



JAMES R. MORRIS  
Vice President

Duke Energy Corporation  
Catawba Nuclear Station  
4800 Concord Road  
York, SC 29745

803-701-4251  
803-701-3221 fax

March 1, 2011

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555

Subject: Duke Energy Carolinas, LLC (Duke Energy)  
Catawba Nuclear Station, Unit 1  
Docket Number 50-413  
Notice of Enforcement Discretion (NOED) Request  
Technical Specification (TS) 3.8.1, "AC Sources - Operating" (primary TS)  
TS 3.7.8, "Nuclear Service Water System (NSWS)" (secondary TS)  
TS 3.7.5, "Auxiliary Feedwater (AFW) System" (secondary TS)  
TS 3.6.6, "Containment Spray System" (secondary TS)

Enclosed is the written documentation of the background and technical information supporting the Catawba Nuclear Station Unit 1 NOED request. This information was discussed with the NRC in a telephone conference call on February 25, 2011. The NOED was subsequently verbally granted by the NRC following the conference call. This submittal fulfills the requirement to submit the written NOED request within two working days of the NRC granting the request.

This request concerns an extension of the TS Completion Time for Diesel Generator (DG) 1B inoperability from the current 72 hours by an additional 48 hours, for a total of 120 hours. The requested extension is necessary to restore the DG to operable status. DG 1B was declared inoperable on February 23, 2011 at 0432 hours due to problems experienced during its TS required 24-hour run. Absent enforcement discretion, the DG would be required to be declared operable by February 26, 2011 at 0432 hours. The details of this request are fully explained in the enclosure to this letter.

This NOED request is necessary to support the replacement of the mechanical governor on DG 1B and the conduct of required post-maintenance testing. As shown in the enclosed justification, Duke Energy maintains that granting of discretionary enforcement in this case is in the best interest of nuclear safety.

This NOED request was reviewed and approved by the Catawba Plant Operations Review Committee (PORC) on February 25, 2011.

This NOED request was approved by the NRC on February 25, 2011 at 1655 hours. Catawba restored DG 1B and all affected supported equipment with a 72-hour TS Completion Time to operable status by 1454 hours on February 27, 2011.

A001  
HRC

U.S. Nuclear Regulatory Commission  
Page 2  
March 1, 2011

Should you have any questions concerning this information, please contact L.J. Rudy at (803) 701-3084.

Very truly yours,

A handwritten signature in black ink, appearing to read "James R. Morris". The signature is fluid and cursive, with a prominent initial "J" and a long, sweeping underline.

James R. Morris

LJR/s

Enclosure

U.S. Nuclear Regulatory Commission  
Page 3  
March 1, 2011

xc (with enclosure):

V.M. McCree  
U.S. Nuclear Regulatory Commission  
Regional Administrator, Region II  
Marquis One Tower  
245 Peachtree Center Ave., NE Suite 1200  
Atlanta, Georgia 30303-1257

G.A. Hutto, III  
Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
Catawba Nuclear Station

J.H. Thompson (addressee only)  
NRC Project Manager  
U.S. Nuclear Regulatory Commission  
11555 Rockville Pike  
Mail Stop O8 G9A  
Rockville, MD 20852-2738

S.E. Jenkins  
Manager  
Radioactive & Infectious Waste Management  
Division of Waste Management  
South Carolina Department of Health and Environmental Control  
2600 Bull St.  
Columbia, SC 29201

**Enclosure**  
**Catawba Nuclear Station, Unit 1**  
**Request for Enforcement Discretion**  
**TS 3.8.1, "AC Sources - Operating"**  
**TS 3.7.8, "Nuclear Service Water System (NSWS)"**  
**TS 3.7.5, "Auxiliary Feedwater (AFW) System"**  
**TS 3.6.6, "Containment Spray System"**

**Background**

The onsite standby power source for each 4160 volt Engineered Safety Features (ESF) bus at Catawba is a dedicated Diesel Generator (DG). For each unit, DGs A and B are dedicated to ESF buses ETA and ETB, respectively. A DG starts automatically on a Safety Injection (SI) signal (i.e., low pressurizer pressure or high containment pressure) or on an ESF bus degraded voltage or undervoltage signal. After the DG has started, it will automatically tie to its respective bus after offsite power is tripped as a consequence of ESF bus undervoltage or degraded voltage, independent of or coincident with an SI signal. With no SI signal, there is a ten-minute delay between the degraded voltage signal and the DG start signal. The DGs will also start and operate in the standby mode without tying to the ESF bus on an SI signal alone. Following the trip of offsite power, a sequencer strips loads from the ESF bus. When the DG is tied to the ESF bus, loads are then sequentially connected to its respective ESF bus by the automatic load sequencer. The sequencing logic controls the permissive and starting signals to motor breakers to prevent overloading the DG by automatic load application.

