

DOCKETED

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CALPINE CORPORATION

NYSE CPN

CCFC SUTTER ENERGY, LLC.

5029 S. TOWNSHIP ROAD

YUBA CITY, CA 95993

530.821.2060 (P)

530.821.2065 (F)

January 25, 2019

Mr. John Heiser
Compliance Project Manager
California Energy Commission
1516 9th Street, MS 2000
Sacramento, CA 95814

Mr. Christopher Brown, APCO
Feather River Air Quality Management District
541 Washington Avenue
Yuba City, CA 95991

Subject: **Sutter Energy Center; 97-AFC-2
Annual Compliance Report Year 2018**

Dear Mr. Heiser, Mr. Brown:

CCFC Sutter Energy, LLC, on behalf of the Sutter Energy Center, hereby submits this Annual Compliance Report for Year 2018 pursuant to the Commission Decision for the Sutter Energy Center.

This Annual Compliance Report contains the following:

- 1) An updated compliance matrix showing the status of all open Conditions of Certification.
- 2) A summary of the current project operating status and an explanation of any significant changes to facility operations during the year.
- 3) Documents required by the following Conditions:

Soil & Water-1	A record of the average monthly groundwater consumption.
Soil & Water-2	The volume and method of disposal for all wastewater streams.
Haz-1	A list of hazardous materials contained at the facility.
Vis-1 & Vis-5	Visual Resources.
Waste-3	Waste management methods.
TLSN-2	Summary of complaints and corrective actions regarding interference.



TLSN-4

Summary of inspection results and fire protection activities along ROW.

- 4) A cumulative listing of all post-certification changes approved by the Commission or cleared by the CPM.
- 5) An explanation for any submittal deadlines that were missed and estimate of submission.
- 6) A listing of filings made to or permits issued by other governmental agencies during the year.
- 7) A projection of project compliance activities scheduled during the next year.
- 8) A listing of the year's addition to the on-site compliance file.

Please call Michael Buzdas at (530) 821-2074 if you have any questions.

CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware of significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Andrew Gundershaug
Responsible Official & General Plant Manager

Enclosures:

cc: C. Brown, FRAQMD
D. Williams, Calpine Corp.
B. McBride, Calpine Corp.

2) Current Operating Status:

EXECUTIVE SUMMARY

The Sutter Energy Center began commercial operations July 1, 2001 and has operated reliably since that time. Sutter Energy Center went into cold layup in 2016 and subsequently restarted operations in 2018. The plant operated approximately 5570 service hours and achieved an availability factor of 85.87% for January through December 2018 period.

The Plant produced 589,155 Net MWhr during this period. The plant is dispatched by SMUD.

OPERATIONS

Monthly Production

Month	Net Production MwHr
January	0
February	0
March	28,175
April	38,046
May	5,736
June	16,236
July	107,348
August	124,280
September	61,909
October	112,951
November	1,150
December	93,324

Scheduled Outages

There were 16 scheduled outages during 2018.

Dates	Unit	Duration (Hrs)	Reason
3/5/2018	CT1	17.35	Resume planned re-commissioning of Sutter
3/6/2018	CT1	60.60	Resume planned re-commissioning of Sutter
3/9/2018	CT1	67.47	Resume planned re-commissioning of Sutter
3/12/2018	CT1	4.55	Resume planned re-commissioning of Sutter and repair blade path issue
3/15/2018	CT1	87.00	Resume planned re-commissioning of Sutter
3/15/2018	ST	90.00	Resume planned re-commissioning of Sutter
7/3/2018	CT1	5.10	Inspection of CTG exhaust to HRSG Expansion Joint

8/31/2018	CT1	140.57	Outage to repair fogging nozzles, repair inlet drain, and remove internal filters
9/6/2018	CT2	156.53	Maintenance outage to repair HRSG tube leaks and Fuel Valve driver
9/25/2018	CT2	1,227.33	Repair unit #2 LP Evaporator leak. Complicated repair and delays due to resources.
11/1/2018	CT1	393.95	Full plant outage to conduct needed CMs and BSI Inspections
11/1/2018	ST	396.58	Maintenance Outage to repair HRSG Drains
11/28/2018	ST	2.48	CT1 Water Wash
11/28/2018	CT1	2.48	CT1 Water Wash
11/29/2018	ST	14.50	Repair Lube oil vent line
11/29/2018	CT1	14.50	Repair lube oil vent line

Unscheduled Outages

There were 22 unscheduled outages during 2018.

Dates	Unit	Duration (Hrs)	Reason
3/5/2018	CT1	1.00	Unit Trip due to LP Bleed valve position fault
3/9/2018	CT1	1.07	Fuel valve hunting, overfuel. DCS adjust on Trip setpoint
3/9/2018	CT1	0.50	High blade path spread due to clogged "A" stage wickets hard, cleaning piping
3/12/2018	CT1	0.50	unit tripped on high blade path, found FME tape on Basket 3 pilot piping
3/15/2018	CT1	1.83	HRH Bypass fail to open, valve repaired
3/15/2018	ST	3.00	Forced Outage due to HRH Bypass Valve Issue
3/15/2018	ST	0.92	vapor extractor problem
3/15/2018	CT1	0.67	Vapor Extractor failure
4/19/2018	ST	1.00	Repair oil leak on RHSV
4/24/2018	ST	1.00	Unit unavailable due to CPN Fuel changing o-ring in main fuel isolation valve in yard
4/24/2018	CT1	1.00	Unit unavailable due to CPN Fuel changing o-ring in main fuel isolation valve in yard
5/29/2018	CT2	1.52	Unit tripped on vibration, replaced proximeter
5/29/2018	CT2	2.33	Ip drum level trip, recalibrated transmitter
6/3/2018	ST	0.75	HP drum level trip
6/3/2018	CT1	0.75	HP Drum Level trip
6/27/2018	CT1	4.27	replace hydraulic pump #2
6/27/2018	ST	4.27	replace ct hyd pump
9/6/2018	ST	2.37	Unit Shutdown due to A stage valve oscillation
9/6/2018	CT2	5.20	Issue with a stage fuel drive causing valve swing unit shut down
9/6/2018	ST	0.25	Excitation system Field breaker issue, breaker swapped out
9/20/2018	CT1	1.13	Excessive co, unit shut down, inlet air probe repaired
9/20/2018	ST	1.92	Unit Shutdown due to high CO, unit restarted after inlet temp probe replaced

MODIFICATIONS AND TESTING

The Annual RATA and source testing for Unit 1 was conducted during the year on March 27-28, 2018. The Annual RATA and source testing for Unit 2 was conducted during the year on July 3, 2018.

ENVIRONMENTAL HEALTH & SAFETY

The Plant did not experience any environmental incident in 2018.

Sutter plant personnel worked a total of 54,042 hours during this reporting time period without a lost time or OSHA recordable accident.

3) Required Documents to be submitted in this Report

Noise-2 The Sutter Energy Center received 2 noise related complaints and was submitted previously on January 23, 2018 and February 2, 2018.

