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Jan 09 2023

January 9, 2023

**VIA ELECTRONIC FILING**

Ms. Shonta A. Dunston  
North Carolina Utilities Commission  
4325 Mail Service Center  
Raleigh, North Carolina 27699-4300

**RE: Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's  
Responses to Follow-up Data Requests from the Companies' January 3,  
2023 Briefing on Winter Storm Elliott  
Docket No. M-100, Sub 163**

Dear Ms. Dunston:

Please find enclosed for filing Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's Responses to Follow-up Data Requests from the Companies' January 3, 2023 Briefing on Winter Storm Elliott, in the above-referenced docket.

If you have any questions, please let me know.

Sincerely,

A handwritten signature in black ink that reads "Jason Higginbotham". The signature is written in a cursive, flowing style.

Jason A. Higginbotham

Enclosure

cc: Parties of Record

CERTIFICATE OF SERVICE

I certify that a copy of Duke Energy Carolinas, LLC and Duke Energy Progress, LLC's Responses to Follow-up Data Requests from the Companies' January 3, 2023 Briefing on Winter Storm Elliott, in Docket No. M-100, Sub 163, has been served by electronic mail, hand delivery, or by depositing a copy in the United States Mail, 1<sup>st</sup> Class Postage Prepaid, properly addressed to parties of record.

This the 9<sup>th</sup> day of January, 2023.



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**DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC**

**Request:**

For the last three winter peaks and Winter Storm Elliott, how accurate were the Company's weather forecasts three days before the peak? The day before the peak? How accurate was the Company's load forecast three days before the peak? The day before the peak? (Requested by Commissioner Duffley)

**Response:**

Please see the requested data below. Consistent with Duke Energy's briefing to the Commission, as is shown in the data below (along with data provided in response to 1-2), the difference between forecast and actual temperature and load for 12/24/22 was more substantial than prior winter weather events due to a unique confluence of factors.

**CAR Combined System:**

Season	CAR Peak Hour Ending	Actual (MWh)	1-Day Forecast (MWh)	3-Day Forecast (MWh)	Actual Temperature (F)	1-Day Forecast (F)	3-Day Forecast (F)
Winter 2019-2020	1/22/2020 8:00	30642	30796	30674	25	24	23
Winter 2020-2021	2/4/2021 8:00	30053	29917	30617	24	25	23
Winter 2021-2022	1/27/2022 8:00	31812	30906	31230	24	23	21
Winter 2022-2023	12/24/2022 9:00	36542	33273	32308	11	11	15
Winter 2022-2023	12/25/2022 8:00	32624	32942	32097	17	14	16

\*12/24/2022, the actual peak load is estimated to what it would have been without load shed and DSM.

\*\* The actual temperature and forecast temperature are for the peak load hour; daily low temperatures could occur a few hours before the peak load hour.

**DEC System:**

Season	DEC Peak Hour Ending	Actual (MWh)	1-Day Forecast (MWh)	3-Day Forecast (MWh)	Actual Temperature (F)	1-Day Forecast (F)	3-Day Forecast (F)
Winter 2019-2020	1/22/2020 8:00	18405	18201	18285	24	24	23
Winter 2020-2021	2/4/2021 8:00	17878	17618	17941	25	25	23
Winter 2021-2022	1/27/2022 8:00	18731	18088	18316	25	24	22
Winter 2022-2023	12/24/2022 9:00	21768	19548	18973	10	10	14
Winter 2022-2023	12/25/2022 8:00	19310	19200	18729	15	14	15

\*12/24/2022, the actual peak load is estimated to what it would have been without load shed and DSM.

\*\* The actual temperature and forecast temperature are for the peak load hour; daily low temperatures could occur a few hours before the peak load hour.

**DEP System:**

Season	DEP Peak Hour Ending	Actual (MWh)	1-Day Forecast (MWh)	3-Day Forecast (MWh)	Actual Temperature (F)	1-Day Forecast (F)	3-Day Forecast (F)
Winter 2019-2020	12/20/2019 8:00	12255	11875	12011	26	24	25
Winter 2020-2021	1/29/2021 8:00	12258	12537	11950	26	23	26
Winter 2021-2022	1/23/2022 8:00	13490	12140	12395	18	22	20
Winter 2022-2023	12/24/2022 8:00	14840	13913	13377	12	13	16
Winter 2022-2023	12/25/2022 8:00	13314	13742	13368	19	15	17

\*12/24/2022, the actual peak load is estimated to what it would have been without load shed and DSM.

\*\* The actual temperature and forecast temperature are for the peak load hour; daily low temperatures could occur a few hours before the peak load hour.

**DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC**

**Request:**

Provide the Mean Absolute Percent Error (“MAPE”) calculation for load forecast deviation from actual load and the Celsius Absolute Percent Error (“CAPE”) reflecting the temperature forecast deviation from actual temperature for 12/24 and 12/25. (Requested by Commissioner Duffley)

**Response:**

Please see the requested data below.

**CAR Combined System:**

CAR Load Forecast MAPE

<u>Year</u>	<u>1 Day</u>	<u>3 Day</u>
Winter 19-20	97.8%	98.3%
Winter 20-21	97.4%	96.7%
Winter 21-22	97.9%	98.2%
12/24/2022	92.9%	91.2%
12/25/2022	96.0%	97.8%

CAR Weather Forecast CAPE

<u>Year</u>	<u>1 Day</u>	<u>3 Day</u>
Winter 19-20	99.0%	99.2%
Winter 20-21	99.3%	98.5%
Winter 21-22	99.5%	99.1%
12/24/2022	99.1%	98.4%
12/25/2022	98.3%	98.6%

**DEC System:**

DEC Load Forecast MAPE

<u>Year</u>	<u>1 Day</u>	<u>3 Day</u>
Winter 19-20	98.3%	98.1%
Winter 20-21	97.6%	97.5%
Winter 21-22	97.7%	98.5%
12/24/2022	90.9%	89.1%
12/25/2022	98.1%	98.9%

DEC Weather Forecast CAPE

<u>Year</u>	<u>1 Day</u>	<u>3 Day</u>
Winter 19-20	99.2%	99.3%
Winter 20-21	99.5%	98.6%
Winter 21-22	99.4%	99.1%
12/24/2022	99.1%	98.2%
12/25/2022	98.8%	98.8%

**DEP System:**

DEP Load Forecast MAPE

<u>Year</u>	<u>1 Day</u>	<u>3 Day</u>
Winter 19-20	98.1%	98.2%
Winter 20-21	96.5%	94.3%
Winter 21-22	91.2%	93.1%
12/24/2022	95.7%	94.2%
12/25/2022	93.0%	96.2%

DEP Weather Forecast CAPE

<u>Year</u>	<u>1 Day</u>	<u>3 Day</u>
Winter 19-20	98.6%	98.5%
Winter 20-21	98.9%	99.0%
Winter 21-22	98.5%	98.7%
12/24/2022	99.2%	98.6%
12/25/2022	97.8%	98.5%

**DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC**

**Request:**

Provide all interruption records for Winter Storm Elliott. (Requested by Commissioner Duffley)

**Response:**

Due to the volume of information that must be processed to provide a complete response to this data request, Duke Energy anticipates providing a response to this request no later than January 17, 2023. However, Duke Energy is working diligently to gather all required information and commits that it will respond earlier than its current target date, if possible.



**DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC**

**Request:**

Under Section 6.11.1.9 of Duke Energy's General Load Reduction Plan, the Systems Operations – Energy Control Center is required to provide a report of shortage and anticipated shortages of electric energy and capacity to FERC by promptly submitting a single electronic report via the Division of Reliability's electronic pager system at [emergency@ferc.gov](mailto:emergency@ferc.gov). Please provide a copy of all such reports submitted to FERC for Winter Storm Elliott. (Requested by Commissioner Duffley)

**Response:**

On December 25, 2022, Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") submitted to the U.S. Department of Energy ("DOE") completed Forms DOE-417 related to the events of Winter Storm Elliott. Form DOE-417 is an Electric Emergency Incident and Disturbance Report, which contains the information required to be reported to the Federal Energy Regulatory Commission ("FERC") under Section 6.11.1.9 of DEP's General Load Reduction Plan. DEC and DEP provided the completed Forms DOE-417 to the North American Electric Reliability Corporation ("NERC"), and NERC forwarded the Forms DOE-417 to FERC's Office of Electric Reliability, which is the FERC Office that receives email at [emergency@ferc.gov](mailto:emergency@ferc.gov). Copies of the December 25 Forms DOE-417 are attached and are marked for identification as "DEC DOE DOE-417 12242022Filing.pdf" and "DEP DOE DOE-417 12242022Filing.pdf".

**DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC**

**Request:**

Please state whether customer outage notifications in North Carolina require customers to opt-in or if customers are automatically enrolled and must opt-out. Please also provide the percentage of customers in North Carolina currently enrolled in outage notifications by channel (e.g., email, text message, and phone). (Requested by Commissioner Hughes)

**Response:**

Prior to 2019, Duke Energy customers were required to opt-in to notifications about outages and other significant events impacting their service. Customers had the option to opt-in to text message alerts, email alerts, or voice alerts. Around that time, the Company also began to receive feedback from numerous customers about their desire to receive such notifications. As a result, in 2019, Duke Energy performed a one-time automatic enrollment of all existing customers that met certain guidelines into the Company's notification system. The Company required existing customers to (a) have an active account; (b) have provided accurate contact information including either a mobile phone number or email address; and (c) have not previously opted-out of the Outage Notification program. The automatic enrollment action registered existing customers to receive either text message or email alerts, based on the type of contact information that had been provided.

In 2021, Duke Energy deployed its Customer Connect Program. The program was implemented in March 2021 for Duke Energy Carolinas ("DEC") and in November 2021 for Duke Energy Progress ("DEP"). Under the program, all new customers are automatically enrolled in text message or email alerts of outages. Customers with landlines continue to have the option to opt-in to voice alerts. The program also enabled customers to enroll in more than one channel type or to enroll additional contacts (i.e., a single account can now elect to get Outage Notifications by text and email).

As of January 5, 2023, approximately 67% of DEC and approximately 73% of DEP customers with meters in North Carolina are enrolled in the Outage Notification Program and receive notifications of an outage through at least one of the three available communication channels as follows:

	Total Enrolled	Text	Email	Voice
DEC NC	67%	62%	28%	13%
DEP NC	73%	72%	21%	10%

Duke Energy has an ongoing effort to review existing customer accounts that are not enrolled in the notification program to determine whether there may be an opportunity to enroll additional customers automatically or engage with customers to determine if they are interested in enrolling in notifications. The Company expects to complete its review by the end of Q2 2023.

**DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC**

**Request:**

Please explain why Duke Energy decided to open the reclosers or otherwise disconnect available generation from two solar facilities at the following locations on 12/23/22 and 12/24/22: (a) 75 Crown Boulevard, Timberlake, NC 27583; and (b) 157 Hunt Club Road, Timberlake, NC 27583. (Commissioner McKissick)

**Response:**

Duke Energy did not disconnect available generation from the two solar facilities identified in this request. The solar facilities were unavailable due to a distribution-level outage on the Durham Road feeder to which the solar facilities interconnect. This outage was caused by the extreme wind gusts that occurred during Winter Storm Elliott and caused a conductor to burn down across the highway. The solar installations were unavailable starting at 7:17 am on December 23, 2023. Restoration occurred for one of the installations approximately 31 hours later at 2:55 pm on December 24, 2022 and approximately 35 hours later at 6:31 pm on December 24, 2022. Throughout the restoration effort, Duke Energy balanced the need to restore customers quickly with its focus on efficiently restoring solar generators that had been impacted by the winter storm.

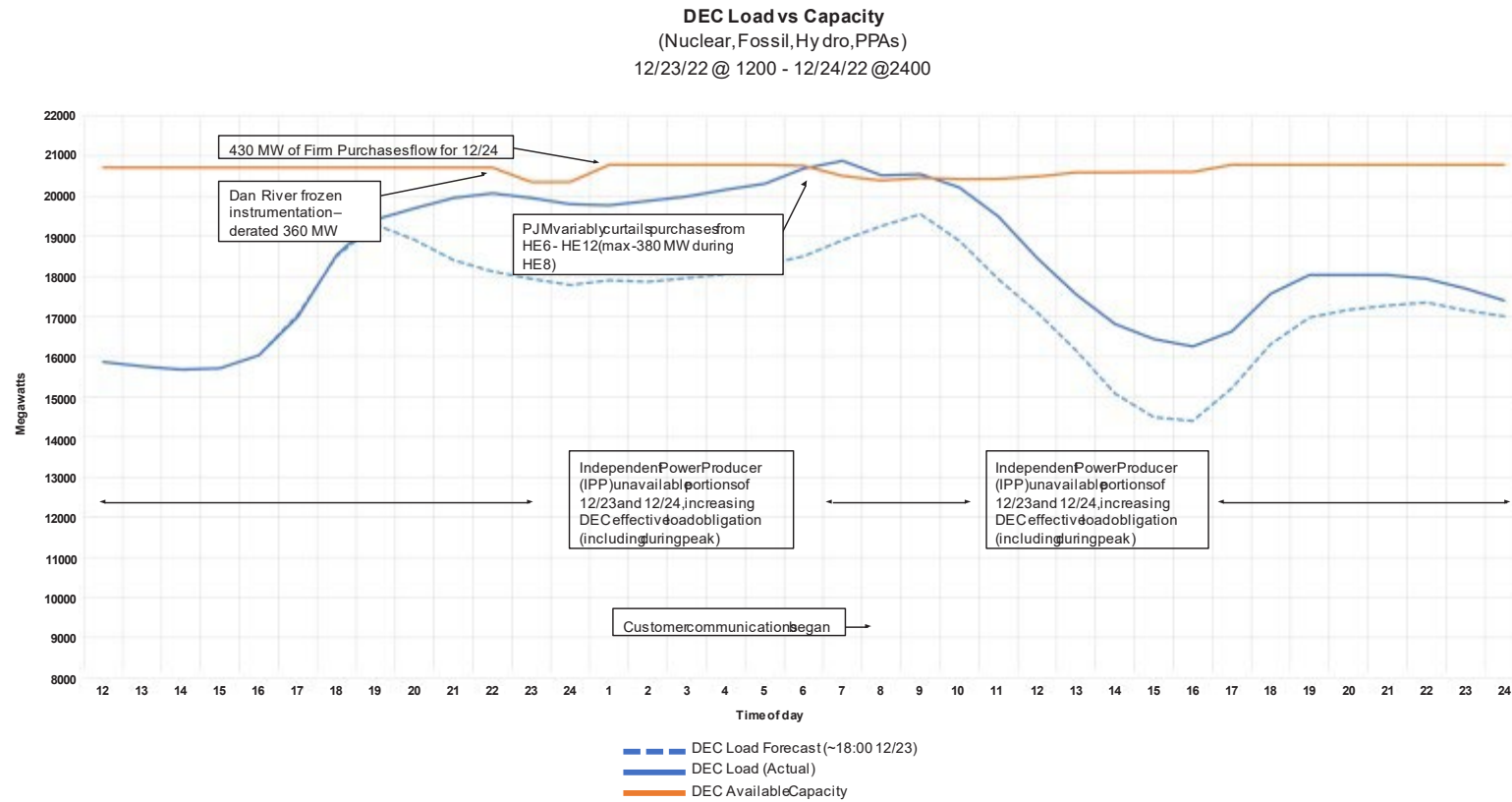
**DUKE ENERGY CAROLINAS, LLC and DUKE ENERGY PROGRESS, LLC**

