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10 CFR 50.90

July 16, 2013

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

**Subject: Duke Energy Carolinas, LLC
Oconee Nuclear Station (ONS), Units 1, 2, and 3
Docket Numbers 50-269, 50-270, and 50-287
Additional Information Regarding License Amendment Request to Clarify the
Application of the 45-day Completion Time of Technical Specification 3.8.1
Required Action C.2.2.5
License Amendment Request (LAR) No. 2012-14, Supplement 1**

On October 30, 2012, Duke Energy Carolinas, LLC (Duke Energy) submitted a License Amendment Request (LAR) requesting the Nuclear Regulatory Commission (NRC) approve a Technical Specification (TS) change to allow the 45-day Completion Time (CT) of TS 3.8.1 Required Action (RA) C.2.2.5 to be applied cumulatively over a 3-year time period for each Keowee Hydro Unit (KHU). By letter dated June 17, 2013, the NRC requested Duke Energy to submit additional information associated with the LAR.

The enclosure provides the requested information. Attachments 1 and 2 provide changes to the proposed TS and Bases associated with NRC Request for Additional Information (RAI) 8. The changes proposed by this supplement are bounded by the no significant hazards consideration submitted in the October 30, 2012, LAR.

This license amendment is needed to allow work associated with the Protected Service Water (PSW) System tie-in to the KHU emergency power to proceed on schedule. This work is scheduled to begin on September 3, 2013; therefore, approval no later than August 15, 2013, is requested. There are no new commitments being made as a result of this letter.

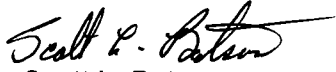
If there are any additional questions, please contact Boyd Shingleton, ONS Regulatory Affairs, at (864) 873-4716.

www.duke-energy.com

ADDI
NRR

I declare under penalty of perjury that the foregoing is true and correct. Executed on
July 16, 2013.

Sincerely,



Scott L. Batson
Vice President
Oconee Nuclear Station

Enclosure Response to NRC Request for Additional Information

Attachments

Attachment 1 Marked up Technical Specification and Bases Pages
Attachment 2 Retyped Technical Specification and Bases Pages

cc w/Enclosure and Attachments:

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ENCLOSURE

**Duke Energy Response to
NRC Request for Additional Information (RAI)**

NRC Background Information

Section 4.0 Risk Insights of the license amendment request (LAR) dated October 30, 2012, states:

“The justification for the TS Completion Time clarification is based on the deterministic evaluation in section 3.0. Duke Energy reviewed the Probabilistic Risk Assessment (PRA) to gain additional insights concerning the configuration of ONS with one KHU inoperable for a cumulative 45 days over 3-year time period versus one KHU inoperable for one continuous 45-day time period. The Incremental Conditional Core Damage Probability (ICCDP) and the Incremental Conditional Large Early Release Frequency (ICLERP) (sic) risk metrics are the same regardless of whether or not a KHU is inoperable for a continuous 45-day time period or for a cumulative 45 days over any 3-year time period. The insights from the Duke Energy risk analysis support the deterministic analysis showing that there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner of this license amendment request.”

RAI 1

Concerning the risk assessment performed to gain insights in Section 4.0 of the Oconee LAR dated October 30, 2012, related to the proposed 45 days cumulative per rolling 3 year period, please discuss the basis for your conclusion(s) on risk insights.

Duke Energy Response

The basis for Duke Energy's conclusion is that the Incremental Conditional Core Damage Probability (ICCDP) and the Incremental Conditional Large Early Release Probability (ICLERP) risk metrics are the same regardless of whether or not a KHU is inoperable for a continuous 45-day time period or for a cumulative 45 days over any 3-year time period.

RAI 2

What duration was used for a single Keowee Hydro Unit (KHU) outage? Were dual KHU outages considered as part of the single KHU outage?

