phelps

Phelps Dunbar LLP
Canal Place
365 Canal Street
Suite 2000
New Orleans, LA 70130
504 566 1311

NATHAN G. HUNTWORK
Partner
504 584 9203
nathan.huntwork@phelps.com

May 14, 2021

12922-0336
RECEIVED
MAY 14 2021
LA Public Service Commission

VIA HAND DELIVERY

Mr. Brandon Frey
Executive Secretary
Louisiana Public Service Commission
Galvez Building, 12th Floor
602 North Fifth Street
Baton Rouge, LA 70802

Re: PROPOSED CAPTION: In re: Report Concerning Winter Storms Uri and Viola Maximum Generation Event (LPSC Docket No. X-)

Dear Mr. Frey,

On behalf of Cleco Power LLC ("Cleco Power"), enclosed are one (1) original and three (3) copies of its Report Concerning Winter Storms Uri and Viola Maximum Generation Event. Cleco Power has proposed the above-referenced caption for LPSC consideration. Please retain the original and two (2) copies for your files and return one (1) date-stamped copy of the filing to us.

Cleco Power is making this filing pursuant to the terms Section II(E) of the Monitoring Plan established pursuant to the conditions of Commission Order No. U-34501, issued June 30, 2020. Pursuant to Section II(E)(4) of the Monitoring Plan, the LPSC is to establish a separate X docket for the report for the particular maximum generation event at issue, and file this report in that X docket. Pursuant to Section II(E)(5), notice of the filing shall be published in the next available bulletin. In addition, pursuant to the Order and Monitoring Plan, Cleco Power is serving a copy of the filing on the service list of LPSC Docket No. U-34501 as of July 1, 2020. Lastly, because the report does not contain Highly Sensitive Protected Materials, Cleco Power is not providing a proposed confidentiality agreement as part of this filing (which would otherwise be provided under Section II(E)(6) of the Monitoring Plan).

ROUTE TO			ROUTE FROM
DEPT. Legal	DATE 5/14	DEPT.	
DEPT. Bill	DATE 5/25	DEPT.	
DEPT.	DATE	DEPT.	
DEPT.	DATE	DEPT.	

F21-60785

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

Sincerely,

Nathan G. Huntwork
Counsel for Cleco Power LLC

NGH/cb
Enclosures

cc: Docket U-34501 Service List
Daniel T. Pancamo
Collin Buisson

CERTIFICATE OF SERVICE

I hereby certify that I have this 14th day of May, 2021, served copies of the referenced filing upon all known parties of this proceeding, by overnight courier delivery, hand delivery, or by electronic mail.

Nathan G. Huntwork
LA Bar Roll No. 31789

BEFORE THE
LOUISIANA PUBLIC SERVICE COMMISSION

CLECO POWER LLC, **DOCKET NO. X-_____**
EX PARTE

IN RE: REPORT CONCERNING WINTER STORMS
URI AND VIOLA MAXIMUM GENERATION EVENT

Cleco Power LLC ("Cleco Power"), through undersigned counsel, hereby submits this report concerning the February, 2021 Winter Storms Maximum Generation Event to the Staff of the Louisiana Public Service Commission ("LPSC" or the "Commission"), as required by Section II(E) of the Monitoring Plan established pursuant to the conditions of Commission Order No. U-34501, issued June 30, 2020, which provide, in pertinent part:

> For each MISO Maximum Generation Event ("MaxGen Event") applicable to the Cleco Power Local Balancing Authority that affects its operations, Cleco Power shall file with the Commission and publicly provide, with reasonable best effort, subject to appropriate confidentiality designations, a report containing the following information:

A) An overview of the MaxGen Event

In February 2021, Cleco Power's service territory experienced extreme and unprecedented winter weather in the form of Winter Storms Uri and Viola. These storms resulted in damage to Cleco Power's distribution and transmission assets; electricity generation supply shortages; and natural gas supply shortages and increased wholesale prices of natural gas in the United States, primarily due to prolonged freezing temperatures. In response to these events, the Midcontinent Independent System Operator, Inc. ("MISO") declared a MaxGen Event spanning from February 15, 2021, at 3:00 P.M. CST until February 19, 2021 at 10:00 A.M. CST. MISO declares MaxGen Events when demand for power exceeds supply to such a degree that controlled outages are needed in order to prevent a wider and more catastrophic blackout caused by system overload.

