive
Radioactive

Units	
Units	
Units Select	
mg/L	
ug/L	
mg/L ug/L μCi/mL	

Wastewater Treatment Technology
Wastewater Treatment Technology
Select
Aerobic biological reactor
Anaerobic biological reactor
Centrifugation
Chemical precipitation/flocculation
Constructed wetlands
Cross flow filtration
Degasification
Dechlorination
Evaporation
Hollow fiber filtration
Ion exchange
Ion exchange membrane
Ion-specific filtration
Neutralization
Oil/water separator
Oil skimming
Reverse osmosis
Settling pond
Settling tank
Slow sand filter
Specially-prepared activated carbon
Super absorbent polymers
Temporary storage for radionuclide decay
Ultrafiltration
Wet oxidation
Other specify