Duke Energy Response

The duration used for a single KHU outage was 45 days. If dual KHU outages are required during an extended single KHU outage, then the time in the dual KHU outages is counted as time in the extended single KHU outage since the Unit(s) remain(s) in Technical Specification (TS) 3.8.1 Condition C for an inoperable overhead KHU. Dual KHU outages were not considered in the PRA risk assessment since no change to the 60-hour Completion Time of TS 3.8.1 Required Action (RA) H.2 was requested and a dual KHU outage is not necessarily required for an extended single KHU outage.

RAI 3

When a single KHU outage is entered, how is it ensured that the other KHU will maintain its high reliability to start and run?

Duke Energy Response

ONS operations procedures require the KHU associated with the underground emergency power path be demonstrated operable prior to taking the KHU associated with the overhead emergency power path out of service. Technical Specification (TS) 3.8.1 RA C.1 requires Surveillance Requirement (SR) 3.8.1.3 be performed within 1 hour of a KHU becoming inoperable if not performed within the previous 12 hours and once per 7 days thereafter. The normal SR frequency for SR 3.8.1.3 is 31 days. This SR verifies the availability of the KHU associated with the underground emergency power path to start automatically and energize the underground emergency power path. Utilization of either the auto-start or emergency start sequence assures the control function operability by verifying proper speed control and voltage. Power path verification is included to demonstrate breaker operability from the KHU onto the standby buses. This is accomplished by closing the Keowee Feeder Breakers (SK) to energize each de-energized standby bus.

TS 3.8.1 RA C.2.2.2 requires suspending KHU generation to the grid prior to exceeding the 72 hour Completion Time of RA C.2.1. TS 3.8.1 RA C.2.2.3 requires verification by administrative means that the remaining KHU and its required underground emergency power path are operable. This assures that the KHU and its required underground emergency power path are available prior to entering an extended single KHU outage (> 72 hours). TS 3.8.1 RA C.2.2.4 requires verifying alternate power source capability by performing SR 3.8.1.16 prior to exceeding 72 hours. This SR verifies that both emergency power paths are operable prior to entering the extended single KHU outage.

Additionally, the ONS Risk Management Process and resulting required Critical Activity Plans implement risk mitigation actions such as a review to confirm there are no outstanding corrective work orders or equipment deficiencies on the underground emergency power path and protected equipment posting strategies. This provides further confidence in the reliability associated with the KHU and underground emergency power path remaining in service.

RAI 4

There may be times when a dual KHU outage is entered, for example to drain the penstock and isolate a single KHU, followed by bringing back one KHU for a period of time, and then re-entering a dual KHU outage to recover the KHU undergoing maintenance. What steps are taken to ensure that the KHU brought back to service between dual KHU outages does not have degradation in its reliability to start and run?

Duke Energy Response

After each dual KHU outage, an operability test (SR 3.8.1.3) is performed to demonstrate operability of the KHU not undergoing maintenance prior to declaring the KHU operable. Additionally, while in the extended single KHU outage, TS 3.8.1 RA C.1 requires SR 3.8.1.3 be performed more frequently (once per 7 days versus once per 31 days), thus providing additional assurance that the remaining KHU will start and run on demand during the extended single KHU outage. Additionally, RA C.2.2.3 requires verification that the remaining KHU and its required underground emergency power path are operable and that Limiting Condition for Operation (LCO) 3.3.21 for the Emergency Power Switching Logic (EPSL) Keowee Emergency Start Function is met prior to exceeding 72 hours. If a Keowee Emergency Start channel becomes inoperable during the extended single KHU outage, RA L.2 requires compliance be restored within 4 hours rather than the 72 hours allowed by TS 3.3.21 RA A.1.

RAI 5

Regarding the Safe Shutdown Facility (SSF) during a dual KHU outage and a single KHU outage, are there differences in the way the SSF is ready to be used if needed (e.g., in the deployment of the SSF)? If so, please discuss the differences.