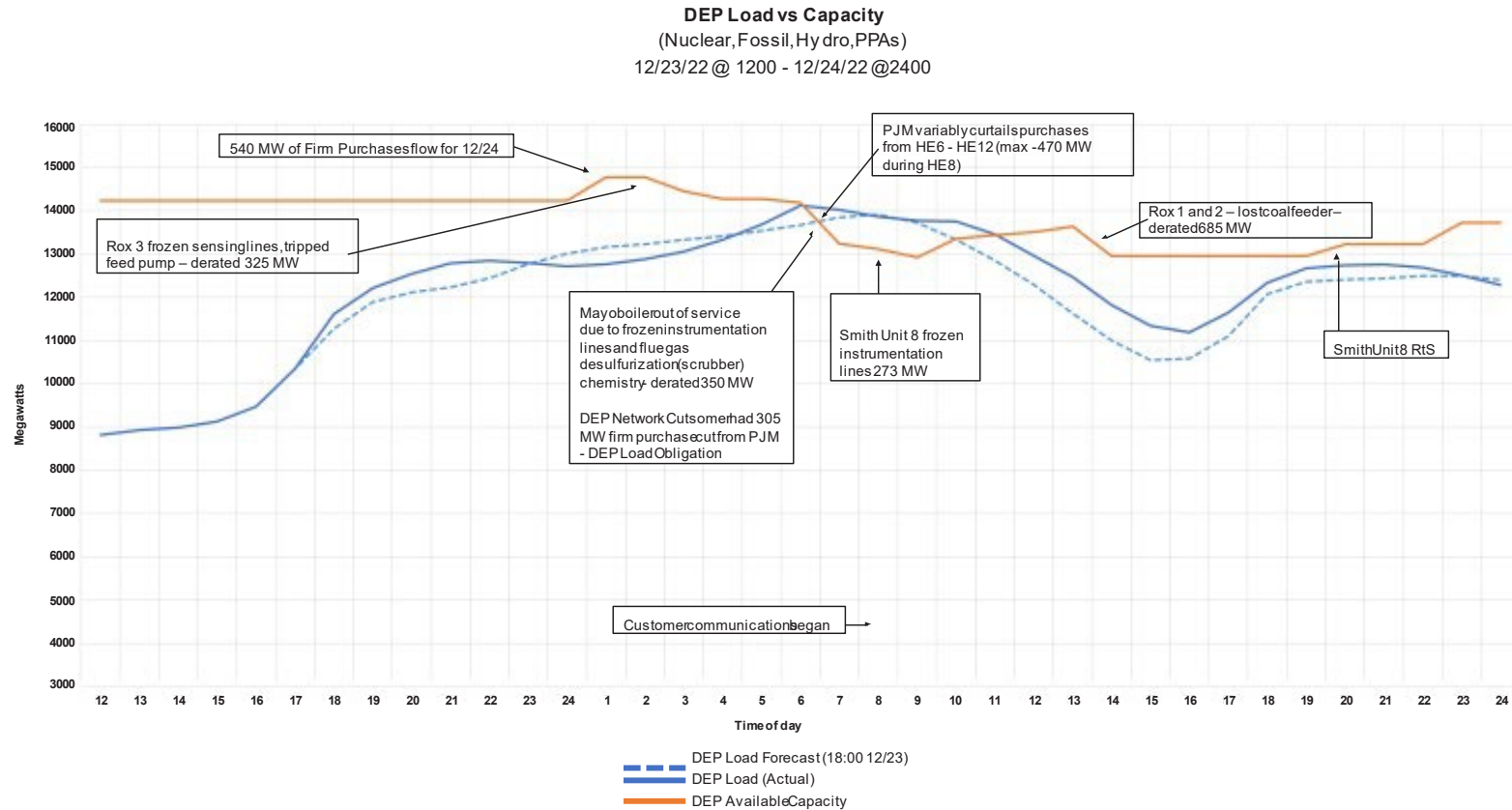
**Request:**

For Winter Storm Elliott, provide a chart showing the generation capacity and load for DEC and DEP and when the lines on the chart crossed. (Requested by Commissioner Hughes)

**Response:**

On January 3, 2023, Duke Energy filed its presentation to the North Carolina Utilities Commission ("Commission") on Winter Storm Elliott, which was titled, "North Carolina Utilities Commission: January 3, Briefing on Rolling Outages", in Docket Nos. M-100, Sub 163 and M-1, Sub 0. The Appendix to that presentation contains two line graphs, beginning on pages 23 and 24 of the electronic PDF, which show the load and available capacity for Duke Energy Carolinas, LLC and Duke Energy Progress, LLC during the relevant timeframe. Duke Energy believes that these graphs respond to the Commission's request above. For reference, copies of those graphs are copied below.





U.S. Department of Energy  
Form DOE-417**ELECTRIC EMERGENCY INCIDENT AND  
DISTURBANCE REPORT**OMB No. 1901-0288  
Approval Expires: 05/31/2024  
Burden Per Response: 1.8 hours

**NOTICE:** This report is **mandatory** under Public Law 93-275. Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For the sanctions and the provisions concerning the confidentiality of information submitted on this form, see General Information portion of the instructions. **Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

**RESPONSE DUE:**

Within 1 hour of the incident, submit Schedule 1 and lines N - S in Schedule 2 as an Emergency Alert report if criteria 1-9 are met. If criterion 2 is met, also submit the Cyber Attributes on line T in Schedule 2.