Soil & Water-1: A record of the average monthly groundwater consumption.

The Sutter Energy Center consumed the following volume of groundwater during the reporting period:

2018

Month	Total Gallons	Average GPM
January-2018	1,961,449	43.9
February-2018	2,045,558	50.7
March-2018	1,809,520	40.5
April-2018	502,088	11.6
May-2018	447,360	10.0
June-2018	792,570	18.3
July-2018	3,046,385	68.2
August-2018	1,141,484	25.6
September-2018	681,575	15.8
October-2018	1,450,325	32.5
November-2018	389,603	9.0
December-2018	1,435,086	32.1

Soil & Water-2: The volume and method of disposal for all wastewater streams.

The only wastewater stream generated on-site is sanitary waste that is trucked off-site by a licensed septic waste hauler. Approximately 6,850 gallons per month is trucked off-site.

Haz-1: A list of hazardous materials contained at the facility.

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center	Chemical Location 4160 Battery Room	CERS ID 10153109
Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993		Facility ID Status Submitted on 1/18/2019 2:21 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	GNB Flooded Classic Battery HCT- Pounds		29280	488	29280	0	- Physical	Lead	60 %	7439-92-1
	25	State	Storage Container		Pressue	Waste Code	Flammable	Sulfuric Acid	30 %	✓ 7664-93-9
	CAS No	✓ EHS	Solid	Other	Ambient		- Health Acute	Non Hazardous Ingredients	3 %	
		Type	Mixture	Days on Site: 365	Temperature		Toxicity	Case Material	10 %	
					Ambient		- Health			
							Reproductive			
							Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center	Chemical Location Condensate Chemical Feed	CERS ID 10153109
Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993		Facility ID Status Submitted on 1/18/2019 2:21 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 8 - Corrosives (Liquids and Solids)	Steamate NA1324	Gallons	550	500	550	0	- Health Acute Toxicity	Ammonia solution	40 %	✓ 1336-21-6
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>		- Health Skin Corrosion	Ethanolamine	10 %	141-43-5
		Liquid	Tote Bin		Ambient	<u>Waste Code</u>	Irritation			
		<u>Type</u>	Mixture	Days on Site: 365		<u>Temperature</u>	- Health Serious Eye Damage Eye Irritation			
					Ambient		- Health Specific Target Organ Toxicity			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location CT Battery Room	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Excide EC-17	Pounds	18000	150	18000	0	- Physical	Lead	60 %	7439-92-1
	CAS No. <input checked="" type="checkbox"/> EHS	State	Storage Container		Pressure	Waste Code	Flammable	Sulfuric Acid	30 %	<input checked="" type="checkbox"/> 7664-93-9
		Solid	Other		Ambient		- Physical	Non Hazardous Ingredients	3 %	
		Type			Temperature		Explosive	Case Material	10 %	
		Mixture	Days on Site: 365		Ambient		- Health Acute			
							Toxicity			
							- Health			
							Reproductive			
							Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center	Chemical Location East side of Plant	CERS ID 10153109
Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993		Facility ID Status Submitted on 1/18/2019 2:21 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
DOT: 2.2 - Nonflammable Gases	Ammonia	Pounds	52530	52530	40000		- Physical	Ammonia	100 %	<input checked="" type="checkbox"/>	7664-41-7
Corrosive, Flammable Gas	CAS No. 7664-41-7 <input checked="" type="checkbox"/> EHS	<u>State</u> Liquid	<u>Storage Container</u> Aboveground Tank		<u>Pressue</u> > Ambient	<u>Waste Code</u> 141	Flammable - Physical Gas Under Pressure - Health Acute Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation				
		<u>Type</u> Pure	Days on Site: 365		<u>Temperature</u> Ambient						

