

June 23, 2025

The Honorable Chris Wright Secretary of Energy United States Department of Energy 1000 Independence Avenue, SW Washington, DC 20585-1000

Re: Request for Emergency Order Under Section 202(c) of the Federal Power Act

Dear Secretary Wright:

Pursuant to Section 202(c) of the Federal Power Act ("FPA") and the regulations promulgated thereunder by the Department of Energy ("Department" or "DOE"), Duke Energy Carolinas, LLC ("Duke Energy") respectfully requests that the Secretary of Energy ("Secretary") find that an emergency exists within the Duke Energy service territory that requires intervention by the Secretary, in the form of a Section 202(c) emergency order, to preserve the reliability of the bulk electric power system. Duke Energy respectfully requests that the Secretary issue an order immediately, effective today, June 23, 2025, authorizing certain electric generating units located within the Duke Energy service territory to operate up to their maximum generation output levels under the limited circumstances described in this letter, notwithstanding air emissions or other permit limitations. Duke Energy further requests that the order remain effective through 10 PM Eastern Standard Time (EST) on June 25, 2025. Such order need only be effective during the pendency of any Duke Energy-issued Energy Emergency Alert (EEA) Level 2 or Level 3, except as otherwise provided herein in certain limited circumstances in anticipation of an EEA Level 2 or above. Duke Energy is requesting the Department issue an order for this duration with this limiting condition because Duke Energy anticipates unusually high load forecasts during this time of approximately 21,968 MW for DEC and 35,623 MW for the Carolinas.

## Background

Duke Energy's service territory will be impacted by a ridge of high pressure that will stall over the eastern United States resulting in elevated ambient temperatures combined with high humidity for many eastern power pools. This combination of heat and humidity is expected to result in a significant increase in demand for electricity on the Duke Energy system. These conditions are expected to begin on June 23, 2025 and extend through June 25, 2025. Peak temperatures across the service territory – outside of the high elevation – are expected to range from 96°F to 102°F during this time with heat indices in the range of 100°F to 110°F. The ridge weakens after Wednesday, then higher rain chances will provide relief from extreme temperatures and load Thursday and Friday.

While the vast majority of generating units in the Duke Energy service territory continue to function as expected under these stressed conditions, some units may experience operating difficulties due to hot weather in the coming days. Specifically, approximately 1500 MW of generating units are currently in outage or derated. Additionally, other units may be limited in their availability by conditions and limitations in their environmental permits. As a result, Duke Energy may not have sufficient generation available to meet this unusually high demand and may have to curtail load in order to maintain security and reliability of the grid. In anticipation of this emergency, Duke Energy has entered Grid Status Red and anticipates declaring an EEA Level 2.

Duke Energy has taken extensive conservation measures in an effort to reduce load so that the supply of power will continue to be sufficient to meet system demand and reserve requirements. On June 23, 2025, Duke Energy issued public conservation appeals encouraging customers to reduce usage. Additionally, Duke Energy has curtailed all recallable energy sales and implemented its load management program, including implementing residential demand response programs and large load curtailments. Duke Energy also notified wholesale customers to implement in-kind load management programs. These efforts are expected to reduce demand by approximately 700 - 1000 MW across the peak demand period.

In addition to the conservation measures, Duke Energy has also exhausted its ability to obtain more power through other means, including utilizing its Carolinas reserve sharing group and purchasing external capacity. As a result of these efforts, Duke Energy has secured approximately 1332 MW.

Duke Energy anticipates needing to continue these emergency actions through the order end date requested here. Subject to the exceptions requested herein, Duke Energy commits to continuing to take such actions, including utilizing other supply resources, before operating any units or calling on any generator to operate any units in a manner that will result in a conflict with a requirement of any federal, state, or local environmental statute or regulation, including requirements in permits issued pursuant to such laws or

regulations. Even with the requested order, however, it is possible that Duke Energy will need to curtail firm load to ensure system reliability.