Within 6 hours of the incident, submit Schedule 1 and lines N - S in Schedule 2 as a Normal Report if only criteria 10-13 are met.

By the end of the next calendar day after a determination, submit Schedule 1 and lines N - S and the Cyber Attributes on line T in Schedule 2 as an Attempted Cyber Compromise if criterion 14 is met.

By the later of 24 hours after the recognition of the incident OR by the end of the next business day submit Schedule 1 and lines N - S in Schedule 2 as a System Report if criteria 15-26 are met. *Note: 4:00pm local time will be considered the end of the business day*

Submit updates as needed and/or a final report (all of Schedules 1 and 2) within 72 hours of the incident.

For NERC reporting entities registered in the United States; NERC has approved that the form DOE-417 meets the submittal requirements for NERC. There may be other applicable regional, state and local reporting requirements.

**METHODS OF FILING RESPONSE**

(Retain a completed copy of this form for your files.)

**Online:** Submit form via online submission at: <https://www.oe.netl.doe.gov/OE417/>

**FAX:** FAX Form DOE-417 to the following facsimile number: (202) 586-8485.

**Alternate:** If you are unable to submit online or by fax, forms may be e-mailed to [doehqec@hq.doe.gov](mailto:doehqec@hq.doe.gov), or call and report the information to the following telephone number: (202) 586-8100.

**SCHEDULE 1 -- ALERT CRITERIA**

(Page 1 of 4)

**Criteria for Filing (Check all that apply) – See Instructions For More Information****EMERGENCY ALERT  
File within 1-Hour**

If any box 1-9 on the right is checked, this form must be filed within 1 hour of the incident; check Emergency Alert (for the Alert Status) on **Line A** below.

1. ☐ Physical attack that causes major interruptions or impacts to critical infrastructure facilities or to operations
2. ☐ Reportable Cyber Security Incident
3. ☐ Cyber event that is not a Reportable Cyber Security Incident that causes interruptions of electrical system operations.
4. ☐ Complete operational failure or shut-down of the transmission and/or distribution electrical system
5. ☐ Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system
6. ☐ Uncontrolled loss of 300 Megawatts or more of firm system loads for 15 minutes or more from a single incident
7. ☒ Firm load shedding of 100 Megawatts or more implemented under emergency operational policy
8. ☐ System-wide voltage reductions of 3 percent or more
9. ☒ Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System

**NORMAL REPORT  
File within 6-Hours**

If any box 10-13 on the right is checked AND none of the boxes 1-9 are checked, this form must be filed within 6 hours of the incident; check Normal Report (for the Alert Status) on **Line A** below.

10. ☐ Physical attack that could potentially impact electric power system adequacy or reliability; or vandalism which targets components of any security systems
11. ☐ Cyber event that could potentially impact electric power system adequacy or reliability
12. ☒ Loss of electric service to more than 50,000 customers for 1 hour or more
13. ☐ Fuel supply emergencies that could impact electric power system adequacy or reliability

**ATTEMPTED CYBER  
COMPROMISE  
File within 1-Day**

If box 14 on the right is checked AND none of the boxes 1-13 are checked, this form must be filed by the end of the next calendar day after the determination of the attempted cyber compromise; check Attempted Cyber Compromise (for the Alert Status) on **Line A** below.

14. ☐ Cyber Security Incident that was an attempt to compromise a High or Medium Impact Bulk Electric System Cyber System or their associated Electronic Access Control or Monitoring Systems

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## SCHEDULE 1 -- ALERT CRITERIA -- CONTINUED

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<p><b>SYSTEM REPORT</b> File within 1-Business Day</p> <p>If any box 15-26 on the right is checked AND none of the boxes 1-14 are checked, this form must be filed by the later of 24 hours after the recognition of the incident <b>OR</b> by the end of the next business day. <i>Note:</i> 4:00pm local time will be considered the end of the business day. Check System Report (for the Alert Status) on <b>Line A</b> below.</p>		<p>15. <input type="checkbox"/> Damage or destruction of a Facility within its Reliability Coordinator Area, Balancing Authority Area or Transmission Operator Area that results in action(s) to avoid a Bulk Electric System Emergency.</p> <p>16. <input type="checkbox"/> Damage or destruction of its Facility that results from actual or suspected intentional human action.</p> <p>17. <input type="checkbox"/> Physical threat to its Facility excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the Facility. Or suspicious device or activity at its Facility.</p> <p>18. <input type="checkbox"/> Physical threat to its Bulk Electric System control center, excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the control center. Or suspicious device or activity at its Bulk Electric System control center.</p> <p>19. <input type="checkbox"/> Bulk Electric System Emergency resulting in voltage deviation on a Facility; A voltage deviation equal to or greater than 10% of nominal voltage sustained for greater than or equal to 15 continuous minutes.</p> <p>20. <input type="checkbox"/> Uncontrolled loss of 200 Megawatts or more of firm system loads for 15 minutes or more from a single incident for entities with previous year's peak demand less than or equal to 3,000 Megawatts</p> <p>21. <input type="checkbox"/> Total generation loss, within one minute of: greater than or equal to 2,000 Megawatts in the Eastern or Western Interconnection or greater than or equal to 1,400 Megawatts in the ERCOT Interconnection.</p> <p>22. <input type="checkbox"/> Complete loss of off-site power (LOOP) affecting a nuclear generating station per the Nuclear Plant Interface Requirements.</p> <p>23. <input type="checkbox"/> Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).</p> <p>24. <input type="checkbox"/> Unplanned evacuation from its Bulk Electric System control center facility for 30 continuous minutes or more.</p> <p>25. <input type="checkbox"/> Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability affecting its staffed Bulk Electric System control center for 30 continuous minutes or more.</p> <p>26. <input type="checkbox"/> Complete loss of monitoring or control capability at its staffed Bulk Electric System control center for 30 continuous minutes or more.</p>					
<p>If significant changes have occurred after filing the initial report, re-file the form with the changes and check Update (for the Alert Status) on <b>Line A</b> below. The form must be re-filed within 72 hours of the incident with the latest information and Final (Alert Status) checked on <b>Line A</b> below, unless updated.</p>							
<b>LINE NO.</b>							
<b>A.</b>	Alert Status (check one)	Emergency Alert <input type="checkbox"/> 1 Hour	Normal Report <input type="checkbox"/> 6 Hours	Attempted Cyber Compromise <input type="checkbox"/> 1 Calendar Day	System Report <input type="checkbox"/> 1 Business Day	Update <input type="checkbox"/> As required	Final <input checked="" type="checkbox"/> 72 Hours
<b>B.</b>	FOIA Exemption(s)	<p>Information on Lines C and D of Schedule 1 will not be disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), e.g., exemptions for confidential commercial information and trade secrets, certain information that could endanger the physical safety of an individual, or information designated as Critical Electric Infrastructure Information.</p> <p>If box 2, 3, 11, or 14 above is checked, identify (by checking all that apply) whether Line C and D combined with box 2, 3, 11, or 14 contains:</p> <p><input type="checkbox"/> Privileged or confidential information, e.g., trade secrets, commercial, or financial information</p> <p><input type="checkbox"/> Critical Electric Infrastructure Information</p> <p><input type="checkbox"/> Other information exempt from FOIA (include a description of the exemption in Schedule 2, on line T)</p>					
<b>C.</b>	Organization Name	Duke Energy Carolinas					
<b>D.</b>	Address of Principal Business Office	526 South Church Street Charlotte North Carolina 28202					