Duke Energy Response

The difference in SSF readiness per our operating procedures is that the SSF is required to be operable prior to entry into and during a dual KHU outage versus "available" prior to entry into and during single KHU outages. A component is considered available or functional prior to post maintenance testing being performed and operable after post maintenance testing is completed. Actions required during Keowee Outages (Dual, Overhead, or Underground) that require SSF activation are directed by Operations procedures (Abnormal and Emergency Operating Procedures).

Keowee Outages (single or dual) are controlled by an Operations Procedure for removal and restoration of the Overhead and Underground Power Paths individually or concurrently. One of the initial conditions for removal of both Power Paths (Overhead and Underground) is to verify that the SSF is operable. No discretionary maintenance or testing is allowed on the SSF during the dual KHU outage. In addition the Protected Equipment Program is implemented for both KHUs and/or power paths being unavailable.

An initial condition for removal of a single KHU or its associated overhead emergency power path is to verify the SSF is "available." Whether discretionary maintenance or testing is permitted is dependent on the electronic risk assessment tool (ERAT) results. Also, Operations hangs Protected Equipment tags as required by the risk management process.

Critical Activity Plans are required for Keowee Outages that result in a PRA ORANGE electronic risk assessment tool (ERAT) risk condition or where activities result in greater than 33 percent of TS RA Completion Time being used. These plans, which are required by the Oconee risk management program, are intended to provide structure and oversight to the overall work plan and

work execution and are not intended to direct work. Critical Activity Plans, which are required to be reviewed and approved by the Plant Operations Review Committee, are the second level of risk management control and require contingency plans for problems that have a reasonable chance to occur.

RAI 6

During KHU outages, are there any planned actions in the event of a heightened likelihood of a loss of offsite power (such as tornado warnings)?

Duke Energy Response

The ONS Operations procedure for removal and restoration of KHUs identifies specific planned actions upon notification of impending severe weather conditions, including tornado warnings. During a dual KHU outage, the procedure requires a licensed operator to be dispatched to the SSF and restoration of the Keowee underground power path if the remaining work can be backed out of or completed and the unit restored within the expected time of the weather impact. The abnormal procedure (AP) for natural disasters is required to be entered following notification of a tornado warning, tornado watch, severe thunderstorm warning, or high wind warning in the Oconee/Pickens County area. The AP requires operators initiate restoration of the following systems to service from any in progress maintenance activities or surveillance testing if possible:

- SSF systems (SSF Diesel Generator, Reactor Coolant Makeup Pumps, SSF Auxiliary Service Water)
- Keowee Underground Power Path
- Keowee Overhead Power Path
- 4160v Power System (Main Feeder or Standby Bus)
- EFW System
- Station ASW Pump/Switchgear

Critical Activity Plans are required for Keowee Outages that result in a PRA ORANGE electronic risk assessment tool (ERAT) risk condition or where activities result in greater than 33 percent of TS RA Completion Time being used. These plans, which are required by the Oconee risk management program, are intended to provide structure and oversight to the overall work plan and work execution and are not intended to direct work. Actions required during Keowee Outages (Dual, Overhead, or Underground) that require SSF activation are directed by Operations procedures (Abnormal and Emergency Operating Procedures).

Critical activity plans for dual KHU outages are required to address multiple risk and mitigation strategies, including severe weather. The weather forecast must be reviewed prior to entering a dual KHU outage condition and monitored during the outage window to determine whether work will continue based on changing weather conditions. As part of the Critical Activity Plan for dual KHU outages, the Work Control Center is required to notify the Transmission Control Center (TCC) and the System Operating Center (SOC) to take action to ensure grid reliability and minimize risks (e.g., minimize non-critical maintenance work affecting ONS ties in surrounding power paths and substations). This notification is a prerequisite in the Critical Activity Plan for dual KHU outages.

RAI 7

During KHU outages, are there any planned actions to ensure availability and reliability of the emergency feedwater system?