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Lube Oil Storage Containment	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Chevron Gear Compound 320	Gallons	275	55	110	0		Lubricating Base Oil	97 %	
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		Liquid	Steel Drum		Ambient					
		<u>Type</u>			<u>Temperature</u>					
		Mixture	Days on Site: 365		Ambient					
	CHEVRON OIL ISO 320	Gallons	200	55	100	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		Liquid	Steel Drum							
		<u>Type</u>			<u>Temperature</u>					
	Kroil	Gallons	33	33	33	0	- Physical Flammable	Severly Hydrotreated Light Naphthenic Distilate	50 %	64742-52-5
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	- Health Skin	Light Petroleum distillates	50 %	64742-95-6
		Liquid	Steel Drum		Ambient		Corrosion	Aliphatic Alcohols	5 %	78-92-2
		<u>Type</u>			<u>Temperature</u>		Irritation	Glycol Ether	5 %	111-76-2
		Mixture	Days on Site: 365		Ambient		- Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard	Proprietary Ingredients	5 %	
	Step One	Gallons	110	55	55	0	- Health Skin Corrosion	Distillates, Hydrotreated Heavy naphthenic	60 %	64742-52-5
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Irritation	Amines, N-tallow	30 %	68603-75-8
		Liquid	Steel Drum		Ambient		- Health Serious	alkyltrimethylenedi-propoxylated		
		<u>Type</u>			<u>Temperature</u>		Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard			
		Mixture	Days on Site: 365		Ambient					
	Turbine Oil GST 100	Gallons	55	55	55	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		Liquid	Steel Drum		Ambient					
		<u>Type</u>			<u>Temperature</u>					
		Pure	Days on Site: 365		Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Lube Oil Storage Containment	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Turbine Oil GST 46	Gallons	200	100	155	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		<u>Liquid</u>	Steel Drum, Other		<u>Ambient</u>					
		<u>Type</u>			<u>Temperature</u>					
		<u>Pure</u>	Days on Site: 365		<u>Ambient</u>					
	Turbine Oil GST 68	Gallons	330	120	220	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		<u>Liquid</u>	Steel Drum		<u>Ambient</u>					
		<u>Type</u>			<u>Temperature</u>					
		<u>Pure</u>	Days on Site: 365		<u>Ambient</u>					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Maintenance Shop	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 2.1 - Flammable Gases	Acetylene	Cu. Feet	900	300	600	0	- Physical	Acetylene	100 %	74-86-2
Flammable Gas	<u>CAS No</u> 74-86-2	<u>State</u> Gas	<u>Storage Container</u> Cylinder		<u>Pressue</u> > Ambient	<u>Waste Code</u>	Flammable - Physical Gas Under Pressure			
		<u>Type</u> Pure	Days on Site: 365		<u>Temperature</u> Ambient					
DOT: 2.2 - Nonflammable Gases	Argon	Cu. Feet	600	300	300	0	- Physical Gas	Argon	100 %	7440-37-1
	<u>CAS No</u> 7440-37-1	<u>State</u> Gas	<u>Storage Container</u> Cylinder		<u>Pressue</u> > Ambient	<u>Waste Code</u>	Under Pressure			
		<u>Type</u> Pure	Days on Site: 365		<u>Temperature</u> Ambient					
	Oxygen	Cu. Feet	4500	300	1800	0				
	<u>CAS No</u> 7782-44-7	<u>State</u> Gas	<u>Storage Container</u> Cylinder		<u>Pressue</u> > Ambient	<u>Waste Code</u>				
		<u>Type</u> Pure	Days on Site: 365		<u>Temperature</u> Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Natural Gas Yard	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
DOT: 3 - Flammable and Combustible Liquids	Condensate and water	Gallons	155	155	155	- Physical	Natural Gas Condensate	80 %	64741-47-5	
Flammable Liquid, Class I-A	CAS No 64741-47-5	State Liquid	Storage Container Aboveground Tank		Pressue Ambient	Waste Code	- Health	Water	20 %	
		Type Mixture	Days on Site: 365		Temperature Ambient		- Health Carcinogenicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard - Health Germ Cell Mutagenicity			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Oil Storage Area	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Oily Solids	Gallons	165	55	55	1500	- Health	Oil filters	100 %	
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Reproductive	Absorbent rags of pads	100 %	
		<u>Solid</u>	Steel Drum		<u>Ambient</u>	223	Toxicity			
		<u>Type</u>			<u>Temperature</u>		- Health Skin			
		<u>Waste</u>	Days on Site: 365		<u>Ambient</u>		Corrosion			
							Irritation			
							- Health			
							Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Specific			
							Target Organ			
							Toxicity			
							- Health			
							Aspiration Hazard			
							- Health Germ			
							Cell Mutagenicity			
	Oily Water	Gallons	500	500	100	2500	- Health Skin	Oily Water	100 %	
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosion			
		<u>Liquid</u>	Plastic/Non-metalic Drum		<u>Ambient</u>	223	Irritation			
		<u>Type</u>			<u>Temperature</u>		- Health			
		<u>Waste</u>	Days on Site: 365		<u>Ambient</u>		Respiratory Skin			
							Sensitization			
							- Health Serious			
							Eye Damage Eye			
							Irritation			
							- Health Specific			
							Target Organ			
							Toxicity			
							- Health			
							Aspiration Hazard			
							- Health Germ			
							Cell Mutagenicity			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Oil Storage Shed	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	COILSHINE FOAMING ALKALINE COIL CLEANER	Gallons	55	55	55	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		Liquid	Plastic/Non-metalic Drum		Ambient					
		<u>Type</u>			<u>Temperature</u>					
		Mixture			Ambient					
	Diesel Fuel	Gallons	500	500	250	0	- Physical	Diesel Fuel	100 %	68476-34-6
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Flammable			
	68476-34-6	Liquid	Aboveground Tank		Ambient		- Health			
		<u>Type</u>			<u>Temperature</u>		Carcinogenicity			
		Pure	Days on Site: 365		Ambient		- Health Acute			
							Toxicity			
							- Health Skin			
							Corrosion			
							Irritation			
							- Health Specific			
							Target Organ			
							Toxicity			
							- Health			
							Aspiration Hazard			
	Ethylene Glycol	Gallons	55	55	55	0	- Health Acute	Ethylene Glycol	99 %	000107-21-1
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Toxicity			
	000107-21-1	Liquid	Plastic/Non-metalic Drum		Ambient		- Health Specific			
		<u>Type</u>			<u>Temperature</u>		Target Organ			
		Pure	Days on Site: 365		Ambient		Toxicity			
DOT: 3 - Flammable and Combustible Liquids	MOBILE REGAL SGT 22	Gallons	600	55	100	0	- Health			
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Reproductive			
	68424-31-7	Liquid	Steel Drum		Ambient		Toxicity			
		<u>Type</u>			<u>Temperature</u>					
					Ambient					
	STEP ONE OIL SOLUABLE CLEANER BY JOHNSON	Gallons	55	55	55	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		Liquid	Steel Drum							
		<u>Type</u>			<u>Temperature</u>					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Plant Equipment	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Hydraulic Oil AW46 <small>CAS No</small>	Gallons	220	120	220	0		Lubricating Base Oil	99 %	
		<small>State</small>	<small>Storage Container</small>		<small>Pressue</small>	<small>Waste Code</small>				
		<small>Liquid</small>	Steel Drum, Other		Ambient					
		<small>Type</small>			<small>Temperature</small>					
		<small>Pure</small>	Days on Site: 365		Ambient					
	Mobile DTE 26 <small>CAS No</small>	Gallons	400	120	400	0		Zinc Alkyl Dithiophosate		68649-42-3
		<small>State</small>	<small>Storage Container</small>		<small>Pressue</small>	<small>Waste Code</small>				
		<small>Liquid</small>	Steel Drum, Other		Ambient					
		<small>Type</small>			<small>Temperature</small>					
		<small>Pure</small>	Days on Site: 365		Ambient					
	Shell Turbo DR46 <small>CAS No</small> 25155-23-1	Gallons	220	120	220	0	- Health Reproductive Toxicity - Health Specific Target Organ Toxicity	Trixylyl Phosphate	100 %	25155-23-1
		<small>State</small>	<small>Storage Container</small>		<small>Pressue</small>	<small>Waste Code</small>				
		<small>Liquid</small>	Steel Drum, Other		Ambient					
		<small>Type</small>			<small>Temperature</small>					
		<small>Pure</small>	Days on Site: 365		Ambient					
	Turbine Oil GST 32 <small>CAS No</small>	Gallons	15000	5500	15000	0				
		<small>State</small>	<small>Storage Container</small>		<small>Pressue</small>	<small>Waste Code</small>				
		<small>Liquid</small>	Steel Drum, Other		Ambient					
		<small>Type</small>			<small>Temperature</small>					
		<small>Pure</small>	Days on Site: 365		Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location R. O. Building	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Hypersperse MDC700	Gallons	400	400	400	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressure</u>	<u>Waste Code</u>				
		Liquid	Tote Bin		Ambient					
		<u>Type</u>			<u>Temperature</u>					
		Mixture	Days on Site: 365		Ambient					
DOT: 8 - Corrosives (Liquids and Solids)	Optisperse HP 54434	Gallons	280	55	280	0	- Health Skin Corrosion	Sodium Hydroxide Caustic Soda	7 %	1310-73-2
Corrosive	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressure</u>	<u>Waste Code</u>	Irritation			
	1310-73-2	Liquid	Tote Bin		Ambient		- Health Respiratory Skin Sensitization			
		<u>Type</u>			<u>Temperature</u>		- Health Serious Eye Damage Eye Irritation			
		Mixture	Days on Site: 365		Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Switchyard	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS
	Sulfur Hexafluoride SF6	Pounds	580	145	580	0	- Health			
	<u>CAS No</u> 2551-62-4	<u>State</u> Gas	<u>Storage Container</u> Other		<u>Pressue</u> Ambient	<u>Waste Code</u>	Aspiration Hazard			
		<u>Type</u> Pure	Days on Site: 365		<u>Temperature</u> Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Transformers in Plant	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Luminol Tri	Gallons	50000	14416	50000	0	- Health Skin	Lubricating Base Oil		
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Corrosion	1,2,3,4-Tetrahydronaphthalene	2 %	119-64-2
		<u>Liquid</u>	Other		Ambient		Irritation			
		<u>Type</u>			<u>Temperature</u>		- Health Serious			
		Pure	Days on Site: 365		Ambient		Eye Damage Eye Irritation			