In the event of a loss of preferred power, the ESF electrical loads are automatically connected to the DGs in sufficient time to provide for safe reactor shutdown and to mitigate the consequences of a Design Basis Accident (DBA) such as a Loss of Coolant Accident (LOCA).

Certain required unit loads are returned to service in a predetermined sequence in order to prevent overloading the DG in the process. Approximately one minute after the initiating signal is received, all loads needed to recover the unit or to maintain it in a safe condition are returned to service.

TS 3.8.1 governs the DGs. Limiting Condition for Operation (LCO) 3.8.1 requires two operable DGs for each unit that is in Modes 1, 2, 3, and 4. With one DG inoperable, the inoperable DG must be restored to operable status within 72 hours per Required Action B.4. If this is not accomplished, the unit must be placed in Mode 3 within 6 hours and in Mode 5 within 36 hours per Required Actions G.1 and G.2.

The NSWS provides a heat sink for the removal of process and operating heat from safety related components during a DBA or transient. During normal operation, and a normal shutdown, the NSWS also provides this function for various safety related and non-safety related components.

The NSWS consists of two independent loops (A and B) of essential equipment, each of which is shared between the two Catawba units. Each loop contains two NSWS pumps, each of which is supplied from a separate DG. Each set of two pumps supplies two trains (1A and 2A, or 1B and 2B) of essential equipment through common discharge piping. While the pumps are unit designated (i.e., 1A, 1B, 2A, 2B), all train-related pumps receive automatic start signals

from a corresponding train-related SI or blackout signal from either unit. Therefore, a pump designated to one unit will supply post-accident cooling to equipment in that loop on both units. For example, the 1B NSWS pump, whose emergency power is supplied by DG 1B, will supply post-accident cooling to NSWS trains 1B and 2B.

One NSWS loop containing two operable NSWS pumps has sufficient capacity to supply post-LOCA loads on one unit and shutdown and cooldown loads on the other unit. Thus, the operability of two NSWS loops assures that no single failure will keep the system from performing the required safety function. Additionally, one NSWS loop containing one operable NSWS pump has sufficient capacity to maintain one unit indefinitely in Mode 5 (commencing 36 hours following a trip from full power) while supplying the post-LOCA loads of the other unit. Thus, after a unit has been placed in Mode 5, only one NSWS pump and its associated DG are required to be operable on each loop, in order for the system to be capable of performing its required safety function, including single failure considerations.

TS 3.7.8 governs the NSWS. LCO 3.7.8 requires two operable NSWS trains for each unit that is in Modes 1, 2, 3, and 4. With one NSWS train inoperable, the inoperable NSWS train must be restored to operable status within 72 hours per Required Action A.1. If this is not accomplished, the unit must be placed in Mode 3 within 6 hours and in Mode 5 within 36 hours per Required Actions C.1 and C.2.

The NSWS also supports the AFW and Containment Spray Systems since it serves as the assured water source for these systems. TS 3.7.5 governs the AFW System. LCO 3.7.5 requires three AFW trains to be operable in Modes 1, 2, and 3, and one motor-driven AFW train to be operable in Mode 4 when the steam generators are relied upon for heat removal. With one AFW train inoperable in Mode 1, 2, or 3 for reasons other than an inoperable steam supply to the turbine-driven AFW pump, the inoperable AFW train must be restored to operable status within 72 hours per Required Action B.1. If this is not accomplished, the unit must be placed in Mode 3 within 6 hours and in Mode 4 within 12 hours per Required Actions C.1 and C.2. TS 3.6.6 governs the Containment Spray System. LCO 3.6.6 requires two containment spray trains to be operable in Modes 1, 2, 3, and 4. With one containment spray train inoperable, the inoperable containment spray train must be restored to operable status within 72 hours per Required Action A.1. If this is not accomplished, the unit must be placed in Mode 3 within 6 hours and in Mode 5 within 84 hours per Required Actions B.1 and B.2.