Duke Energy Response

Planned actions to ensure availability and reliability of the Emergency Feedwater (EFW) system for a KHU outage are dependent upon the results of a risk assessment using the ERAT. ERAT factors in the status of plant equipment and the plant schedule for testing and maintenance to identify whether EFW is protected equipment during KHU outages. The Operations Procedure controlling removal and restoration of the Overhead and Underground Power Paths concurrently requires, as a prerequisite for entry into a dual KHU outage, verification that all three Units EFW Systems are fully operable. This procedure also requires the Work Control Center (WCC) to be notified that no discretionary maintenance is allowed on EFW equipment during the outage and to implement the protected equipment program for both KHUs or power paths inoperable per the ONS risk management process. Through this process, the EFW system is identified as protected equipment, which means a protected equipment posting is required, a site wide communication is completed, and surveillances and intrusive work are normally not allowed. The primary purpose of protecting EFW equipment is to ensure it is available for normal operations and for mitigating abnormal or emergency conditions.

RAI 8

The staff is concerned that using 45 days of outage time for each KHU cumulative over three years could result in a significant increase in the duration of dual KHU outages, which typically occur at the beginning and end of maintenance periods for individual KHUs, due to the shared intake pipe. Dual KHU outages carry more risk than single KHU outages. Please explain how dual KHU outages would be limited to avoid this condition.

Duke Energy Response

The removal of both KHUs from service creates an ORANGE ERAT risk condition and is undesirable from a risk perspective. With this elevated risk condition, maintenance and testing on other risk significant equipment is limited due to being protected during the time period that both KHUs are out of service. Currently this dual KHU outage time is limited by the maintenance rule (10 CFR 50.65(a)(4)) which restricts the underground path being out of service/unavailable to 2% of a cycle (2 years).

Duke Energy has determined it would be prudent to further limit the time allowed for two KHUs inoperable when using the 45-day Completion Time (CT) of TS 3.8.1 RA C.2.2.5. To accomplish this, Duke Energy proposes to add a second Completion Time to TS 3.8.1, RA H.2 to limit the cumulative time that both KHUs are allowed to be inoperable per rolling 3 year period to 240 hours when inoperable during the 45-day CT of TS 3.8.1 RA C.2.2.5.

The proposed CT is considered appropriate since it is more restrictive than the maintenance rule requirement, more restrictive than the current RA CT for two inoperable KHUs, and is not overly restrictive such that it would preclude planned work required to maintain a KHU. The proposed CT is based on de-watering the shared intake pipe twice, once to isolate the KHU to be repaired and once to restore the KHU during a typical 45-day single KHU outage. During this de-watered time period both KHUs are inoperable (dual KHU outage), and entry into Condition H of TS 3.8.1 is required. The CT for TS 3.8.1 RA H.2 is 60 hours. Currently there are no TS restrictions on the number of dual KHU outages within an extended single KHU outage. The overall duration of dual KHU outage time is limited by the maintenance rule. Assuming Condition H is entered twice for the maximum 60 hour CT during an extended single KHU outage results in 120 hours of dual KHU outage time. Currently, the 45-day CT of RA C.2.2.5 is allowed to be used for each KHU every 3 years. With the assumption of two entries the resulting dual KHU outage time in a 3-year period is 240 hours. Therefore, by limiting the dual KHU outage time to 240 hours cumulatively in a 3-year period, use of the 45-day Completion Time for each KHU cumulatively over three years does not result in an increased duration of dual KHU outage time over what is currently allowed and results in a more restrictive requirement. Attachment 1 and 2 provide revised marked up TS and Bases and retyped TS and Bases pages, respectively. The TS Bases for RA C.2.2.5 and H.2 has been revised to indicate that a review of the past three years entries is required to determine the remaining time allowed in the Completion Times.

Note that an extended single KHU outage to perform work on one KHU does not necessarily require a dual KHU outage to allow performance of the work. For example, no dual KHU outage time is required during the planned single KHU outage to tie Keowee AC Power to PSW. This is the first planned usage of the proposed 45-day cumulative Completion Time.