B) A description of the timing and duration of the MaxGen Event

On February 14, 2021, Winter Storm Uri reached Louisiana, resulting in power outages for approximately 11,000 of Cleco Power's electric customers located primarily in south Louisiana. By February 17, 2021, power was restored to 100% of customers who could receive power. On February 17, 2021, Winter Storm Viola reached Louisiana, resulting in power outages for approximately 43,000 of Cleco Power's electric customers located primarily in central and south Louisiana. By February 22, 2021, power was restored to 100% of customers who could receive power.

As noted above, MISO declared a MaxGen Event beginning at 3:00 P.M. CST on February 15, 2021, until 10:00 A.M. CST on February 19, 2021. On February 16, 2021, MISO notified Cleco Power that extremely cold temperatures were causing an increase in demand for power, which resulted in an overload of the power grid. These energy and capacity shortages necessitated that MISO implement controlled outages in certain of its service areas. In response, and as described further below, this notice from MISO required that Cleco Power curtail interruptible and firm load for limited periods of time.

C) An explanation of the causes of the MaxGen Event

Due to the extreme freezing temperatures caused by Winter Storms Uri and Viola, the demand for energy in MISO surged. Cleco Power was notified by MISO that this increase in demand for energy resulted in an overload of the electric grid. To help protect the stability of the electric grid and prevent prolonged and catastrophic outages, MISO instructed Cleco Power to reduce demand by initiating periodic outages to customers in its service territory. The periodic outages were minimal and suspended within one hour of initiation at the direction of MISO, because the energy shortage was no longer threatening the reliability of the grid.

D) The aggregate MW of Cleco Power's planned generation outages and transmission outages during the MaxGen Event

The St. Mary Clean Energy Center was scheduled for a planned outage (February 7 – 28, 2021). However, the unit was placed into a forced outage in late January to resolve a mechanical issue. The projected duration of the forced outage resulted in Cleco Power and Cabot Corporation ("Cabot") starting their respective planned outage activities early. The final three days of Cleco Power's outage activities overlapped with three days (February 15-18) from the original planned outage schedule. The Cabot facility did not complete its scheduled activities until after Winter Storms Uri and Viola. It should be noted that the St. Mary Clean Energy Center cannot operate while the Cabot facility is shutdown, as the waste heat from Cabot's facility is the fuel source for the St. Mary Clean Energy Center.

The St. Mary Clean Energy Center generates 47 MW (ICAP) of capacity. The outage did not contribute to reliability and/or deliverability problems during Winter Storms Uri and Viola. The St. Mary Clean Energy Center returned to service on February 26, 2021.

E) The aggregate MW of Cleco Power's forced (or unplanned) generation outages and transmission outages during the MaxGen Event

Please see Attachment A to this filing for a detailed description of Cleco Power's generation outages during the MaxGen Event. Two of Cleco Power's 138 kV transmission lines experienced outages during the MaxGen Event:

A. NAME/ LOCATION/ SIZE	B. LENGTH OF LINE (Circuit length)	C. LEVEL	D. SPECIFIC CAUSE	E. TIME SPAN	F. CONTRIBUTED TO RELIABILITY PROBLEMS?	G. Expected return or actual return to service
Hopkins-Morbihan	7.459 miles	Outage	A tree fell on the line	Feb 15, 2021 6:39 to 14:25 (7 hrs 46 mins)	No	Actual Feb 15, 2021 12:25
Hopkins – Patoutville	10.646 miles	Outage	Downed static wire near structure	Feb 17, 2021 9:15 to 11:19 (2 hrs 4 mins)	No	Actual Feb 17, 2021 11:19

F) The aggregate MW of Cleco Power interruptible customer load interrupted or curtailed by Cleco Power during the MaxGen Event

Cleco Power curtailed a combined total of 12 MW of interruptible customer load to two separate customers during the MaxGen Event.