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center	Chemical Location Various locations	CERS ID 10153109
Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993		Facility ID
		Status Submitted on 1/18/2019 2:21 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Propane	Cu. Feet	250	80	200	0	- Physical	Propane	100 %	74-98-6
	<u>CAS No</u> 74-98-6	<u>State</u> Gas	<u>Storage Container</u> Cylinder		<u>Pressue</u> > Ambient	<u>Waste Code</u>	Flammable - Physical Gas Under Pressure			
		<u>Type</u> Pure	Days on Site: 365		<u>Temperature</u> Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Water Treatment Area	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	CAUSTIC SODA BEANS	Pounds	2000	100	2000	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
		Solid	Bag		Ambient					
		<u>Type</u>			<u>Temperature</u>					
					Ambient					
DOT: 8 - Corrosives (Liquids and Solids)	Optiguard MCA4288	Gallons	165	55	110	0	- Physical Corrosive To Metal	Sodium Sulfite	10 %	7757-83-7
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	- Health Skin Corrosion	Sodium Hydroxide	10 %	1310-73-2
		Liquid	Plastic/Non-metalic Drum		Ambient		- Health Skin Corrosion	Sodium Carbonate	3 %	497-19-8
		<u>Type</u>			<u>Temperature</u>		Irritation	2-Diethylaminoethanol	3 %	100-37-8
		Mixture			Ambient		- Health Serious Eye Damage Eye Irritation			
							- Health Specific Target Organ Toxicity			
	Sodium tripolyphosphate	Pounds	5000	50	5000		- Health Skin Corrosion	Sodium Phosphate, Tribasic	100 %	7758-29-4
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>	Irritation			
	7758-29-4	Solid	Bag		Ambient		- Health Respiratory Skin Sensitization			
		<u>Type</u>			<u>Temperature</u>		- Health Serious Eye Damage Eye Irritation			
		Pure	Days on Site: 365		Ambient		- Health Specific Target Organ Toxicity			
	USG TARRA ALBA	Pounds	4000	100	2000	0				
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressue</u>	<u>Waste Code</u>				
	13397-24-5	Solid	Bag		Ambient					
		<u>Type</u>			<u>Temperature</u>					
					Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location Water Treatment Building	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Calcium Chloride <small>CAS No 10043-52-4</small>	Pounds	6000	50	2500	0		Calcium Chloride	96 %	10043-52-4
		<small>State</small> Solid	<small>Storage Container</small> Bag		<small>Pressue</small> Ambient	<small>Waste Code</small>				
		<small>Type</small> Pure	Days on Site: 365		<small>Temperature</small> Ambient					
	CLOROX BLEECH <small>CAS No</small>	Gallons	50	10	50	0				
		<small>State</small> Liquid	<small>Storage Container</small> Plastic/Non-metalic Drum		<small>Pressue</small>	<small>Waste Code</small>				
		<small>Type</small>			<small>Temperature</small>					
	DYNALENE EG <small>CAS No</small>	Gallons	25	25	25	0				
		<small>State</small> Liquid	<small>Storage Container</small> Plastic/Non-metalic Drum		<small>Pressue</small> Ambient	<small>Waste Code</small>				
		<small>Type</small>			<small>Temperature</small> Ambient					
	Hydrous Calcium Sulfate, Solid <small>CAS No 10101-41-4</small>	Pounds	3000	50	1500	0	- Health Acute Toxicity - Health Respiratory Skin Sensitization	Hydrous Calcium Sulfate, solid	100 %	10101-41-4
		<small>State</small> Solid	<small>Storage Container</small> Bag		<small>Pressue</small> Ambient	<small>Waste Code</small>				
		<small>Type</small> Pure	Days on Site: 365		<small>Temperature</small> Ambient					
	Soda Ash <small>CAS No 497-19-8</small>	Pounds	500	50	250	0	- Health Serious Eye Damage Eye Irritation	Sodium Carbonate	100 %	497-19-8
		<small>State</small> Solid	<small>Storage Container</small> Bag		<small>Pressue</small> Ambient	<small>Waste Code</small>				
		<small>Type</small> Pure	Days on Site: 365		<small>Temperature</small> Ambient					
	Sodium Hypochlorite <small>CAS No 7681-52-9</small>	Gallons	110	55	55	0	- Physical Corrosive To Metal - Health Skin Corrosion Irritation - Health Serious Eye Damage Eye Irritation	Sodium Hypochlorite Sodium Hydroxide	20 % 5 %	7681-52-9 1310-73-2
		<small>State</small> Liquid	<small>Storage Container</small> Plastic/Non-metalic Drum		<small>Pressue</small> Ambient	<small>Waste Code</small>				
		<small>Type</small> Mixture	Days on Site: 365		<small>Temperature</small> Ambient					
	SODIUM PHOSPHATE <small>CAS No</small>	Pounds	200	50	200	0				
		<small>State</small> Solid	<small>Storage Container</small> Can		<small>Pressue</small> Ambient	<small>Waste Code</small>				
		<small>Type</small>			<small>Temperature</small> Ambient					
	Sodium Sulfate, Anyhdrous <small>CAS No 7757-82-6</small>	Pounds	5000	50	5000	0	- Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation	Sodium Sulfate, Anhydrous	99 %	7757-82-6
		<small>State</small> Solid	<small>Storage Container</small> Bag		<small>Pressue</small> Ambient	<small>Waste Code</small>				
		<small>Type</small> Pure	Days on Site: 365		<small>Temperature</small> Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center	Chemical Location West Side of Switchyard	CERS ID 10153109
Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993		Facility ID Status Submitted on 1/18/2019 2:21 PM

DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Hyvolt II <u>CAS No</u> 64742-53-6	Gallons	55	55	35	0	- Health Aspiration Hazard	Severly Hydrotreated Light Naphthenic Distilate Butylated Hydroxytoluene	100 % 0 %	64742-53-6 128-37-0
	Used Oil <u>CAS No</u>	Gallons	250	250	100	500	- Health Carcinogenicity - Health Reproductive Toxicity - Health Skin Corrosion Irritation - Health Respiratory Skin Sensitization - Health Serious Eye Damage Eye Irritation - Health Specific Target Organ Toxicity - Health Aspiration Hazard - Health Germ Cell Mutagenicity	Waste oil water	90 % 10 %	