Attachment 1

Marked Up Technical Specification and Bases

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>H. -----NOTE----- Condition may be entered only when both required offsite sources are verified by administrative means to be OPERABLE and the requirements of LCO 3.8.3, "DC Sources-Operating;" LCO 3.8.6, "Vital Inverters-Operating;" LCO 3.8.8, "Distribution Systems-Operating;" LCO 3.3.17, "EPSL Automatic Transfer Function;" LCO 3.3.18, "EPSL Voltage Sensing Circuits;" LCO 3.3.19, "EPSL 230 kV Switchyard DGVP," are verified by administrative means to be met.</p> <p>-----</p> <p>Both KHUs or their required emergency power paths inoperable for planned maintenance or test with both standby buses energized from LCT via isolated power path.</p>	<p>H.1 Energize both standby buses from LCT via isolated power path.</p> <p><u>AND</u></p> <p>H.2 Restore one KHU and its required emergency power path to OPERABLE status.</p>	<p>1 hour from discovery of deenergized standby bus</p> <p>60 hours</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto; margin-right: auto;"> <p><u>AND</u></p> <p>240 hours cumulative per 3-year rolling time period when entered during the 45-day Completion Time of Required Action C.2.2.5</p> </div>

(continued)

BASES

ACTIONS

C.1, C.2.1, C.2.2.1, C.2.2.2, C.2.2.3, C.2.2.4, and C.2.2.5 (continued)

repairs which are estimated to be necessary every six to eight years. Also, generator thrust and guide bearing replacements are necessary. Other items which manifest as failures are expected to be rare and may be performed during the permitted maintenance periods. ~~As such, the 45 day restoration time of Required Action C.2.2.5 is allowed only once in a three year period for each KHU. This Completion Time is 45 days from discovery of initial inoperability of the KHU. This effectively limits the time the KHU can be inoperable to 45 days from discovery of initial inoperability rather than 45 days from entry into Condition C and precludes any additional time that may be gained as a result of switching an inoperable KHU from the underground to the overhead emergency power path. The Completion Time is modified by a note indicating an additional 30 days is allowed when entering Condition C prior to November 3, 2006 at 1029 hours.~~

45-day Completion Time

to be applied cumulatively over a rolling

it is not to exceed 45 days cumulative in a rolling 3-year time period for each KHU

For example, if KHU-1 is inoperable for 15 days, the 45-day Completion Time for KHU-1 is reduced to 30 days for the rolling 3-year time period containing the 15 day inoperability. This requires a review of entries for the previous 3 years to determine the remaining time allowed in the 45-day Completion Time. If the 72 hour Completion Time of C.2.1 is not exceeded, the 45-day Completion is not applicable and is not reduced.

Required Actions C.2.2.1, C.2.2.2, C.2.2.3, and C.2.2.4 must be met in order to allow the longer restoration times of Required Action C.2.2.5. Required Action C.2.2.1 requires that both standby buses be energized using an LCT through the 100 kV transmission circuit. With this arrangement (100 kV transmission circuit electrically separated from the system grid and all offsite loads), a high degree of reliability for the emergency power system is provided. In this configuration, the LCT is serving as a second emergency power source, however, since the 100 kV transmission circuit is vulnerable to severe weather a time limit is imposed. The second Completion Time of Required Action C.2.2.1 permits the standby buses to be re-energized by an LCT within 1 hour in the event this source is subsequently lost. Required Action C.2.2.2 requires suspension of KHU generation to the grid except for testing. The restriction reduces the number of possible failures which could cause loss of the underground emergency power path. Required Action C.2.2.3 requires verifying by administrative means that the remaining KHU and its required underground emergency power path and both required offsite sources are OPERABLE. This provides additional assurance that offsite power will be available. In addition, this assures that the KHU and its required underground emergency power path are available.

Required Action C.2.2.3 also requires verifying by administrative means that the requirements of the following LCOs are met:

BASES

ACTIONS

H.1 and H.2 (continued)

Verifying by administrative means allows a check of logs or other information to determine the OPERABILITY status of required equipment in place of requiring unique performance of Surveillance Requirements. If the AC Source is subsequently determined inoperable, or an LCO stated in the Note to Condition H is subsequently determined not met, continued operation up to a maximum of four hours is allowed by ACTION L.