### **Need for NOED**

Duke Energy is requesting that the NRC exercise discretion to not require compliance with TS 3.8.1, Required Action B.4 for the inoperable DG, TS 3.7.8, Required Action A.1 for the inoperable NSWS train, TS 3.7.5, Required Action B.1 for the inoperable AFW train, and TS 3.6.6, Required Action A.1 for the inoperable containment spray train. Catawba is specifically requesting that the Completion Times of these Required Actions be extended from the current 72 hours by an additional 48 hours, for a total of 120 hours. The requested extension of these Completion Times will allow work to be completed to restore DG 1B to operable status.

### **Basis for NOED**

Duke Energy has reviewed NRC Regulatory Issue Summary 2005-01, "Changes to Notice of Enforcement Discretion (NOED) Process and Staff Guidance", and the accompanying NRC

Inspection Manual Part 9900 Technical Guidance, "Operations – Notices of Enforcement Discretion", and has concluded that Part 9900 Section B.2.1, "Situations Affecting Radiological Safety – Regular NOEDs", Criterion 1.a is satisfied. This criterion applies to plants in power operation desiring to avoid unnecessary transients as a result of compliance with the license condition and, thus, minimize the potential safety consequences and operational risks. The basis for this conclusion and other information required to support a request for NOED is provided below.

**1. The Technical Specification or other license condition that will be violated:**

**Duke Energy Response:**

Catawba is requesting enforcement discretion from TS 3.8.1, Required Action B.4, TS 3.7.8, Required Action A.1, TS 3.7.5, Required Action B.1, and TS 3.6.6, Required Action A.1, as indicated above. TS 3.8.1 is the primary TS due to the inoperability of DG 1B. TS 3.7.8 is affected because DG 1B is required to be operable for NSWS Train 1B to be considered operable. TS 3.7.5 and TS 3.6.6 are affected due to the fact that when a shared NSWS component is inoperable, both units initially enter the Condition for one inoperable NSWS train. It is subsequently permissible for the operators to isolate one NSWS train's flowpath to the corresponding train of the AFW System and the Containment Spray System. The purpose of this isolation is to allow one of the units to exit the Condition for one inoperable NSWS train; however, the isolated AFW and containment spray trains must be considered inoperable and their Conditions must be entered.

**2. The circumstances surrounding the situation: including likely causes; the need for prompt action; action taken in an attempt to avoid the need for a NOED; and identification of any relevant historical events.**

**Duke Energy Response:**

DG 1B was started at 1200 hours on February 22, 2011 for its 24-hour run. The 24-hour run is performed every 18 months in accordance with TS Surveillance Requirement (SR) 3.8.1.14. The DG achieved full load at approximately 1240 hours. At approximately 0430 hours on February 23, 2011, voltage, power factor, and load were noted to be swinging outside of the normal control band (load was noted to be changing by approximately 800 kW). DG 1B was subsequently declared inoperable at 0432 hours on February 23, 2011. Problem Investigation Report (PIP) C-11-01407 was written to document the issue. Troubleshooting subsequently determined that the problem with DG 1B was in the mechanical governor. The governor's speed setting could not be adjusted to the desired value. As required by TS, a common mode failure evaluation was performed within 24 hours in order to determine if the problem was transportable to the other DGs (1A, 2A, and 2B). This evaluation was completed at 0326 hours on February 24, 2011 and it was determined that no common mode failure mechanism existed. The decision was made to replace the mechanical governor.

Catawba took action in an attempt to avoid the need for this NOED request. This included initiating a Unit Threat Team, and performing the mechanical governor replacement under a maintenance plan utilizing 24-hour coverage.

There have been no other relevant historical events at Catawba in conjunction with this issue.