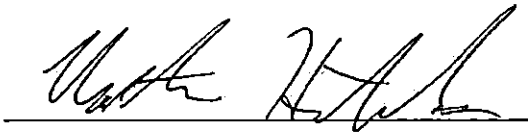
G) The aggregate MW of Cleco Power firm customer load interrupted or curtailed by Cleco Power during the MaxGen Event

Pursuant to load shed orders from MISO, Cleco Power curtailed firm load in an aggregate amount of 153.2 MW during the MaxGen Event. Please see also Cleco Power's response to LPSC 1-13 in the undocketed 2021 Winter Storm Event matter.

H) An explanation of any lessons learned and/or actions to take to minimize the likelihood of a future MaxGen Event driven by the same or similar causes

During Winter Storms Uri and Viola, Cleco Power worked with both MISO and the LPSC to maintain and restore service as quickly as possible. Cleco Power continues to study the impacts of Winter Storms Uri and Viola and will continue to analyze best practices for similar situations in the future.

Respectfully submitted,



By: Nathan G. Huntwork (Bar Roll No. 31789)
Daniel T. Pancamo (Bar Roll No. 19726)
Collin Buisson (Bar Roll No. 38146)
Phelps Dunbar LLP
365 Canal Street, Suite 2000
New Orleans, Louisiana 70130-6534
Telephone: (504) 566-1311
Fax: (504) 568-9130
Email: nathan.huntwork@phelps.com
dan.pancamo@phelps.com
collin.buisson@phelps.com

Record Number	Power Plant Name	Plant Location (City)	Plant Location (State)	Generating Unit Name	EIA Entity ID	EIA Plant Number	EIA Gen ID	GADS Unit Code	GADS Utility Code	GO/GOP NCRID	GO/GOP Name	Joint Owner Name	RC/BA	Primary Fuel Type	Alternate Fuel Type	Unit Type	Pipeline/Gas Supplier	Type of Fuel Supply Contract
1	Coughlin Power Station	St. Landry	LA	CLEC.CPS6	3265	1396	U6 CT, 6	801	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
2	Coughlin Power Station	St. Landry	LA	CLEC.CPS6	3265	1396	U6 CT, 6	801	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
3	Coughlin Power Station	St. Landry	LA	CLEC.CPS7	3265	1396	U7CT, U72, 7	802	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
4	Coughlin Power Station	St. Landry	LA	CLEC.CPS7	3265	1396	U7CT, U72, 7	802	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
5	Coughlin Power Station	St. Landry	LA	CLEC.CPS7	3265	1396	U7CT, U72, 7	802	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
6	Coughlin Power Station	St. Landry	LA	CLEC.CPS7	3265	1396	U7CT, U72, 7	802	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
7	Coughlin Power Station	St. Landry	LA	CLEC.CPS7	3265	1396	U7CT, U72, 7	802	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
8	Coughlin Power Station	St. Landry	LA	CLEC.CPS7	3265	1396	U7CT, U72, 7	802	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
9	Coughlin Power Station	St. Landry	LA	CLEC.CPS7	3265	1396	U7CT, U72, 7	802	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Combined Cycle	Pine Prairie Energy Center (PPEC)	Firm