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location ZD area	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)		
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS CAS No.
	Calcium Chloride Solution	Gallons	2000	2000	1500	0	Calcium Chloride	30 %	10043-52-4	
	<u>CAS No</u> 10043-52-4	<u>State</u> Liquid	<u>Storage Container</u> Aboveground Tank		<u>Pressue</u> Ambient	<u>Waste Code</u>				
		<u>Type</u> Mixture	Days on Site: 365		<u>Temperature</u> Ambient					
	Soda Ash Solution	Gallons	150	150	75	0	Sodium Carbonate	5 %	497-19-8	
	<u>CAS No</u>	<u>State</u> Liquid	<u>Storage Container</u> Aboveground Tank		<u>Pressue</u> Ambient	<u>Waste Code</u>				
		<u>Type</u> Mixture	Days on Site: 365		<u>Temperature</u> Ambient					
	Sodium Sulfate, 10% Solution	Gallons	1000	1000	750	0	Sodium Sulfate	10 %	7757-82-6	
	<u>CAS No</u>	<u>State</u> Liquid	<u>Storage Container</u> Aboveground Tank		<u>Pressue</u> Ambient	<u>Waste Code</u>				
		<u>Type</u> Mixture	Days on Site: 365		<u>Temperature</u> Ambient					

Hazardous Materials And Wastes Inventory Matrix Report

CERS Business/Org. Sutter Energy Center Facility Name Sutter Energy Center 5029 S Township Rd, Yuba City 95993	Chemical Location ZD Area	CERS ID 10153109 Facility ID Status Submitted on 1/18/2019 2:21 PM
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DOT Code/Fire Haz. Class	Common Name	Unit	Quantities			Annual Waste Amount	Federal Hazard Categories	Hazardous Components (For mixture only)			
			Max. Daily	Largest Cont.	Avg. Daily			Component Name	% Wt	EHS	CAS No.
	Hypersperse MDC700	Gallons	500	500	300						
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressure</u>	<u>Waste Code</u>					
		Liquid	Tote Bin		Ambient						
		<u>Type</u>			<u>Temperature</u>						
		Mixture	Days on Site: 365		Ambient						
DOT: 8 - Corrosives (Liquids and Solids)	Sulfuric Acid	Pounds	19722	19722	12000	0	- Health Skin Corrosion	Sulfuric Acid	93 %	<input checked="" type="checkbox"/>	7664-93-9
	<u>CAS No</u> <input checked="" type="checkbox"/> EHS	<u>State</u>	<u>Storage Container</u>		<u>Pressure</u>	<u>Waste Code</u>	Irritation	Water	7 %		7732-18-5
		Liquid	Aboveground Tank		Ambient		- Health Serious				
		<u>Type</u>			<u>Temperature</u>		Eye Damage Eye Irritation				
		Mixture	Days on Site: 365		Ambient						
	ZLD Salt Cake	Tons	40	20	16	288		Arsenic	0 %		7440-38-2
	<u>CAS No</u>	<u>State</u>	<u>Storage Container</u>		<u>Pressure</u>	<u>Waste Code</u>		Salt Cake	99 %		
		Solid	Tote Bin		Ambient	181					
		<u>Type</u>			<u>Temperature</u>						
		Waste	Days on Site: 365		Ambient						

Visual Resources:

VIS-1: All buildings at Sutter Energy Center have been inspected and are found to be in compliance with the permit. Any treatment maintenance will be and has been done with approved paint.

VIS-5: Greenleaf Unit One was under new ownership as of July 1, 2015 and is no longer subject to this condition or the CEC license.

Waste-3: Waste Management Methods

Waste Stream	Type	Planned	Actual
Non-hazardous Solid Waste	Recyclables Non Recyclables	Recycle (off-site) Landfill	Recycle (off-site) Landfill
Hazardous Liquid Waste	Used Oil Oily Water Corrosive Liquid	Recycle (off-site) Off-site disposal company Off-site disposal company	Recycle (off-site) Off-site disposal company Off-site disposal company
Hazardous Solid Waste	Used Oil Filters Oily Rags Universal Waste Arsenic Contaminated Salts & Minerals Non-RCRA HRSG Debris	Recycle (off-site) Off-site disposal company Recycle (off-site) Off-site disposal company Off-site disposal company	Recycle (off-site) Off-site disposal company Recycle (off-site) Off-site disposal company Off-site disposal company

Waste-3 Summary of Management

Hazardous

Waste Type	Planned	Actual
Used Oil	<100 gallons/month	400 gallons/yr
Used Oil Filters	< 1 barrel/month	2 barrels/yr
Absorbent pads/drip pans	< 1 barrel/month	2 barrels
Contaminated PPE	< 1 barrel/month	0
Salt Cake	Occasional	12-15 yard bins/yr
Non-RCRA HRSG debris	Occasional	12 tons

Non-Hazardous

Waste Type	Planned	Actual
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General office/Industrial waste*	2ft ³ / month	95 ft ³ /month**
Empty Containers	<10 barrels/month	0
Salt cake	2.5 tons/day	0

* Waste batteries and fluorescent bulbs are segregated and taken to a local collection facility.

**YSDI empties 7 yard dumpster once per month (approx. half full on average).

TLSN-2: Summary of Complaints and corrective actions regarding interference.

The Sutter Energy Center did not receive any complaints of interference with radio or television signals from operation of the line and related facilities during this reporting period.

TLSN-4: Summary of inspection results and fire protection activities along ROW.

Western Area Power Administration conducted quarterly aerial inspections and periodic ground surveillance of the line.

4) List of post-certification changes approved by the Commission or cleared by the CPM:

2001

- CEC staff revised due date for TSE-1 from 30 days after synchronization to 60 days after synchronization. (e-mail dated 6/21/01)
- Submitted project change request to allow interconnection of facility to Calpine's Montis Niger gas line. (5/1/01, Sutter C01-043)
- Compliance Manager approved submittal of RMP to all agencies at the same time, as opposed to obtaining outside agency approval of RMP prior to submittal of the RMP to the CEC.
- CEC staff revised due date for CLOSURE-1 from 90 days prior first energizing to 60 days prior first energizing.
- CEC staff revised due date for CEMS Monitoring Procedures in AQ-34. Revised due date is 1/9/01.

- Received clarification on the timing for the submittals on TLSN-3, TLSN-5, and TLSN-6. Per CEC e-mail dated 10/3/00, the timing on submittals for these conditions is tied to power being generated at the Sutter plant and sent out over the grid.
- Submitted request (Calpine letter dated 8/8/00, Sutter C00-060) and received approval (CEC letter dated 8/17/00) to place the poles on the pole bases on S. Township Road prior to the burial of the PG&E 12 kV line. Verification that the 12 kV line has been undergrounded will be submitted to the CEC prior to placing the poles on O'Banion Road pursuant to the revised verification section of LAND USE-7.
- Submitted agency requested changes to the air quality amendment, which was previously submitted on 5/16/00 (7/20/00, Sutter C00-057).
- Submitted an amendment to Air Quality Conditions of Certification AQ-32 and AQ-37 (5/16/00, Sutter C00-032). Amendments also submitted to FRAQMD and EPA.
- Submitted request and received approval to extend landscape installation deadline to 11/17/00 pursuant to VIS-4. (4/25/00, Sutter C00-018)
- Submitted short route change to eastern portion of main 20" pipeline route for approval, (Sutter C00-009), and received CEC approval of route change.
- PG&E 6" collection line will be built in Sutter County rather than Colusa County. No pipeline work other than removal of drip lines will occur in Colusa County. PG&E 6" pipeline work in Sutter County does not require permits. Condition LAND USE-3 closed per CEC letter dated 3/29/00.
- There will be only one dehydrator built for the pipeline. Dehydrator description was approved in letter from CEC dated 3/29/00. Will submit ATC from FRAQMD. (PUBLIC HEALTH-1)
- Staff approved pipeline size increase from 16" to 20".
- CEC staff revised the verification Section of BIO-5 to allow for submittal of a Consistency Determination from CDFG, which replaced the Endangered Species MOUs that are no longer being issued.
- CEC revised the verification section of BIO-7 to allow for submittal of Streambed Alteration Agreements after detailed design of the outfall, bridge or pipeline has been completed and before construction of the relevant structure begins.
- Preliminary information on the sanitary waste system has been supplied to Sutter County pursuant to SOILS & WATER-7. Sutter County staff and CEC staff have agreed that this is satisfactory for now, and that detailed information will be submitted at a later date.
- Received CEC approval on a single walled ammonia tank.