U.S. Department of Energy  
Form DOE-417**ELECTRIC EMERGENCY INCIDENT AND  
DISTURBANCE REPORT**

OMB No. 1901-0288

Approval Expires: 05/31/2024

Burden Per Response: 1.8 hours

**SCHEDULE 1 -- ALERT NOTICE**

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INCIDENT AND DISTURBANCE DATA			
<b>E.</b>	Geographic Area(s) Affected (County, State)	North Carolina: South Carolina:	
<b>F.</b>	Date/Time Incident Began (mm-dd-yy/hh:mm) using 24-hour clock	<u>12</u> - <u>24</u> - <u>2022</u> / <u>04</u> : <u>45</u> mm dd yy hh mm	<input checked="" type="checkbox"/> Eastern <input type="checkbox"/> Central <input type="checkbox"/> Mountain <input type="checkbox"/> Pacific <input type="checkbox"/> Alaska <input type="checkbox"/> Hawaii
<b>G.</b>	Date/Time Incident Ended (mm-dd-yy/ hh:mm) using 24-hour clock	<u>12</u> - <u>24</u> - <u>2022</u> / <u>15</u> : <u>45</u> mm dd yy hh mm	<input checked="" type="checkbox"/> Eastern <input type="checkbox"/> Central <input type="checkbox"/> Mountain <input type="checkbox"/> Pacific <input type="checkbox"/> Alaska <input type="checkbox"/> Hawaii
<b>H.</b>	Did the incident/disturbance originate in your system/area? (check one)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/> Unknown <input type="checkbox"/>
<b>I.</b>	Estimate of Amount of Demand Involved (Peak Megawatts)	1,000	Zero <input type="checkbox"/> Unknown <input type="checkbox"/>
<b>J.</b>	Estimate of Number of Customers Affected	295,000	Zero <input type="checkbox"/> Unknown <input type="checkbox"/>

**SCHEDULE 1 – TYPE OF EMERGENCY**

Check all that apply

K. Cause	L. Impact	M. Action Taken
<input type="checkbox"/> Unknown <input type="checkbox"/> Physical attack <input type="checkbox"/> Threat of physical attack <input type="checkbox"/> Vandalism <input type="checkbox"/> Theft <input type="checkbox"/> Suspicious activity <input type="checkbox"/> Cyber event (information technology) <input type="checkbox"/> Cyber event (operational technology) <input type="checkbox"/> Fuel supply emergencies, interruption, or deficiency <input type="checkbox"/> Generator loss or failure not due to fuel supply interruption or deficiency or transmission failure <input type="checkbox"/> Transmission equipment failure (not including substation or switchyard) <input type="checkbox"/> Failure at high voltage substation or switchyard <input checked="" type="checkbox"/> Weather or natural disaster <input type="checkbox"/> Operator action(s) <input type="checkbox"/> Other <input checked="" type="checkbox"/> Additional Information/Comments: Colder than normal temperatures. Energy Emergency Alert 3 in place at ~0610. Rotational feeder load shed in effect.  Update: 12/24/22 @ 15:45 - all circuits restored, EEA 1 in place.	<input type="checkbox"/> None <input type="checkbox"/> Control center loss, failure, or evacuation <input type="checkbox"/> Loss or degradation of control center monitoring or communication systems <input type="checkbox"/> Damage or destruction of a facility <input type="checkbox"/> Electrical system separation (islanding) <input type="checkbox"/> Complete operational failure or shutdown of the transmission and/or distribution system <input type="checkbox"/> Major transmission system interruption (three or more BES elements) <input type="checkbox"/> Major distribution system interruption <input type="checkbox"/> Uncontrolled loss of 200 MW or more of firm system loads for 15 minutes or more <input checked="" type="checkbox"/> Loss of electric service to more than 50,000 customers for 1 hour or more <input type="checkbox"/> System-wide voltage reductions or 3 percent or more <input type="checkbox"/> Voltage deviation on an individual facility of ≥10% for 15 minutes or more <input checked="" type="checkbox"/> Inadequate electric resources to serve load <input type="checkbox"/> Generating capacity loss of 1,400 MW or more <input type="checkbox"/> Generating capacity loss of 2,000 MW or more <input type="checkbox"/> Complete loss of off-site power to a nuclear generating station <input type="checkbox"/> Other <input checked="" type="checkbox"/> Additional Information/Comments: Energy Emergency Alert 3 in effect.  Update: 12/24/22 @ 15:45 - EEA 1 in place.	<input type="checkbox"/> None <input checked="" type="checkbox"/> Shed Firm Load: Load shedding of 100 MW or more implemented under emergency operational policy (manually or automatically via UFLS or remedial action scheme) <input checked="" type="checkbox"/> Public appeal to reduce the use of electricity for the purpose of maintaining the continuity of the electric power system <input checked="" type="checkbox"/> Implemented a warning, alert, or contingency plan <input type="checkbox"/> Voltage reduction <input checked="" type="checkbox"/> Shed Interruptible Load <input type="checkbox"/> Repaired or restored <input type="checkbox"/> Mitigation implemented <input type="checkbox"/> Other <input checked="" type="checkbox"/> Additional Information/Comments: Load management programs in effect. Public appeals issued. Firm load shed in progress. EEA 3 issued.  Update: 12/24/22 @ 15:45 - all circuits restored, EEA 1 in place.

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**U.S. Department of Energy**  
**Form DOE-417**

***ELECTRIC EMERGENCY INCIDENT AND  
DISTURBANCE REPORT***

**OMB No. 1901-0288**  
**Approval Expires: 05/31/2024**  
**Burden Per Response: 1.8 hours**

**SCHEDULE 2 -- NARRATIVE DESCRIPTION**

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*Information on Schedule 2 will not be disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), e.g., exemptions for confidential commercial information and trade secrets, certain information that could endanger the physical safety of an individual, or information designated as Critical Electric Infrastructure Information.*

<b>N. FOIA Exemption(s)</b>	Identify (by checking all that apply) whether Schedule 2 – Narrative Description contains: <input type="checkbox"/> Privileged or confidential information, e.g., trade secrets, commercial, or financial information <input type="checkbox"/> Critical Electric Infrastructure Information <input type="checkbox"/> Other information exempt from FOIA (include a description of the exemption on line T below)
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**NAME OF OFFICIAL THAT SHOULD BE CONTACTED FOR FOLLOW-UP OR ANY ADDITIONAL INFORMATION**

<b>O.</b>	Name	Energy Control Center DEC Duke Energy
<b>P.</b>	Title	
<b>Q.</b>	Telephone Number	( 800 )-( 225 )-( 5838 )
<b>R.</b>	FAX Number	( 704 )-( 382 )-( 6938 )
<b>S.</b>	E-mail Address	vacar@duke-energy.com

Provide a description of the incident and actions taken to resolve it. Include as appropriate, the cause of the incident/disturbance, change in frequency, mitigation actions taken, equipment damaged, critical infrastructures interrupted, effects on other systems, and preliminary results from any investigations. Be sure to identify: the estimate restoration date, the name of any lost high voltage substations or switchyards, whether there was any electrical system separation (and if there were, what the islanding boundaries were), and the name of the generators and voltage lines that were lost (shown by capacity type and voltage size grouping).