10	Dolet Hills Power Station	Mansfield	LA	CLEC.DPS	3265	51	1	106	708	CPWR	CPWR	Northeast Texas Elect Coop, Inc; Oklahoma Municipal Power Authority; Southwestern Electric Power Co	Midcontinent Independent System Operator (MISO)	Lignite		Fossil Steam	Enlink Midstream LLC	Firm
11	Dolet Hills Power Station	Mansfield	LA	CLEC.DPS	3265	51	1	106	708	CPWR	CPWR	Northeast Texas Elect Coop, Inc; Oklahoma Municipal Power Authority; Southwestern Electric Power Co	Midcontinent Independent System Operator (MISO)	Lignite		Fossil Steam	Enlink Midstream LLC	Firm
12	Dolet Hills Power Station	Mansfield	LA	CLEC.DPS	3265	51	1	106	708	CPWR	CPWR	Northeast Texas Elect Coop, Inc; Oklahoma Municipal Power Authority; Southwestern Electric Power Co	Midcontinent Independent System Operator (MISO)	Lignite		Fossil Steam	Enlink Midstream LLC	Firm
13	Evangeline Energy Center	Boyce	LA	CLEC.MPS3	3265	6190	3	650	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Petroleum Coke	Coal	Fluidized Bed Combustion	Trunkline Gas Transmission (TGC)	Firm
14	Evangeline Energy Center	Boyce	LA	CLEC.MPS3	3265	6190	3	650	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Petroleum Coke	Coal	Fluidized Bed Combustion	Trunkline Gas Transmission (TGC)	Firm
15	Evangeline Energy Center	Boyce	LA	CLEC.MPS3	3265	6190	3	650	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Petroleum Coke	Coal	Fluidized Bed Combustion	Trunkline Gas Transmission (TGC)	Firm
16	Evangeline Energy Center	Boyce	LA	CLEC.MPS1	3265	6190	1	104	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Fossil Steam	Trunkline Gas Transmission (TGC)	Firm
17	St. Mary Energy Center	Franklin	LA	CLEC.SPS1	3265	60610	1	810	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Waste Heat		Co-Gen Blocks	None	Firm
18	St. Mary Energy Center	Franklin	LA	CLEC.SPS1	3265	60610	1	810	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Waste Heat		Co-Gen Blocks	None	Firm
19	St. Mary Energy Center	Franklin	LA	CLEC.SPS1	3265	60610	1	810	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Waste Heat		Co-Gen Blocks	None	Firm
20	Teche Power Station	Baldwin	LA	CLEC.TPS4	3265	1400	4	310	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Gas Turbine	Columbia Gas Transmission (CGT)	Firm
21	Teche Power Station	Baldwin	LA	CLEC.TPS3	3265	1400	3	103	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Fossil Steam	Columbia Gas Transmission (CGT)	Firm
22	Teche Power Station	Baldwin	LA	CLEC.TPS3	3265	1400	3	103	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Fossil Steam	Columbia Gas Transmission (CGT)	Firm
23	Teche Power Station	Baldwin	LA	CLEC.TPS3	3265	1400	3	103	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Fossil Steam	Columbia Gas Transmission (CGT)	Firm
24	Teche Power Station	Baldwin	LA	CLEC.TPS3	3265	1400	3	103	708	CPWR	CPWR	None	Midcontinent Independent System Operator (MISO)	Gas		Fossil Steam	Columbia Gas Transmission (CGT)	Firm