2002

- April 1, 2002 submitted request to modify FDOC, AFC, and PSD permits to FRAQMD, CEC, and EPA. Waiting on response.
- April 8, 2002 Soil & Water-1 received verification change to eliminate the requirement to report TDS levels and groundwater levels.

2003

- On June 11, 2003, the Commission issued amended Air Conditions of Certification. These amended Conditions are now consistent with the Feather River Air Quality Management District's limits in the Permit to Operate and reflect the following:

Emissions shall not exceed:

680 lb NO_x per turbine startup.

80 lb/hr NO_x per turbine during each turbine shutdown.

100 lb/hr CO per turbine during each turbine shutdown.

Each turbine startup shall not exceed 360 minutes.

2004

- CEC AQ-32 (11) and Feather River Air Quality Management District Permit to Operate Condition Number 35 were amended in June changing the CO #/startup averaging from 1-hour to 3-hours.
- Waste-3 The Waste Management Plan was revised and submitted to the CEC in September. The revision reflected the change in status of the zero discharge salt cake to a hazardous waste.
- Obtained approval on March 30, 2004 to run two aboveground pipelines between Sutter and Greenleaf Unit 1 to eliminate water treatment equipment at Greenleaf Unit 1. This project has been completed.
- Obtained approval on April 30, 2004 to perform a percolation test to install a septic waste system. To date, this test has not been conducted.

2005

- The Sutter Energy Center requested on September 6, 2005 to discontinue BIO-10(4) avian collision monitoring of the transmission line and heat recovery steam generator stacks.

2006

- On August 2, 2006, the Commission approved the Sutter Energy Center request to discontinue BIO-10(4).

2010

- On July 30, 2010 Sutter Energy Center was issued its Title V Federal Operating Permit and Title IV Acid Rain Permit, FRAQMD Permit No. P13005.

2011

- On May 11, 2011 Sutter Energy Center was issued a variance for total startup and shutdown hours. Variance effective April 1, 2011 to March 31, 2012. FRAQMD Permit No. P13005.

2016

- On September 7, 2016 approved Submittal 2016-0799 requesting to waive certain AQ requirements has been reviewed and found to be ongoing and in compliance. Approved SEC June 7, 2016 letter requesting a source testing waiver for AQ-33, AQ-34, and AQ-35.

2017

- None

2018

- On August 7, 2018, FRAQMD issued the renewed Title V permit.
- On September 21, 2018 the commission approved the modification AQ-32 in the Commission Final Decision to the conditions of SEC's Title V Operating Permit, issued by the Feather River Air Quality Management District, by replacing existing per-unit limits on the number of startup and shutdown hours with combined limits to startup and shutdown hours for both combustion turbine combined cycle units.

5) Missed submittal deadlines:

There were no missed submission deadlines during this reporting period.

6) Filings made to or permits issued by other governmental agencies during the year:

On August 7, 2018, FRAQMD issued the renewed Title V permit and updated Condition 17.

7) Project compliance activities scheduled for 2019:

The RATA testing has been tentatively scheduled for February 27, 2019.

1) Sutter Energy Center CEC Compliance Matrix

Cond. #	Requirements & Task Summary		Action required	Lead Resp.	Agency	Submittal Date	Approval date	Status	Comments
AIR QUALITY									
AQ - 7	The facility shall not discharge from any source such quantities of air contaminants or other materials that cause a public nuisance.	Oper	Include in the quarterly Air Quality Reports the date and time when any accidental release of air contaminants or other materials occur, and the cause of release and measures taken to correct it.	Owner		Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 8	The facility shall not emit particulate emissions from any single source which exceed an opacity equal to or greater than 20% for a period aggregating more than 3 minutes in any 1 hour, excluding uncombined water vapor.	Design, Oper	Include in the Air Quality Report an explanation and the date, time and duration of any violation of this condition.	Owner		Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 9	The facility shall not discharge into the atmosphere from any source particulate matter in excess of 0.3 grains per cubic foot of gas at standard conditions and 12% CO ₂	Design, Oper	Submit to the District and CPM the annual test and specify the level of particulate matter .	Owner		Annual		On going	Annual source testing was conducted March 27-28, 2018.
AQ - 10	Facility shall not discharge in any one hour from any source fumes in total quantities in excess of the amounts as prescribe for and shown in District's Rule 3.3 Table of Allowable Rate of Emission Based on Process Weight Rate.	Design, Oper	Indicate in the Air Quality Report the date, time, and duration of any violation of this condition.	Owner		Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 11	The facility shall not discharge into the atmosphere from any source of emission, any sulfur oxides in excess of 0.2 % by volume collectively calculated as SO ₂ .	Oper	Submit to the District and CPM the annual test and specify the level of sulfur oxides.	Owner		Annual		On going	Annual source testing was conducted March 27-28, 2018.
AQ - 12	Shall not build, erect, install, or use any article, machine, equipment or other contrivance to conceal an emission which would otherwise constitute a violation of the Health and Safety Code or Rules and Regulations of the State of California.	All	Obtain approval from the District and the CPM prior to installing any new equipment that results in releasing air contaminants.	Owner				On going	Refer also to AQ-34 and AQ-36 No new qualifying equipment installed during year.
AQ - 14	The intent and the specific information as listed in AQ-14 regarding shut down of any pollution control equipment shall be report to the Air Pollution Control Officer at least 24 hours prior to the planned shutdown.	Oper	Include in the Air Quality Report , the dates of the equipment maintenance schedule and duration.	Owner		Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 15	Immediately report break down conditions to APCO, violations and corrective actions taken	Oper	Include details in the quarterly Air Quality Report for any breakdown and corrective actions taken.	Owner		Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 16	Submit application for a Federal Operating Permit Title V within 12 months after startup	Oper	Submit a copy of the application to CPM at the time of filing	Owner		Within 12 mths after Ops		Complete	Submitted Title V application on 4/4/02
AQ - 17	Prepare a Toxic Hot Spots Emission Inventory	Oper	Submit to the District and CPM the inventory	Owner		First August after the first full year of operation		Complete	Inventory Plan submitted to CPM and District on August 29, 2002. Emission Inventory Report submitted on June 3, 2003.
AQ - 19	The equipment is subject to the federal NSPS codified at 40 CFR Part 60, Subparts A, Db and Gg . Compliance with all applicable provisions of these regulations is required.	Design, Oper	Submit to the District and CPM a copy of a statement of compliance. In the quarterly Air Quality Reports	Owner		Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 22	ATC not transferable without written approval of APCO		If ownership or location of facility changes , 60 days prior to such action notify in writing, the District, and the CPM of intentions	Owner	CPM/District	60 days before location or ownership change		On going	NA for reporting period.
AQ - 23 & 24	Inspection scope and requirements are listed in AQ-23 & 24.	Oper	Allow reasonable access and make all site logs and plant permits available for inspection to the District, California Air Resources Board (CARB) , and CEC staff	Owner	District CARB CEC Staff	Ongoing		On going	Owner to allow access to District, CARB and CEC Staff at all reasonable times and make information available.