**Cyber Attributes:** For cyber events, including attempted cyber compromises, provide the following attributes (at a minimum): (1) the functional impact, (2) the attack vector used, and (3) the level of intrusion that was achieved or attempted.

If necessary, copy and attach additional sheets. Equivalent documents, containing this information can be supplied to meet the requirement; this includes the NERC EOP-004 Disturbance Report. Along with the filing of Schedule 2, a final (updated) Schedule 1 needs to be filed. Check the Final box on line A for Alert Status on Schedule 1 and submit this and the completed Schedule 2 no later than 72 hours after detection that a criterion was met.

**T. Narrative:**

On December 24th, 2022, Duke Energy Carolinas BA experience load ~10% higher than forecast (~2000MW) due to extreme cold and arctic wind chills. Over the night a CT from a Combine Cycle tripped resulting in a loss of ~350MW. On the morning of the 24th and independent power producer serving ~300MW of network load. The resultant combination of generation loss and excessive load resulted in an imbalance of 1000MW. DEC implemented DSM at 04:00 and release a public appeal moving to an EEA2 at 04:30. At 06:10 DEC moved to an EEA3 beginning feeder rotation of 400MW. Feeder rotation was increased to 1000MW at 07:00.

At 09:21 DEC began manual load restoration. The EEA 3 was exited at 15:45 when all circuits were restored.

<b>U. Estimated Restoration Date for all Affected Customers Who Can Receive Power</b>	$\frac{12}{\text{mm}} - \frac{24}{\text{dd}} - \frac{2022}{\text{yy}}$
<b>V. Name of Assets Impacted</b>	Dan River CT #9 - 350MW (including steam recovery lost) Kings Mt Energy Center - 300MW IPP

<b>W. Notify NERC, E-ISAC, or CISA Central</b>	<p>Select the appropriate box(es) if you approve of all of the information provided on this form being submitted to the North America Electric Reliability Corporation (NERC), the Electricity Information Sharing and Analysis Center (E-ISAC), or DHS CISA Central or their successor(s).</p> <p>NERC is an entity that is certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk power system but that is not part of the Federal Government. The information submitted to NERC, E-ISAC, or CISA Central can be submitted to help fulfill the respondent's requirements under NERC's reliability standards.</p> <p>If approval is given to alert NERC, E-ISAC, or DHS CISA Central, then this form will be emailed to systemawareness@nerc.net, operations@eisac.com, and/or central.cyber@cisa.dhs.gov when it is submitted to DOE. DOE is not responsible for ensuring the receipt of these emails by NERC, E-ISAC, or CISA Central.</p> <p><input checked="" type="checkbox"/> Notify NERC   <input checked="" type="checkbox"/> Notify E-ISAC   <input checked="" type="checkbox"/> Notify CISA Central</p>
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Jan 09 2023

**U.S. Department of Energy  
Form DOE-417**
**ELECTRIC EMERGENCY INCIDENT AND  
DISTURBANCE REPORT**
**OMB No. 1901-0288  
Approval Expires: 05/31/2024  
Burden Per Response: 1.8 hours**

**NOTICE:** This report is **mandatory** under Public Law 93-275. Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For the sanctions and the provisions concerning the confidentiality of information submitted on this form, see General Information portion of the instructions. **Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

**RESPONSE DUE:**

Within 1 hour of the incident, submit Schedule 1 and lines N - S in Schedule 2 as an Emergency Alert report if criteria 1-9 are met. If criterion 2 is met, also submit the Cyber Attributes on line T in Schedule 2.

Within 6 hours of the incident, submit Schedule 1 and lines N - S in Schedule 2 as a Normal Report if only criteria 10-13 are met.

By the end of the next calendar day after a determination, submit Schedule 1 and lines N - S and the Cyber Attributes on line T in Schedule 2 as an Attempted Cyber Compromise if criterion 14 is met.

By the later of 24 hours after the recognition of the incident OR by the end of the next business day submit Schedule 1 and lines N - S in Schedule 2 as a System Report if criteria 15-26 are met. *Note: 4:00pm local time will be considered the end of the business day*

Submit updates as needed and/or a final report (all of Schedules 1 and 2) within 72 hours of the incident.

For NERC reporting entities registered in the United States; NERC has approved that the form DOE-417 meets the submittal requirements for NERC. There may be other applicable regional, state and local reporting requirements.

**METHODS OF FILING RESPONSE**

(Retain a completed copy of this form for your files.)

**Online:** Submit form via online submission at: <https://www.oe.netl.doe.gov/OE417/>

**FAX:** FAX Form DOE-417 to the following facsimile number: (202) 586-8485.

**Alternate:** If you are unable to submit online or by fax, forms may be e-mailed to [doehqec@hq.doe.gov](mailto:doehqec@hq.doe.gov), or call and report the information to the following telephone number: (202) 586-8100.

**SCHEDULE 1 -- ALERT CRITERIA**

(Page 1 of 4)

**Criteria for Filing (Check all that apply) – See Instructions For More Information**
**EMERGENCY ALERT  
File within 1-Hour**

If any box 1-9 on the right is checked, this form must be filed within 1 hour of the incident; check Emergency Alert (for the Alert Status) on **Line A** below.

1. ☐ Physical attack that causes major interruptions or impacts to critical infrastructure facilities or to operations
2. ☐ Reportable Cyber Security Incident
3. ☐ Cyber event that is not a Reportable Cyber Security Incident that causes interruptions of electrical system operations.
4. ☐ Complete operational failure or shut-down of the transmission and/or distribution electrical system
5. ☐ Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system
6. ☐ Uncontrolled loss of 300 Megawatts or more of firm system loads for 15 minutes or more from a single incident
7. ☒ Firm load shedding of 100 Megawatts or more implemented under emergency operational policy
8. ☒ System-wide voltage reductions of 3 percent or more
9. ☒ Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System

**NORMAL REPORT  
File within 6-Hours**

If any box 10-13 on the right is checked AND none of the boxes 1-9 are checked, this form must be filed within 6 hours of the incident; check Normal Report (for the Alert Status) on **Line A** below.

10. ☐ Physical attack that could potentially impact electric power system adequacy or reliability; or vandalism which targets components of any security systems
11. ☐ Cyber event that could potentially impact electric power system adequacy or reliability
12. ☐ Loss of electric service to more than 50,000 customers for 1 hour or more
13. ☐ Fuel supply emergencies that could impact electric power system adequacy or reliability

**ATTEMPTED CYBER  
COMPROMISE  
File within 1-Day**

If box 14 on the right is checked AND none of the boxes 1-13 are checked, this form must be filed by the end of the next calendar day after the determination of the attempted cyber compromise; check Attempted Cyber Compromise (for the Alert Status) on **Line A** below.