Record Number	Power Plant Name	Event Type: Forced Derate - (FD), Maintenance Derate - (MD), Planned Derate - (PD), Forced Outage - (FO), Maintenance Outage - (MO), Planned Outage - (PO), Startup Failure - (SF)	Type of Unit Trip	Event Start Date	Event Start Time	Event End Date	Event End Time	Time Zone	MW Rating (Nameplate)	Net Output (MW)	MW Outaged or Derated	Event Cause
1	Coughlin Power Station	FD		2/16/2021	2:00:00 AM	2/16/2021	1:36:00 PM	Central	264	251.8	81.8	Frozen Transmitter
2	Coughlin Power Station	FO	Operator Initiated	2/16/2021	1:36:00 PM	2/16/2021	5:17:00 PM	Central	264	251.8	251.8	Frozen Transmitter
3	Coughlin Power Station	FD		2/15/2021	4:30:00 AM	2/15/2021	5:09:00 AM	Central	511	485.8	255.8	Elevated Exhaust Pressure
4	Coughlin Power Station	FO	Automatic Trip	2/15/2021	5:09:00 AM	2/15/2021	10:30:00 AM	Central	511	485.8	485.8	Frozen Transmitter
5	Coughlin Power Station	FD		2/15/2021	10:30:00 AM	2/15/2021	12:48:00 PM	Central	511	485.8	255.8	Generator Circuit Breaker Position/Indication Mismatch
6	Coughlin Power Station	FO	Automatic Trip	2/15/2021	12:48:00 PM	2/15/2021	6:30:00 PM	Central	511	485.8	485.8	Frozen Air Valve
7	Coughlin Power Station	FD		2/15/2021	8:52:00 PM	2/15/2021	9:39:00 PM	Central	511	485.8	235.8	Frozen Transmitter
8	Coughlin Power Station	FO	Automatic Trip	2/15/2021	9:39:00 PM	2/17/2021	2:41:00 PM	Central	511	485.8	485.8	Frozen Caustic Line
9	Coughlin Power Station	FD		2/17/2021	2:41:00 PM	2/17/2021	9:08:00 PM	Central	511	485.8	255.8	Frozen Line
10	Dolet Hills Power Station	FD		2/12/2021	11:14:00 AM	2/15/2021	3:40:00 AM	Central	650	645.3	390.3	Lack of Fuel
11	Dolet Hills Power Station	FD		2/15/2021	3:40:00 AM	2/16/2021	2:25:00 AM	Central	650	645.3	476.3	Lack of Fuel
12	Dolet Hills Power Station	FD	Operator Initiated	2/16/2021	2:25:00 AM	2/26/2021	12:00:00 AM	Central	650	645.3	645.3	Lack of Fuel
13	Evangeline Energy Center	FO	Automatic Trip	2/16/2021	6:31:00 AM	2/17/2021	8:00:00 PM	Central	641	624.7	624.7	Frozen Transmitter
14	Evangeline Energy Center	FD		2/18/2021	7:15:00 PM	2/20/2021	12:34:00 AM	Central	641	624.7	364.7	Tube Leak
15	Evangeline Energy Center	FD		2/20/2021	12:34:00 AM	2/21/2021	11:16:00 AM	Central	641	624.7	364.7	Coupling Failure
16	Evangeline Energy Center	FO	Automatic Trip	2/16/2021	3:54:00 PM	2/16/2021	5:14:00 PM	Central	440	416.2	416.2	Frozen Line
17	St. Mary Energy Center	FO		1/24/2021	1:33:00 AM	2/15/2021	2:00:00 PM	Central	50	47.3	47.3	Boiler Feed Pump Failure
18	St. Mary Energy Center	PO	Operator Initiated	2/15/2021	2:00:00 PM	2/18/2021	6:05:00 PM	Central	50	47.3	47.3	Planned Outage
19	St. Mary Energy Center	FO		2/18/2021	6:05:00 PM	2/26/2021	11:10:00 AM	Central	50	47.3	47.3	Lack of Fuel
20	Teche Power Station	FO	Automatic Trip	2/17/2021	9:33:00 AM	2/17/2021	10:16:00 AM	Central	33	34.0	34.0	Low Gas Pressure
21	Teche Power Station	FD		2/16/2021	6:10:00 AM	2/16/2021	10:35:00 AM	Central	359	326.6	26.6	Low Gas Flow
22	Teche Power Station	FO	Automatic Trip	2/17/2021	8:31:00 AM	2/18/2021	4:32:00 AM	Central	359	326.6	326.6	Turbine Vibration
23	Teche Power Station	FD		2/18/2021	4:32:00 AM	2/19/2021	9:38:00 PM	Central	359	326.6	261.6	Lack of Water
24	Teche Power Station	FD		2/19/2021	9:38:00 PM	2/20/2021	11:59:00 AM	Central	359	326.6	236.6	Lack of Water