3. **Information to show that the cause and proposed path to resolve the situation are understood by the licensee, such that there is a high likelihood that planned actions to resolve the situation can be completed within the proposed NOED time frame.**

**Duke Energy Response:**

Catawba determined the cause of the failure to be the DG mechanical governor. The governor has since been replaced. Therefore, this NOED request is limited to the time to complete maintenance on the DG, to conduct required DG testing, and to perform required system realignments. It is anticipated that the remainder of the maintenance, subsequent testing, and system realignments will require less than 48 additional hours beyond the expiration of the applicable TS Completion Times.

4. **The safety basis for the request, including an evaluation of the safety significance and potential consequences of the proposed course of action.**
  - a. **Provide the incremental conditional core damage probability (ICCDP) and incremental conditional large early release probability (ICLERP) associated with the period of enforcement discretion.**

**Duke Energy Response:**

Using the Catawba Probabilistic Risk Assessment (PRA) model, unavailability of DG 1B and isolation of NSW to AFW and containment spray trains as the assured source results in an Incremental Conditional Core Damage Frequency of 7.70E-08/day and an Incremental Conditional Large Early Release Frequency of 1.07E-08/day.

The ICCDP and ICLERP have been evaluated to be:

24-hour extension	48-hour extension
ICCDP 7.70E-08	ICCDP 1.54E-07
ICLERP 1.07E-08	ICLERP 2.14E-08

The above values are less than the guidance thresholds of 5E-07 and 5E-08 for the period of enforcement discretion.

- b. **Discuss the dominant risk contributor (cutsets/sequences) and summarize the risk insights for the plant-specific configuration the plant intends to operate in during the period of enforcement discretion.**

**Duke Energy Response:**

In the ICCDP results, the dominant sequences are initiated by Loss of Offsite Power (LOOP) and tornadoes. The LOOP sequences involve failure to recover offsite power and failure of the redundant DG 1A to start. The tornado sequences also involve failure of DG 1A to start in addition to the AFW turbine-driven pump failing to run.

The ICLERP dominant sequences are initiated by Steam Generator Tube Ruptures (SGTR). The SGTR sequences involve failure to make up to the upper surge tank, failure to manually throttle AFW flow in the control room, and failure to establish feed and bleed cooling.

- c. Explain compensatory measures that will be taken to reduce the risk associated with the specified condition.**

**Duke Energy Response:**

In general terms, the following compensatory measure strategy will be employed:

1. Defer non-essential surveillances or other maintenance activities in the switchyard where human error could contribute to the likelihood of a LOOP. This has not been included in the quantitative evaluation.
2. Defer non-essential surveillances or other maintenance activities on risk-significant equipment. This equipment includes DG 1A, the AFW turbine-driven pump, and the Standby Shutdown System (SSS).

The following specific compensatory measures are being taken to reduce the risk during the NOED period:

- During the period of enforcement discretion, no elective maintenance or testing will be planned on DG 1A or on NSWS Train 1A. In addition, for Unit 1, during this period, no elective maintenance or testing will be planned on the operable equipment that relies upon NSWS Train 1A as a support system.
- During the period of enforcement discretion, no elective maintenance or testing will be planned on AFW Train 1A, Train 1B, or the Unit 1 turbine-driven AFW pump.
- During the period of enforcement discretion, no elective maintenance or testing will be planned on Unit 1 Component Cooling Water (CCW) System.
- During the period of enforcement discretion, no elective maintenance or testing will be planned on Chemical Volume and Control System Train 1A or Train 1B.
- During the period of enforcement discretion, no elective maintenance or testing will be planned on the SSS.
- During the period of enforcement discretion, no elective maintenance or testing will be planned on the portions of the drinking water system that are relied upon to provide backup cooling to the Train 1A centrifugal charging pump.