1) Sutter Energy Center CEC Compliance Matrix

Cond. #	Requirements & Task Summary		Action required	Lead Resp.	Agency	Submittal Date	Approval date	Status	Comments
AQ - 29	Use California PUC pipeline quality natural gas.	Oper	Submit to the District and CPM a copy of the monthly natural gas analysis or certification issued by the natural gas distributor.	Owner	CPM/District	Monthly during Ops.		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 30	Basic and Control equipment to be operated and maintained per vendors practices and procedures		Refer to AQ- 14	Owner	NA			On going	
AQ - 31	Maximum heat input allowed to each permitted internal and external combustion emissions unit (CTG-1,CTG-2, Duct Burners-1 and Duct Burners-2).	Design, Oper	Include in the quarterly Air Quality Reports , a summary of hourly/daily fuel consumption. The Jan. AQR shall include information on amount of fuel consumed in previous calendar year.	Owner		Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 32	Definitions, operational limitations, and air emission limitations during facility normal operation, startup and shutdown are given in AQ-33.	Oper	Provide, in the quarterly Air Quality Reports , daily and annual emissions as required in this condition. Include details any violations to NOx & VOC.	Owner		Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
AQ - 35	Source testing shall be performed annually to determine the mass emission rates and concentrations of NOx, CO, VOC, PM10 and SO2 emissions . Startup source tests for VOC shall be conducted every seven years, beginning in 2003.	Oper	Test procedures shall be submitted to the District and CPM for review at least 60 days before the start of commercial operation and any subsequent annual compliance test for any changes to the original procedures. Notify the officials within 7 days before initial operation or each planned source testing.	Owner	CPM/District	14-Apr-03		On going	Annual source testing was conducted March 27-28, 2018.
AQ - 36	Source tests to determine ammonia slip shall be conducted within 90 days after commercial operation and thereafter as required by the APCO.	Design, Oper	Same as those provided in AQ-36	Owner	CPM/District	At request of District		On going	Annual source testing was conducted March 27-28, 2018.
AQ - 39 & 40	1. Requirements for records and logs, inspection and reporting are given in AQ-40. 2. Provide Quarterly Reports to the District and CPM. 3. Records & logs are to be maintained for 5 years.	Oper	Refer to AQ-40 & 41. Within 30 days of the end of the calendar quarter, provide the District and CPM the required data.	Owner	CPM/District	Quarterly		On going	Quarterly reports submitted in April, July, October 2018 & January 2019.
LAND USE									
Land Use 4	Pave a new runway to allow for year round use by members of the local agricultural industry.	Design, Constr.	30 days prior to the start of construction of the runway, submit to the CPM a copy of the letter from the Sutter County Board of Supervisors stating the specific of the new runway as agreed upon.	Owner	Sutter County Bd of Supervisors approval of runway location	January 30, 2003 (County to CEC)	13-Mar-03	Complete	January 30, 2003 letter from Dennis Nelson, Sutter County Board of Supervisors to CPM states that Calpine has met all of its requirements with the County and the Board of Supervisors recommends that no further action is necessary to comply with this condition. Received concurrence from CEC in letter dated March 13, 2003.
BIOLOGICAL RESOURCES									
Bio - 4	Develop and implement a Worker Environmental Awareness Program . A protocol of the training program is provided in Bio - 4.	Ops	Keep signed statements for active operational employees on file and for at least six months after their termination.	Owner	CPM	Ongoing		On going	Employees and Contractors training records are kept on file.
Bio - 8	Eliminate wastewater discharge as described in Condition SOILS & WATER-2	Ops		Owner	CPM	Annual		Complete	Grimes Project - Completed

1) Sutter Energy Center CEC Compliance Matrix

Cond. #	Requirements & Task Summary		Action required	Lead Resp.	Agency	Submittal Date	Approval date	Status	Comments
Bio - 10	Develop a monitoring plan to determine impacts to birds from avian collision and/or electrocutions on transmission lines an HRSG stacks.	Ops	Conduct avian collision monitoring and submit annual report to the CPM and Western.	Owner	CPM	Pending		Discontinued	On August 2, 2006, the Commission approved the Sutter Energy Center's request to discontinue BIO-10(4) Avian Collision monitoring.
Bio - 11	Develop and implement a Wetland Monitoring Program to ensure the wetlands remaining onsite are not degraded.	Ops	Conduct wetlands monitoring and submit annual report to CPM and Western.	Owner	CPM	30-Sep-03		Discontinued	On February 21, 2006, the Commission approved the Sutter Energy Center's request to discontinue BIO-11 Wetland Monitoring Program.
Noise									
NOISE - 2	Throughout the construction and operation, document, investigate, evaluate and attempt to resolve all project related noise complaints.	Ops	Within 30 days of receiving a noise complaint, file a copy of the Noise Complaint Resolution Form with the Sutter County Community Services Department and with the CPM.	Owner	CPM	Monthly		On going	As requested by the CEC, Steve Munro, only submit reports when complaints are received. Two complaints in 2018 and they were submitted within 30 days.
TRAFFIC & TRANSPORTATION									
TRANS - 4	Require all truck deliveries using Highway 99 to use Oswald Road and South Township Road to the site. All truck deliveries using Highway 20 to use George Washington to Oswald Road and then South Township Road to the site.	Ops	Include this specific route in its contracts for truck deliveries and maintain copies onsite for inspection by the CPM.	BPC/ Owner	N/A		N/A	On going	Approved routes included with purchase orders.
SOIL AND WATER RESOURCES									
Soil & Water - 1	SPP will utilize a 100 percent dry cooling condensers.	Design, Oper	Provide to the CPM in the Annual Compliance Report , a record of the average month groundwater consumption.	Owner				On-going	Included in this report.
Soil & Water - 2	No project wastewater streams shall be discharged to surface water.	Design, Oper	Provide to the CPM in the Annual Compliance Report , the volume and method of disposal for all wastewater streams	Owner		Annual		On-going	Sanitary waste is trucked off-site by septic company. Plant process is zero discharge. Grimes Project completed - no wastewater is discharged.
HAZARDOUS MATERIAL HANDLING									
HAZ - 1	Shall not use any hazardous material in reportable quantities that is not listed in Table 5.8-4 and 5.8-5 of the AFC, unless approved in advance by the CPM.	All	Provide, in the Annual Compliance Report, a list of hazardous material contained at the facility.	Owner		Annual		On-going	Provide list of hazardous materials at the facility in each Annual Compliance Report. Code of Federal Regulations, Part 40, Subpart F, Section 68.130. List attached.
WASTE MANAGEMENT									
Waste-2	Notify the CPM of any waste management-related enforcement action taken.	Ops	Notify the CPM in writing within 10 days of being aware of an impending enforcement action.	Owner				Will Start if Occurs	No occurrences in 2018.
Waste-3	Prepare and submit construction and operational waste management plans to the officials	Ops	Document how actual waste management methods in the Annual Compliance Reports.	Owner	SC/CPM	Annual		On-going	Document actual waste management methods in Annual Compliance Report. Report attached.
FACILITY DESIGN									
GEN-6	Prior to any activity requiring special inspections assign a qualified and certified special inspector responsible for UBC requirements or weld inspections	Oper	15 days prior to activities, submit qualifications of special inspector to CBO with copy to CPM . Submit to CPM in Monthly Compliance Report the CBO's approval. Notify CPM of any replacement.	BPC	CBO			On-going	NA for reporting period.
Civil									
CIVIL-2	If unforeseen soil or geologic conditions are identified. Stop all work. Submit modified plans, specs, etc to CBO and obtain approval prior to resuming construction.	Oper	Notify CPM within 5 days when work is stopped. Obtain CBO approval of modifications. Copy CPM within 5 days of CBO approval.	BPC		Within 5 days of work stoppage		On-going	NA for reporting period.