Record Number	Power Plant Name	Explanation of Cause
1	Coughlin Power Station	Unreliable deaerator level control due to instrument sensing lines freezing from the extremely low temperatures and the duration thereof. The deaerator sensing lines has functional heat tracing installed that consists of two zones; one for the tubing between the transmitters and hard piping, and one for the hard piping between the tubing and the vessel. The freezing occurred at the juncture between the two zones, which is inside an insulated and heated enclosure, but the protection was not adequate for the severe cold weather experienced during this event.
2	Coughlin Power Station	Loss of throttle pressure indication resulting in high main steam pressure due to frozen throttle pressure transmitter sensing lines from the extremely low temperatures and the duration thereof. The throttle pressure transmitters had heat tracing installed. However, an intermittent short circuit developed in a connector, which prevented consistent, proper operation. The short circuit was identified and repaired to return the heat tracing to normal service.
3	Coughlin Power Station	Elevated exhaust pressure believed to be caused by excessive mass flow through the combustion turbine due to the extreme cold/dense air from the extremely low temperatures and the duration thereof. However, the root cause of the high exhaust pressure trip on 7-2 CT has not been confirmed and although higher than normal mass flow through the turbine was experienced due to extreme cold/dense air, the MW output had not yet reached its programmed limits.
4	Coughlin Power Station	Loss of feedwater flow due to frozen deaerator level sensing lines from the extremely low temperatures and the duration thereof. The deaerator sensing lines has functional heat tracing installed that consists of two zones; one for the tubing between the transmitters and hard piping, and one for the hard piping between the tubing and the vessel. The freezing occurred at the juncture between the two zones, which is inside an insulated and heated enclosure, but the protection was not adequate for the severe cold weather experienced during this event.
5	Coughlin Power Station	After the trip of Unit 7 steam turbine and 7-1 combustion turbine at 5:09, the 7-1 generator circuit breaker indication did not change states to indicate open, though the breaker did function correctly. This prevented any attempt to return 7-1 combustion to service before Cleco Apparatus personnel could resolve the issue with proper generator circuit breaker indication.
6	Coughlin Power Station	During the attempted restart of 7-2 combustion turbine, the pneumatic actuator for the rotor air cooler bypass valve malfunctioned, which caused an automatic unload/shutdown of the combustion turbine.
7	Coughlin Power Station	Multiple attempts were made to restart Coughlin Unit 7 but frozen main steam flow transmitter sensing lines and low condensate storage levels prevented an immediate successful return to service. The low condensate storage levels were due to the inability to operate the water plant for a period of time, due to frozen chemical feed lines. This was exacerbated by the extended startup efforts on Coughlin Unit 7, which requires a substantial volume of condensate for the venting of steam. Additionally, operational difficulties on Coughlin Unit 6, associated with manual level control of the deaerator and hotwell, caused higher than normal condensate makeup rates, which extended the time necessary to recover condensate storage to an acceptable level for startup of Coughlin Unit 7.
8	Coughlin Power Station	Multiple attempts were made to restart Coughlin Unit 7 but frozen main steam flow transmitter sensing lines and low condensate storage levels prevented an immediate successful return to service. The low condensate storage levels were due to the inability to operate the water plant for a period of time, due to frozen chemical feed lines. This was exacerbated by the extended startup efforts on Coughlin Unit 7, which requires a substantial volume of condensate for the venting of steam. Additionally, operational difficulties on Coughlin Unit 6, associated with manual level control of the deaerator and hotwell, caused higher than normal condensate makeup rates, which extended the time necessary to recover condensate storage to an acceptable level for startup of Coughlin Unit 7.
9	Coughlin Power Station	During the Unit 7 startup, multiple valves and lines on IP Feedwater pumps had to be thawed before placing the pumps in service. Thawing of 7-1 IPFWP occurred in parallel with the previous event. This event represents the delay in placing the second combustion turbine in service while thawing the valves/lines on the second IPFWP.
10	Dolet Hills Power Station	Lignite frozen in the fuel silos due to the extremely low temperatures and the duration thereof. The fuel silos are completely exposed to weather coming from the west.
11	Dolet Hills Power Station	Lignite frozen in the fuel silos due to the extremely low temperatures and the duration thereof. The fuel silos are completely exposed to weather coming from the west.
12	Dolet Hills Power Station	Lignite frozen in the fuel silos due to the extremely low temperatures and the duration thereof. The fuel silos are completely exposed to weather coming from the west.
13	Sterlie Energy Center	Moisture froze in the transmitter drain lines due to extremely low temperatures and the duration thereof.
14	Sterlie Energy Center	Tube riser failed at the weld where the riser is attached to the header
15	Sterlie Energy Center	When rotating the ID Fan rotor from standstill the torque applied on the starting motor coupling caused it to fail
16	Sterlie Energy Center	Moisture in the instrument air supply froze due to extremely low temperatures and the duration thereof.
17	St. Mary Energy Center	Both boiler feed pumps were out of service and was waiting on a new pump to arrive onsite.
18	St. Mary Energy Center	Unit and coresponding Cabot Plant was already in an outage.
19	St. Mary Energy Center	Lack of heat input into the HRSG due to the Cabot Plant being in an outage.
20	Teche Power Station	The gas pressure regulator needed to be adjusted.
21	Teche Power Station	Gas control valve in the gas yard did not switch fully over to remote control
22	Teche Power Station	The high vibration is believed to have been caused by a "thermally" induced rub after a significant & rather quick dispatched decrease in unit load.
23	Teche Power Station	The water district system was experiencing a large demand for water due to customers who were running their water to prevent lines from freezing. In addition, there were several leaks on the system caused by busted lines throughout the district's territory.
24	Teche Power Station	The water district system was experiencing a large demand for water due to customers who were running their water to prevent lines from freezing. In addition, there were several leaks on the system caused by busted lines throughout the district's territory.