- During the period of enforcement discretion, no elective maintenance or testing will be planned on the Train 1A or Train 1B essential AC power switchgear including the 4160 volt busses, load centers, and motor control centers.
  - During the period of enforcement discretion, no elective maintenance or testing will be planned on switchyard components or the transformers that feed the Train 1A and Train 1B 4160 volt busses.
  - Station personnel will communicate with the System Operations Center once each shift regarding the unit status and the need to maintain grid stability during the period of enforcement discretion.
  - In accordance with System Operations Management Procedure 02-02, "Operations Roles In The Risk Management Process", selected plant equipment will be posted as "protected" to ensure that no persons inadvertently enter the area of the equipment. This equipment includes, but is not limited to, the switchyard and main transformer yards, the essential switchgear rooms, the SSS, and selected pumps. In addition to Unit 1 equipment, specific Unit 2 and shared equipment to be protected includes DGs 2A and 2B, NSWS pumps 2A and 2B, 4160 volt essential busses 2ETA and 2ETB, and motor control centers 1EMXG and 2EMXH.
  - Prior to entering the period of enforcement discretion, the operating crews will review the procedures regarding starting the SSS and establishing backup cooling to the Train 1A centrifugal charging pump.
  - Catawba has installed permanent flood protection barriers in the turbine building to mitigate turbine building flooding. In addition, to help reduce any potential flooding issues, no elective maintenance or testing will be planned on the Condenser Circulating Water System.
  - To mitigate the risk of a potential core damage event, an operator action has been identified. This involves dispatching operators to throttle key AFW valves that supply flow to the steam generators prior to the depletion of the vital batteries, thereby preventing steam generator overfill and thus protecting the steam supplies to the AFW turbine-driven pump. Catawba will dedicate an operator on each shift with this responsibility. This action has been previously proceduralized and validated.
  - Any yard digging activities over active NSWS piping will be prohibited during the period of enforcement discretion.
  - Station personnel will verify once per shift that the above compensatory measures remain in place during the period of enforcement discretion.
  - The Unit Threat Team will remain in place throughout the evolution.
- d. Discuss how compensatory measures are accounted for in the PRA. These modeled compensatory measures should be correlated, as applicable, to the dominant PRA sequences identified in Item 4.b above. In addition, other measures not directly related to the equipment out-of-service may also be implemented to reduce overall plant risk and, as such, should be explained. Compensatory measures that cannot be modeled in the PRA should be assessed qualitatively.**

**Duke Energy Response:**

The risk assessment has taken into account that risk-significant systems are assumed to be available. Deferring surveillances or other maintenance activities in the switchyard is not modeled in the PRA. However, since this is aligned with the dominant risk contributors, namely the LOOP sequence, it should result in a significant risk reduction during the NOED period. Although not all of the above compensatory measures are modeled in the PRA, they collectively serve to mitigate the risk associated with the granting of the NOED.

- e. **Discuss the extent of condition of the failed or unavailable component(s) to other trains/divisions of equipment and what adjustments, if any, to the PRA common cause factors have been made to account for potential increases in the failure probabilities. The method to use to determine the extent of condition should be discussed. It is recognized that a formal root cause or apparent cause is not required given the limited time available in determining acceptability of a proposed NOED. However, a discussion of the likely cause should be provided with an associated discussion of the potential for common cause failure.**

**Duke Energy Response:**

As indicated in the response to Item 2, a common mode failure evaluation was performed for the other DGs. This evaluation is summarized below:

Determine what component failed.

DG 1B was declared inoperable due to voltage, power factor, and load swinging outside of the normal control band 15 hours into a scheduled 24-hour run. A team was assembled to identify possible failure modes for the observed condition. Troubleshooting identified that the component that caused the load swings on DG 1B was the Woodward mechanical governor.

Determine as best possible the probable failure mechanism for the component.

Troubleshooting identified the speed setting of the mechanical governor to be 453 rpm vs. 460 rpm. Following unloading of the engine, frequency was cycling between 60 hz (450 rpm) and 60.4 hz (453 rpm). Operators were not able to manually increase engine speed by raising the speed output of the electronic governor, indicating the mechanical governor was already controlling engine speed. The electronic governor is designed to maintain the engine speed at a constant value of 450 rpm. The electronic governor receives input from the digital reference unit and then sends a signal to the mechanical governor which controls the engine fuel rack system during full load operation. DG 1B became unstable at full load as the speed setting for the mechanical governor began to drift low during the 24-hour run. As this speed setting drifted close to the setpoint for the electronic governor, the two components begin competing to control load. Although the mechanical governor can control the engine during loaded operation, it is not designed nor credited for

this function. Possible failure modes for the mechanical governor are failed internal components.

A review of modifications, work orders, and procedure changes implemented since the conduct of the previous 24-hour runs as indicated below was performed to answer the following questions.