## **Relief Requested**

Duke Energy and/or generators within the Duke Energy service territory may be required to limit power output from certain generating units due to emissions, effluent, or other limits established by federal and state environmental laws and permits. These units are described in **Exhibit A** (the "Specified Resources").<sup>1</sup> The operation of these units could be impacted by permit restrictions related to the operation of pollution control equipment. Specifically, should units experience an equipment malfunction that affects the injection of water on a simple cycle combustion turbine or the use of ammonia on a combined cycle combustion turbine, compliance with NOx emission limitations may not be achievable. Other control devices, such as electrostatic precipitators (ESP) can experience mechanical issues when running at maximum load for extended periods of time concurrent with elevated ambient temperatures and humidity. Performance issues related to the ESP can result in an increase in filterable particulate and metallic particulate emissions from the unit. Because the output from all of the units subject to these restrictions would help to reduce the need for any firm load shedding that may be required during this hot weather event, Duke Energy seeks an immediate order from the Department authorizing the provision of additional energy from the Specified Resources, as well as any other generating units, regardless of emissions or other permit limitations. This relief would be available only under the following limited circumstances:

• For any unit that is unable, or expected to be unable, to produce at its maximum output in compliance with environmental statute, regulation, or permit for the duration of the order, the unit will be allowed to operate at maximum output regardless only during any period for which Duke Energy has declared an Energy Emergency Alert (EEA) Level 2 or Level 3, except as described in the bullet below in certain limited circumstances in anticipation of an EEA Level 2 or above. Once Duke Energy

<sup>&</sup>lt;sup>1</sup> In the event that Duke Energy identifies additional units that it deems necessary to operate in violation of federal and state environmental laws in order to maintain the reliability of the power grid when the demand on the Duke Energy system exceeds expected energy and reserve requirements, Duke Energy shall provide prompt written notice to the Department of Energy at <u>AskCR@hq.doe.gov</u> with an updated Exhibit A to its application with the name and location of those units, the fuel type of such unit, and the anticipated category of environmental impact, at 11:00 Eastern Standard Time or 21:00 Eastern Standard Time, whichever follows closest in time to the unit identification by Duke Energy to the greatest extent feasible. Duke Energy requests that such additional generation units be deemed a resource covered by any order for the hours prior to the required written notice to the Department. However, if the Department of Energy notifies Duke Energy that it does not approve of such generation unit being designated as a resource covered by any order, such generation unit shall not constitute a covered resource upon notification from the Department.

declares that the EEA Level 2 (or above) event has ended, the units would be required to immediately return to operation within their permitted limits, except for the limited exceptions provided herein for operation in anticipation of an EEA Level to prevent the cycling of units or facilitate the charging or pumping of other resources necessary for the EEA Level 2 (or above level). And at all other times, the units would be required to operate within their permitted limits.

- For any generation resource whose operator notifies Duke Energy that the unit is offline or would need to go offline at any point on or after the date of issuance of this order for the time requested and during the pendency of an EEA Level 2 or 3, due to an emissions or other limit in any federal environmental permit, Duke Energy may direct the unit operator to bring the unit online, or to keep the unit online, and to operate at the level consistent with their permits subject to the exceptions requested herein. In this circumstance, the operator would be allowed to make all of the unit's capacity available to Duke Energy for dispatch during any period for which Duke Energy has declared an Energy Emergency Alert (EEA) Level 2 or Level 3, except as described in the third bullet below in certain limited circumstances in anticipation of an EEA Level 2 or above level. Once Duke Energy declares that such an EEA Level 2 (or higher) event has ended, the unit would be required to immediately return to operating at a level below the higher of its minimum operating level or the maximum output allowable under the permitted limit.
- Exception: Duke Energy seeks authority to operate and/or direct the operation of the Specified Resources in certain limited circumstances in advance of declaring an Energy Emergency Alert (EEA) Level 2, or in between such events, where such operation or continued operation of the Specified Resource is reasonably necessary to avoid shutting down and restarting the Specified Resource, because such cycling of units can cause reliability issues regarding restarting, delays, and increased emissions during start up. Duke Energy further seeks authority to operate and/or direct the operation of the Specified Resources in certain limited circumstances in anticipation of declaring an EEA Level 2 where such operation or continued operation of the Specified Resource is reasonably necessary to facilitate charging storage resources or pumping for pumped storage facilities that will needed during the EEA Level 2 (or higher level). Duke Energy commits to take measures to dispatch units for which cycling would otherwise be required in a manner reasonably intended to limit the duration and operating level of those units in such a way as to minimize violations of environmental law consistent with the security and reliability of the grid.
- To minimize adverse environmental impacts as set forth herein, this order limits operation of dispatched units to the times and within the parameters determined by Duke Energy as necessary for grid reliability to avoid adverse health and safety impacts to customers from shedding firm customer load. Consistent with good utility practices, Duke Energy shall exhaust all