Record Number	Power Plant Name	Event Description (Provide Summary of Event)	Equipment or Component Involved	Plant System Containing Equipment or Component	Actions Taken to Restore Unit	Ancillary Services	Blackstart Unit	Mitigating Actions
1	Coughlin Power Station	Restriction due to deaerator level control transmitters freezing up.	Deaerator Level Control Transmitter	Condensate/ Feedwater	Thawed sensing lines	No	No	Installed additional insulation and heater
2	Coughlin Power Station	UNIT 6 was tripped due to faulty throttle transmitter that caused the hp drum reliefs to lift transmitter was froze up.	Throttle Transmitter	HRSG	Thawed sensing lines	No	No	Repaired power curcuit for heat trace
3	Coughlin Power Station	7-2 CT Trip due high exhaust pressure.	7-2 Combustion Turbine	Combustion Turbine	Reduced maximum output limit	No	No	Had Siemens review operational data to confirm unit could be return to service. Reduced maximum output limit to prevent recurrence
4	Coughlin Power Station	Unit trip- Loss of feedwater flow from low deaerator level due to level transmitter sensing lines freezing.	Deaerator Level Transmitter	Condensate/ Feedwater	Thawed sensing lines	No	No	Installed additional insulation and heater
5	Coughlin Power Station	7-1 unavailable due to GCB open/closed status indication issue.	Generator Circuit Breaker	Electrical	Established transmission path through alternate Generator Circuit Breaker	No	No	Cleco Apparatus resolved generator circuit breaker Position/Indication mismatch
6	Coughlin Power Station	7-2 rotor air cooler actuator malfunction due to low air header pressure resulting from a frozen/broken header drain valve.	Rotor Air Cooler Actuator	Combustion Turbine	Replaced valve	No	No	Slow down air header to minimize potential for moisture accumulation
7	Coughlin Power Station	Shutdown one CT to determine if condensate usage could be slowed to the point that 1x1 startup could continue- Unsuccessful.	Caustic Line	Water Plant	Thawed chemical feed lines	No	No	Made temporary modifications to the heat trace power circuits to bypass thermostat control.
8	Coughlin Power Station	Low condensate levels due to extended startup efforts and water plant being unavailable because of frozen caustic lines.	Caustic Line	Water Plant	Thawed chemical feed lines	No	No	Made temporary modifications to the heat trace power circuits to bypass thermostat control.
9	Coughlin Power Station	7-2 IP FW Pump valves/lines frozen from being out of service.	IP Feedwater Pump Vavle and Lines	Feedwater	Thawed valves/lines	No	No	No further action required with unit in service
10	Dolet Hills Power Station	<OMCI> Poor fuel quality causing pluggage	Coal Feeders	Fuel Delivery	Added extra plant and contractor workers for lancing chutes and silo pluggages.	No	No	Emptied silos and chutes to clear pluggages.
11	Dolet Hills Power Station	<OMCI> Coal Silos and Feeders plugging due to wet freezing coal	Coal Silos and Feeders	Fuel Delivery	Added extra plant and contractor workers for lancing chutes and silo pluggages.	No	No	Emptied silos and chutes to clear pluggages.
12	Dolet Hills Power Station	<OMCI> Coal silos and feeders plugged due to freezing coal	Coal Silos and Feeders	Fuel Delivery	Added extra plant and contractor workers for lancing chutes and silo pluggages.	No	No	Emptied silos and chutes to clear pluggages.