DG 1A - January 11, 2010

DG 1B - November 3, 2009

DG 2A - March 1, 2010

DG 2B - January 18, 2010

- i. Were any modifications performed on any other DGs that could have caused the failure to occur?

No modifications have been performed on the mechanical governor that would have caused the observed condition.

- ii. Were any changes performed on any procedure affecting the other DGs that could have caused the failure to occur?

No changes have been made to any procedures performing work on the mechanical governor that would have caused the failure.

- iii. Was any maintenance performed on the other DGs that could have caused the failure to occur?

No maintenance has been performed on the mechanical governor that would have caused the observed load swings.

- iv. Was the failure due to any changes to the environmental conditions such as humidity, temperature, foreign material, or others that could also have affected additional DGs?

No. The observed failure mode is due to a speed setpoint drift resulting from an internal component issue.

- v. Was the failure due to fuel contamination?

No. The respective component has no interaction with DG fuel.

- vi. Determine if tampering appears to be a possible cause of the failure. If not, state this in the evaluation. If so, notify the Operations Shift Manager so that the provisions of Site Directive 3.1.4, "Operational Response to Acts Directed Against Plant Equipment" can be initiated.

No indication of tampering exists. DG 1B operated at full load for 15 hours with no problems before the load swings began.

- vii. Make a reasonable attempt to ensure the failure was not due to a manufacturing defect that may be present on the other engines (i.e., review of 10 CFR 21 reports, operating experience search).

The data obtained during failure validation indicates the problem is the result of a speed setpoint drift. The respective component was replaced in 2002 per Work Order 1014972 as part of the recommended 15-year replacement. There have been no problems identified during that time frame. 10 CFR 21 notifications on these components deal with problems during vendor refurbishments which reveal themselves shortly following installation.

The mechanical governors were replaced per the DG maintenance plan on the following dates:

DG 1A - November 2003 - Work Order 01056756  
DG 1B - April 2002 - Work Order 01014972  
DG 2A - February 2003 - Work Order 01044084  
DG 2B - October 2001 - Work Order 01021260

Conclusion: As a result of the evaluation above, there is no information indicating that a common mode failure mechanism exists affecting the operability of DGs 1A, 2A, and 2B. Catawba will work with the vendor to expedite the root cause determination of the mechanical governor failure. Preventive maintenance has been performed per vendor recommendations on the correct frequencies.

Finally, there was no need to make any adjustments to any PRA common cause factors as a result of this event.

- f. **Discuss external event risk for the specified plant configuration. An example of external event risk is a situation where a reactor core isolation cooling pump (RCIC) has failed and a review of the licensee's individual plant examination of external events or full-scope PRA model identifies that the RCIC pump is used to mitigate certain fire scenarios. Action may be taken to reduce fire ignition frequency in the affected areas or reduce human error associated with time critical operator actions in respond to such scenarios.**

**Duke Energy Response:**

External events are accounted for in the PRA model with the exception of the seismic events. The seismic results typically are not sensitive to unavailabilities of individual components and the seismic contribution is judged to be insignificant relative to the non-seismic results. This assumption is further supported because the seismic Initiating Event Frequency (IEF) is less than the LOOP IEF.

- g. **Discuss forecasted weather conditions for the NOED period and any plant vulnerabilities related to weather conditions.**

**Duke Energy Response:**

Based upon the forecast and the current status of the plant equipment, there are no vulnerabilities expected due to weather conditions for the NOED period. Forecast details are included below:

**Friday:** A mix of clouds and sun with gusty winds. High around 70F. Winds W at 25 to 35 mph. Winds could occasionally gust over 40 mph.

**Friday night:** Generally clear. Low 32F. Winds NNE at 10 to 15 mph.

**Saturday:** Sunny skies. High near 60F. Winds ESE at 5 to 10 mph.

**Saturday night:** Mainly clear early, then a few clouds later on. Low 41F. Winds SSW at 5 to 10 mph.

**Sunday:** More clouds than sun. Highs in the low 70s and lows in the mid 50s.

**Monday:** A few thunderstorms possible. Highs in the low 70s and lows in the mid 40s.

**Tuesday:** Sunny. Highs in the low 60s and lows in the mid 30s.

**5. The justification for the duration of the noncompliance.**

**Duke Energy Response:**

The duration of the non-compliance is limited to the time required to complete the maintenance on DG 1B, to conduct the required DG testing, and to perform the required system realignments. Catawba is therefore requesting that the current 72-hour Completion Times associated with the above TS be extended by 48 additional hours, for a total of 120 hours.