reasonably and practically available resources, including available imports, demand response and identified behind-the-meter generation resources selected to minimize an increase in emissions to the extent that such resources provide support to maintain grid reliability prior to dispatching the Specified Resources at levels in violation of environmental laws. Duke Energy shall provide a daily notification to the Department by email to <u>AskCR@hq.doe.gov</u> reporting each generating unit that has been designated to use the allowance and operated in reliance on the allowances contained in this Order.

- Duke Energy will provide such additional information regarding the environmental impacts of the order and its compliance with the conditions of the order, in each case as requested by the Department of Energy from time to time. By July 2, 2025, Duke Energy will report all dates between June 23, 2025 and June 25, 2025, inclusive, on which the Specified Resources were operated, the hours of operation, and exceedance of permitting limits, including sulfur dioxide, nitrogen oxide, mercury, carbon monoxide, and other air pollutants, as well as exceedances of wastewater release limits. Duke Energy will submit a final report by July 9, 2025, with any revisions to the information reported on July 2, 2025. The environmental information submitted in the final report will also include the following information for each Specified Resource that operates pursuant to the order:
  - The number and actual hours each day that each Specified Resource unit operated in excess of permit limits or conditions;
  - Amount, type and formulation of any fuel used by each Specified Resource;
  - For any permit that had limits or conditions exceeded or violated pursuant to this order, all reporting provided pursuant to that permit over the last three years to the United States Environmental Protection Agency or state or local environmental agencies;
  - Additional information requested by DOE as it performs any environmental review relating to the issuance of the order; and
  - o Information describing how operation of the Specified Resource complied with applicable environmental requirements.
- Duke Energy will take reasonable measures to inform affected communities where all Specified Resources operate that Duke Energy has been issued the order, in a manner that ensures that as many members of the community as possible are aware of the order, and explains clearly what the order allows Duke Energy to do. At a minimum, Duke Energy will post a description of the Order on its website (with a link to the order) and identify the name, municipality or other political subdivision, and zip code of Specified Resources covered by the order, as the Specified Resources may be updated. In addition, in the event that a

Specified Resource operates pursuant to the order, a general description of the action authorized by the order will be included in any press release issued by Duke Energy with respect to the hot weather event and will include a reference to the website posting required by the preceding sentence for further information. Duke Energy will describe the actions taken to comply with this paragraph in the reports described above.

Duke Energy requests this order because it is committed to public health and safety, takes its compliance obligations seriously, and understands the importance of the environmental permit requirements that are at issue. In this case, the risk of power outages during this period of extremely hot temperatures is a more imminent and prominent threat to the communities in our service territory than the temporary exceedances of those permit limits that would be allowed under the order. Authorizing the Specified Resources to operate notwithstanding permit and other limitations will reduce the likelihood that Duke Energy will need to curtail load.

This request is narrowly tailored to allow only the exceedances that are necessary to ensure reliability during the limited timeframe of this request. Limiting the requested allowance to situations involving an EEA Level 2 or 3 will ensure that the generation capacity subject to emissions limits and other permit restrictions will be the last generation that is made available for dispatch to meet system demand, thus minimizing any environmental impact to the greatest degree possible.

Duke Energy greatly appreciates the Department of Energy's expedited consideration of this request and commits to respond to any requests for additional information on an expedited basis. Please do not hesitate to contact me or my staff if you have any questions or require additional information in order to act on this request.

Respectfully Submitted,

Jessica L Bednarcik

Jessica L. Bednarcik SVP, Enterprise Safety and Generation Services Duke Energy Carolinas, LLC

## Exhibit A Proposed Specified Resources