13	Brame Energy Center	Main Steam Flow transmitter froze	Main Steam Flow Transmitter	Boiler Controls	Applied additional heating and insulation protection to thaw transmitters	No	No	Insulate and heat trace the drain lines from the transmitters
14	Brame Energy Center	Boiler 82 waterwall tube leak	Waterwall	Boiler	Repaired weld that failed	No	No	None
15	Brame Energy Center	328 ID fan turning gear coupling repair	ID Fan Turning Gear Coupling	Boiler	Replaced failed coupling	No	No	Continue to perform ID Fan starting motor coupling inspections during planned outages
16	Brame Energy Center	Tripped due to frozen air line on the main gas header trip valve.	Main Gas Header Valve	Fuel Delivery	Placed a tarp enclosure with heat lamps to thaw the frozen valve actuators	No	No	Insure this area has additional protection and heat prior to the start of the cold weather event
17	St. Mary Energy Center	Unavailable due to Boiler Feep Pump Siezed, and 480 breaker malfunction	Boiler Feed Pump	HRSG Feedwater	Both BFPs shipped off to OEM FlowServe to be reconditioned	No	No	Incorporated ABB DCS logic modifications to better handle upsets from Cabot process
18	St. Mary Energy Center	Planned Spring Outage for HRSG repairs and DCS Upgrades	HRSG	HRSG	Completed spring outage	No	No	Standby mode, waiting on Cabot to supply fuel
19	St. Mary Energy Center	<OMCI> Unavailable due to lack of heat from Cabot Plant, OMC	Cabot Plant	Cabot Plant	WHRSG ready to accept fuel from Cabot	No	No	Auxiliary systems in service
20	Teche Power Station	Turbine tripped on low Gas Pressure.	Gas Regulator Valve	Fuel Delivery	Reset regulating valve	No	Yes	None
21	Teche Power Station	unit restricted to 300 MW due to issues with valves in the gas yard	Gas Regulator Valve	Fuel Delivery	Fully switched control to remote	No	No	relabeled regulator for proper remote switch orientation
22	Teche Power Station	Unit #3 tripped on Main Turbine bearing #1 vibration	#1 Bearing	Main Turbine	Rolled unit up to work out vibration and placed unit on line.	No	No	Performed a balanceshot near #1 turbine bearing next time unit came off line.
23	Teche Power Station	<OMCI> Unit #3 forced restriction to 65 MW due to low water pressure and lack of water from District #4.	Water Supply	Water Plant	Placed unit on line	No	No	Minimized water usage
24	Teche Power Station	<OMCI> unit brought to 90 MW but still restricted due to low water pressure from District #4.	Water Supply	Water Plant	Raised restriction as demineralized water tank levels rose	No	No	Minimized water usage

Record Number	Power Plant Name	Describe RC/BA Attempted Modification of Planned Outages	Additional Comments
1	Coughlin Power Station	None	
2	Coughlin Power Station	None	
3	Coughlin Power Station	None	
4	Coughlin Power Station	None	
5	Coughlin Power Station	None	
6	Coughlin Power Station	None	
7	Coughlin Power Station	None	
8	Coughlin Power Station	None	
9	Coughlin Power Station	None	
10	Dolet Hills Power Station	None	
11	Dolet Hills Power Station	None	
12	Dolet Hills Power Station	None	
13	Brame Energy Center	None	
14	Brame Energy Center	None	
15	Brame Energy Center	None	
16	Brame Energy Center	None	
17	St. Mary Energy Center	None	
18	St. Mary Energy Center	None	
19	St. Mary Energy Center	None	
20	Teche Power Station	None	
21	Teche Power Station	None	
22	Teche Power Station	None	
23	Teche Power Station	None	
24	Teche Power Station	None	