14. ☐ Cyber Security Incident that was an attempt to compromise a High or Medium Impact Bulk Electric System Cyber System or their associated Electronic Access Control or Monitoring Systems

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## SCHEDULE 1 -- ALERT CRITERIA -- CONTINUED

(Page 2 of 4)

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<p><b>SYSTEM REPORT</b> File within 1-Business Day</p> <p>If any box 15-26 on the right is checked AND none of the boxes 1-14 are checked, this form must be filed by the later of 24 hours after the recognition of the incident <b>OR</b> by the end of the next business day. <i>Note:</i> 4:00pm local time will be considered the end of the business day. Check System Report (for the Alert Status) on <b>Line A</b> below.</p>		<p>15. <input type="checkbox"/> Damage or destruction of a Facility within its Reliability Coordinator Area, Balancing Authority Area or Transmission Operator Area that results in action(s) to avoid a Bulk Electric System Emergency.</p> <p>16. <input type="checkbox"/> Damage or destruction of its Facility that results from actual or suspected intentional human action.</p> <p>17. <input type="checkbox"/> Physical threat to its Facility excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the Facility. Or suspicious device or activity at its Facility.</p> <p>18. <input type="checkbox"/> Physical threat to its Bulk Electric System control center, excluding weather or natural disaster related threats, which has the potential to degrade the normal operation of the control center. Or suspicious device or activity at its Bulk Electric System control center.</p> <p>19. <input type="checkbox"/> Bulk Electric System Emergency resulting in voltage deviation on a Facility; A voltage deviation equal to or greater than 10% of nominal voltage sustained for greater than or equal to 15 continuous minutes.</p> <p>20. <input type="checkbox"/> Uncontrolled loss of 200 Megawatts or more of firm system loads for 15 minutes or more from a single incident for entities with previous year's peak demand less than or equal to 3,000 Megawatts</p> <p>21. <input type="checkbox"/> Total generation loss, within one minute of: greater than or equal to 2,000 Megawatts in the Eastern or Western Interconnection or greater than or equal to 1,400 Megawatts in the ERCOT Interconnection.</p> <p>22. <input type="checkbox"/> Complete loss of off-site power (LOOP) affecting a nuclear generating station per the Nuclear Plant Interface Requirements.</p> <p>23. <input type="checkbox"/> Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).</p> <p>24. <input type="checkbox"/> Unplanned evacuation from its Bulk Electric System control center facility for 30 continuous minutes or more.</p> <p>25. <input type="checkbox"/> Complete loss of Interpersonal Communication and Alternative Interpersonal Communication capability affecting its staffed Bulk Electric System control center for 30 continuous minutes or more.</p> <p>26. <input type="checkbox"/> Complete loss of monitoring or control capability at its staffed Bulk Electric System control center for 30 continuous minutes or more.</p>					
<p>If significant changes have occurred after filing the initial report, re-file the form with the changes and check Update (for the Alert Status) on <b>Line A</b> below. The form must be re-filed within 72 hours of the incident with the latest information and Final (Alert Status) checked on <b>Line A</b> below, unless updated.</p>							
<b>LINE NO.</b>							
<b>A.</b>	Alert Status (check one)	Emergency Alert <input type="checkbox"/> 1 Hour	Normal Report <input type="checkbox"/> 6 Hours	Attempted Cyber Compromise <input type="checkbox"/> 1 Calendar Day	System Report <input type="checkbox"/> 1 Business Day	Update <input type="checkbox"/> As required	Final <input checked="" type="checkbox"/> 72 Hours
<b>B.</b>	FOIA Exemption(s)	<p>Information on Lines C and D of Schedule 1 will not be disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), e.g., exemptions for confidential commercial information and trade secrets, certain information that could endanger the physical safety of an individual, or information designated as Critical Electric Infrastructure Information.</p> <p>If box 2, 3, 11, or 14 above is checked, identify (by checking all that apply) whether Line C and D combined with box 2, 3, 11, or 14 contains:</p> <p><input type="checkbox"/> Privileged or confidential information, e.g., trade secrets, commercial, or financial information</p> <p><input type="checkbox"/> Critical Electric Infrastructure Information</p> <p><input type="checkbox"/> Other information exempt from FOIA (include a description of the exemption in Schedule 2, on line T)</p>					
<b>C.</b>	Organization Name	Duke Energy Progress					
<b>D.</b>	Address of Principal Business Office	3401 Hillsborough St. Raleigh North Carolina 27607					

U.S. Department of Energy  
Form DOE-417**ELECTRIC EMERGENCY INCIDENT AND  
DISTURBANCE REPORT**

OMB No. 1901-0288

Approval Expires: 05/31/2024

Burden Per Response: 1.8 hours

**SCHEDULE 1 -- ALERT NOTICE**

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**INCIDENT AND DISTURBANCE DATA**

<b>E.</b>	Geographic Area(s) Affected (County, State)	North Carolina:		
<b>F.</b>	Date/Time Incident Began (mm-dd-yy/hh:mm) using 24-hour clock	<u>12</u> - <u>24</u> - <u>2022</u> / <u>06</u> : <u>35</u> mm dd yy hh mm	<input checked="" type="checkbox"/> Eastern <input type="checkbox"/> Pacific	<input type="checkbox"/> Central <input type="checkbox"/> Alaska <input type="checkbox"/> Mountain <input type="checkbox"/> Hawaii
<b>G.</b>	Date/Time Incident Ended (mm-dd-yy/ hh:mm) using 24-hour clock	<u>12</u> - <u>24</u> - <u>2022</u> / <u>16</u> : <u>10</u> mm dd yy hh mm	<input checked="" type="checkbox"/> Eastern <input type="checkbox"/> Pacific	<input type="checkbox"/> Central <input type="checkbox"/> Alaska <input type="checkbox"/> Mountain <input type="checkbox"/> Hawaii
<b>H.</b>	Did the incident/disturbance originate in your system/area? (check one)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Unknown <input type="checkbox"/>
<b>I.</b>	Estimate of Amount of Demand Involved (Peak Megawatts)	960	Zero <input type="checkbox"/>	Unknown <input type="checkbox"/>
<b>J.</b>	Estimate of Number of Customers Affected	130,000	Zero <input type="checkbox"/>	Unknown <input type="checkbox"/>