1) Sutter Energy Center CEC Compliance Matrix

Cond. #	Requirements & Task Summary		Action required	Lead Resp.	Agency	Submittal Date	Approval date	Status	Comments
CIVIL-3	Perform inspections in accordance with UBC 1997 Chap 1, 17 and App Chap 33. Report discrepancies to CBO and CPM.	Oper	Submit to CBO and CPM within 5 days any NCRs and resolutions within 5 days. Submit to CPM in Monthly Compliance Report lost of NCR's for that month.	BPC	CBO/CPM	Within 5 days of NCR transmit to CBO & CPM NCR & resolutions		On-going	NA for reporting period.
Transmission Line Safety & Nuisance									
TLSN-2	Identify and correct all complaints of interference w/ radio and TV signals from oper. of line and facilities. Maintain written records of complaints and corrective actions for 5 yrs.		Summarize complaints and corrective actions in Annual Compliance Report to CPM.	Owner	CPM	Annual Compliance Report		Will Start if Occurs	No complaints received in 2018.
TLSN-4	Ensure transmission line ROW is kept free of combustible materials as per Section 4292 of Public Resources Code and Section 1250 of Calif. Code of Regs.		Provide summary of inspection results and any fire prevention activities along the ROW in Annual Compliance Report.	Owner	CPM	Annual Compliance Report		On-going	On-going by SEC and WAPA.
Closure									
Closure-2	In the event of unplanned and/or sudden facility closure, notify the CPM and other responsible agencies by telephone or fax within 24 hours.		Submit letter to CPM describing the situation, expected duration, and planned actions to protect health, safety, and the environment within 7 days after unplanned closure.	Owner	CPM/ County			Will Start if Occurs	None
Closure-3	In event of a planned closure, at least 12 months (or other mutually agreed-upon period of time) prior to commencing facility closure activities, file a proposed facility closure plan with the CPM for review and approval.		12 months prior to planned closure file facility closure plan with CPM	Owner	CPM	12 months prior closure.		Will Start if Occurs	None
VISUAL RESOURCES									
VIS - 1	Prior to first electricity generation, treat the project structures, buildings, and tanks with non-reflective colors.	Oper	60 days prior to ordering any structures that are to be color treated during manufacture, submit treatment plan to the CPM for review and approval. 30 days prior to first electricity generation, notify the CPM that all treated structures are ready for inspection.	Owner	CPM--60 days prior to ordering any structure	14-May-99 Sutter C99-010 23-Jul-99 Sutter C99-044 20-Mar-01 (e-mail)	23-Jul-99 2-Aug-99 7/17/01	Complete	6/21/99 met with CEC staff at site. Staff approved both Morin Khaki and Centria Surrey Beige. Painting schedule and maintenance procedure approved on 8/2/99. ### 3/20/01 sent e-mail confirming that all pre-engineered buildings and factory coated structures onsite are colored the approved color. ### CEC conducted inspection on 7/17/01. Color approved.
VIS - 3	Develop a exterior lighting plan following the specific requirements given in VIS-3, pp.131.	Oper	60 days before ordering the exterior lighting, provide the lighting plan to the CPM and to the Sutter County Community Services Department for review and approval.	Owner	CPM	14-Sep-00 Sutter C00-065 13-Oct-00 (to CBO) 14-Nov-00 Sutter C00-076 (sent to T. Last) 14-Dec-00 Sutter C00-079 5-Dec-01 (e-mail)	4-Jan-01 (SC approval) 01-Feb-01 (CEC approval)	Complete	CEC and County have approved Sutter lighting plan submittals. ## CEC conducted inspection on 7/24/01. There were lights on Sutter and Greenleaf that need to be modified. Another inspection was conducted on 10/30/01 w/ Tom Miller. The modifications were completed, and notice of completion was sent to S. Munro on 12/5/01. CEC verbal approval by Steve Munro on 2/13/03.
VIS - 5	Have the Greenleaf 1 facilities painted to match the colors of the SPP. Specific requirements are given in VIS-5, pp 134-135.	Oper	60 days prior to electricity generation at SPP, submit a treatment plan for Greenleaf 1 to the CPM for review and approval.	Owner	CPM	29-Sep-00 Sutter C00-066 2-Nov-00 (e-mail) 6-Nov-00 (e-mail) 9-Jan-01 Sutter C01-003 11-Jan-01 (e-mail) 24-Sep-01 (e-mail)	Confirmed w/ Munro on 5/17/01 that GL painting plan had been approved.	Complete	Addendum to the painting plan confirming e-mail and telephone conversations regarding Greenleaf painting was submitted on 1/9/01. On 1/11/01 sent e-mail confirming that Greenleaf painting is complete except for two warehouses that Bechtel will paint. ### CEC conducted inspection on 7/17/01. On 9/24/01 submitted e-mail with photographs of the two painted Greenleaf warehouses (these warehouses hadn't yet been painted when CEC was here for inspection). CEC final approval pending. CEC verbal approval by Steve Munro on 2/13/03. Greenleaf Unit One was under new ownership as of July 1, 2015.