**6. The condition and operational status of the plant (include safety-related equipment out of service or otherwise inoperable).**

**Duke Energy Response:**

Unit 1 is currently in Mode 1 at 100% power. Duke Energy has reviewed the plant TS, the plant operating schedule, and the Work Management System. This review determined that no TS or risk-significant equipment that has an impact on the above PRA results is inoperable or planned to be taken out of service while the NOED is in effect.

**7. The status and potential challenges to off-site and on-site power sources.**

**Duke Energy Response:**

There are no activities scheduled in the switchyard or on the plant transformers that will adversely affect risk during the requested enforcement discretion period. Additionally, no activities are scheduled for the opposite train DG or the opposite train of the NSWS, AFW System, or Containment Spray System.

- 8. The basis for the licensee's conclusion that the noncompliance will not be of potential detriment to the health and safety of the public.**

**Duke Energy Response:**

There is minimal safety consequence associated with this request. Granting of enforcement discretion will not have any adverse safety impact. DG 1A, NSWS Train 1A, AFW Train 1A, and containment spray Train 1A are all fully operable and capable of performing their required safety functions in the unlikely event of a DBA or other event occurring while enforcement discretion is in effect. This request has no significance from the standpoint of operator or public dose in the event of an accident. All dose analysis results will continue to be met.

- 9. The basis for the licensee's conclusion that the noncompliance will not involve adverse consequences to the environment.**

**Duke Energy Response:**

This request for enforcement discretion will not result in any significant changes in the types, or significant increase in the amounts, of any effluents that may be released offsite. In addition, no significant increase in individual or cumulative occupational radiation exposures will be involved as a result of the request. Therefore, it can be concluded that the NRC's granting of this request for enforcement discretion will not involve any adverse consequences to the environment.

- 10. A statement that the request has been approved by the facility organization that normally reviews safety issues (Plant On-site Review Committee, or its equivalent).**

**Duke Energy Response:**

This NOED request was reviewed and approved by the Catawba Plant Operations Review Committee (PORC) on February 25, 2011.

- 11. The request must specifically address which of the NOED criteria for an appropriate condition specified in Section B is satisfied and how it is satisfied.**

**Duke Energy Response:**

Duke Energy is submitting this NOED request in accordance with NRC Inspection Manual Part 9900 Technical Guidance, "Operations – Notices of Enforcement Discretion", and is requesting discretion based on Section B.2.1, "Situations Affecting

Radiological Safety – Regular NOEDs”, Criterion 1.a. This criterion applies to plants in power operation desiring to avoid unnecessary transients as a result of compliance with the license condition and, thus, minimize the potential safety consequences and operational risks. The safety consequences and operational risks for Catawba were reviewed as a part of this NOED request and are documented within this submittal.

- 12. Unless otherwise agreed as discussed in Section B, a commitment is required from the licensee that the written NOED request will be submitted within two working days and the follow-up amendment will be submitted within four working days of verbally granting the NOED. The licensee’s amendment request must describe and justify the exigent circumstances (see 10 CFR 50.91(a)(6)). The licensee should state if staff has agreed during the teleconference that a follow-up amendment is not needed. If the licensee intends to propose a temporary amendment, the licensee’s amendment request shall include justification for the temporary nature of the requested amendment.**

**Duke Energy Response:**

Upon discussion with the NRC on February 25, 2011, Duke Energy will submit a written NOED request within two working days.

Catawba plans to perform a design study to evaluate extended TS Completion Times for DGs and associated equipment. This study is being tracked in Catawba’s Corrective Action Program as PIP C-11-01531.

- 13. In addition to Items 1-12 above, for severe-weather NOED requests the licensee must provide additional specified information.**

**Duke Energy Response:**

This is not a severe-weather NOED request. Weather considerations are discussed in Item 4.