**SCHEDULE 1 – TYPE OF EMERGENCY**

Check all that apply

K. Cause	L. Impact	M. Action Taken
<input type="checkbox"/> Unknown <input type="checkbox"/> Physical attack <input type="checkbox"/> Threat of physical attack <input type="checkbox"/> Vandalism <input type="checkbox"/> Theft <input type="checkbox"/> Suspicious activity <input type="checkbox"/> Cyber event (information technology) <input type="checkbox"/> Cyber event (operational technology) <input type="checkbox"/> Fuel supply emergencies, interruption, or deficiency <input checked="" type="checkbox"/> Generator loss or failure not due to fuel supply interruption or deficiency or transmission failure <input type="checkbox"/> Transmission equipment failure (not including substation or switchyard) <input type="checkbox"/> Failure at high voltage substation or switchyard <input checked="" type="checkbox"/> Weather or natural disaster <input type="checkbox"/> Operator action(s) <input type="checkbox"/> Other <input checked="" type="checkbox"/> Additional Information/Comments: Cold weather in the Southeast; unit boiler loss. Update 12/24/22 16:10 - all circuits restored. Went back to EEA 1 at 16:20.	<input type="checkbox"/> None <input type="checkbox"/> Control center loss, failure, or evacuation <input type="checkbox"/> Loss or degradation of control center monitoring or communication systems <input type="checkbox"/> Damage or destruction of a facility <input type="checkbox"/> Electrical system separation (islanding) <input type="checkbox"/> Complete operational failure or shutdown of the transmission and/or distribution system <input type="checkbox"/> Major transmission system interruption (three or more BES elements) <input type="checkbox"/> Major distribution system interruption <input type="checkbox"/> Uncontrolled loss of 200 MW or more of firm system loads for 15 minutes or more <input checked="" type="checkbox"/> Loss of electric service to more than 50,000 customers for 1 hour or more <input type="checkbox"/> System-wide voltage reductions or 3 percent or more <input type="checkbox"/> Voltage deviation on an individual facility of ≥10% for 15 minutes or more <input checked="" type="checkbox"/> Inadequate electric resources to serve load <input type="checkbox"/> Generating capacity loss of 1,400 MW or more <input type="checkbox"/> Generating capacity loss of 2,000 MW or more <input type="checkbox"/> Complete loss of off-site power to a nuclear generating station <input type="checkbox"/> Other <input type="checkbox"/> Additional Information/Comments:	<input type="checkbox"/> None <input checked="" type="checkbox"/> Shed Firm Load: Load shedding of 100 MW or more implemented under emergency operational policy (manually or automatically via UFLS or remedial action scheme) <input checked="" type="checkbox"/> Public appeal to reduce the use of electricity for the purpose of maintaining the continuity of the electric power system <input type="checkbox"/> Implemented a warning, alert, or contingency plan <input checked="" type="checkbox"/> Voltage reduction <input type="checkbox"/> Shed Interruptible Load <input type="checkbox"/> Repaired or restored <input type="checkbox"/> Mitigation implemented <input type="checkbox"/> Other <input checked="" type="checkbox"/> Additional Information/Comments implemented 5% load shed, public appeals, and Rotating load shed  Update 12/24/22 16:10 - all circuits restored. Went back to EEA 1 at 16:20.

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U.S. Department of Energy  
Form DOE-417**ELECTRIC EMERGENCY INCIDENT AND  
DISTURBANCE REPORT**OMB No. 1901-0288  
Approval Expires: 05/31/2024  
Burden Per Response: 1.8 hours**SCHEDULE 2 -- NARRATIVE DESCRIPTION**

(Page 4 of 4)

Information on Schedule 2 will not be disclosed to the public to the extent that it satisfies the criteria for exemption under the Freedom of Information Act (FOIA), e.g., exemptions for confidential commercial information and trade secrets, certain information that could endanger the physical safety of an individual, or information designated as Critical Electric Infrastructure Information.

**N. FOIA Exemption(s)**

Identify (by checking all that apply) whether Schedule 2 – Narrative Description contains:

- ☐ Privileged or confidential information, e.g., trade secrets, commercial, or financial information  
☐ Critical Electric Infrastructure Information  
☐ Other information exempt from FOIA (include a description of the exemption on line T below)

**NAME OF OFFICIAL THAT SHOULD BE CONTACTED FOR FOLLOW-UP OR ANY ADDITIONAL INFORMATION**

<b>O.</b>	Name	Duke Energy ECC
<b>P.</b>	Title	DEP SPO Mgmt
<b>Q.</b>	Telephone Number	( 919 )-( 546 )-( 6527 )
<b>R.</b>	FAX Number	(   )-(   )-(   )
<b>S.</b>	E-mail Address	eccralpsosupervisors@duke-energy.com

Provide a description of the incident and actions taken to resolve it. Include as appropriate, the cause of the incident/disturbance, change in frequency, mitigation actions taken, equipment damaged, critical infrastructures interrupted, effects on other systems, and preliminary results from any investigations. Be sure to identify: the estimate restoration date, the name of any lost high voltage substations or switchyards, whether there was any electrical system separation (and if there were, what the islanding boundaries were), and the name of the generators and voltage lines that were lost (shown by capacity type and voltage size grouping).

**Cyber Attributes:** For cyber events, including attempted cyber compromises, provide the following attributes (at a minimum): (1) the functional impact, (2) the attack vector used, and (3) the level of intrusion that was achieved or attempted.

If necessary, copy and attach additional sheets. Equivalent documents, containing this information can be supplied to meet the requirement; this includes the NERC EOP-004 Disturbance Report. Along with the filing of Schedule 2, a final (updated) Schedule 1 needs to be filed. Check the Final box on line A for Alert Status on Schedule 1 and submit this and the completed Schedule 2 no later than 72 hours after detection that a criterion was met.

**T. Narrative:**

Due to extreme Cold weather, load forecast error, and loss of capacity on generating units. DEP declared EEA-2 at 06:06. Following the loss of a 350MW boiler, DEP implemented measures to maintain reliability of the BES. 5.0% Voltage Reduction was started at 06:15. 636MW of firm imports were also curtailed during this period. At 06:18, DEP moved from an EEA-2 to an EEA-3 and began feeder rotation of 600MW. At 07:10, feeder rotation was increased to 800MW. By 07:56, feeder rotation totaled 850MW and another 111MW of load was dropped manually.

At 08:16, DEP began manual load restoration. DEP exited 5.0% voltage reduction and returned to 2.9% at 08:33. Went back to EEA 1 at 16:20. Distribution feeders were restored manually with final circuits closed at 16:10.

**U. Estimated Restoration Date for all  
Affected Customers Who Can Receive  
Power**

$$\frac{12}{\text{mm}} - \frac{24}{\text{dd}} - \frac{2022}{\text{yy}}$$
**V. Name of Assets Impacted****W. Notify NERC, E-ISAC, or CISA Central**

Select the appropriate box(es) if you approve of all of the information provided on this form being submitted to the North America Electric Reliability Corporation (NERC), the Electricity Information Sharing and Analysis Center (E-ISAC), or DHS CISA Central or their successor(s).

NERC is an entity that is certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk power system but that is not part of the Federal Government. The information submitted to NERC, E-ISAC, or CISA Central can be submitted to help fulfill the respondent's requirements under NERC's reliability standards.

If approval is given to alert NERC, E-ISAC, or DHS CISA Central, then this form will be emailed to systemawareness@nerc.net, operations@eisac.com, and/or central.cyber@cisa.dhs.gov when it is submitted to DOE. DOE is not responsible for ensuring the receipt of these emails by NERC, E-ISAC, or CISA Central.

☒ Notify NERC | ☒ Notify E-ISAC | ☐ Notify CISA Central

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