With both standby buses energized from an LCT via an isolated power path (100 kV transmission circuit electrically separated from the system grid and all offsite loads), a high degree of reliability for the emergency power system is provided. In this configuration, the LCT is serving as the Oconee emergency power source, however, since the Oconee Units are vulnerable to a single failure of the 100 kV transmission circuit a time limit of 60 hours is imposed. Required Action H.1 permits the standby buses to be re-energized by an LCT within 1 hour in the event this source is subsequently lost. ↑

If both emergency power paths are restored, unrestricted operation may continue. If only one power path is restored, operation may continue per ACTIONS C or D.

I.1, I.2, and I.3

With both KHUs or their required emergency power paths inoperable for reasons other than Conditions G and H, insufficient standby AC power sources are available to supply the minimum required ES functions. In this Condition, the offsite power system is the only source of AC power available for this level of degradation. The risk associated with continued operation for one hour without an emergency power source is considered acceptable due to the low likelihood of a LOOP during this time period, and because of the potential for grid instability caused by the simultaneous shutdown of all three units. This instability would increase the probability of a total loss of AC power. Operation with both KHUs or their required power paths inoperable is permitted for 12 hours provided that Required Actions I.1 and I.2 are met. Required Action I.1 requires that both standby buses be energized using an LCT via an isolated power

The second Completion Time of Required Action H.2 limits the amount of time two KHUs can be inoperable during the 45-day Completion Time of Required Action C.2.2.5 to a cumulative 240 hours over a rolling 3-year period. This requires a review of entries for the previous 3 years to determine the remaining time allowed in the 240-hour Completion Time. This limits the dual KHU outage time when using the 45-day Completion Time of Required Action C.2.2.5 on a cumulative basis over a 3-year time period.

Attachment 2

Retyped Technical Specification and Bases

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
<p>H. -----NOTE----- Condition may be entered only when both required offsite sources are verified by administrative means to be OPERABLE and the requirements of LCO 3.8.3, "DC Sources-Operating;" LCO 3.8.6, "Vital Inverters-Operating;" LCO 3.8.8, "Distribution Systems-Operating;" LCO 3.3.17, "EPSL Automatic Transfer Function;" LCO 3.3.18, "EPSL Voltage Sensing Circuits;" LCO 3.3.19, "EPSL 230 kV Switchyard DGVP," are verified by administrative means to be met.</p> <p>-----</p> <p>Both KHUs or their required emergency power paths inoperable for planned maintenance or test with both standby buses energized from LCT via isolated power path.</p>	<p>H.1 Energize both standby buses from LCT via isolated power path.</p> <p><u>AND</u></p> <p>H.2 Restore one KHU and its required emergency power path to OPERABLE status.</p>	<p>1 hour from discovery of deenergized standby bus</p> <p>60 hours</p> <p><u>AND</u></p> <p>240 hours cumulative per 3-year rolling time period when entered during the 45-day Completion Time of Required Action C.2.2.5</p>

(continued)

BASES

ACTIONS

C.1, C.2.1, C.2.2.1, C.2.2.2, C.2.2.3, C.2.2.4, and C.2.2.5 (continued)

repairs which are estimated to be necessary every six to eight years. Also, generator thrust and guide bearing replacements are necessary. Other items which manifest as failures are expected to be rare and may be performed during the permitted maintenance periods. The 45-day Completion Time of Required Action C.2.2.5 is allowed to be applied cumulatively over a rolling three year period for each KHU. This Completion Time is 45 days from discovery of initial inoperability of the KHU. This effectively limits the time the KHU can be inoperable to 45 days from discovery of initial inoperability rather than 45 days from entry into Condition C and precludes any additional time that may be gained as a result of switching an inoperable KHU from the underground to the overhead emergency power path. The Completion Time is modified by a note indicating it is not to exceed 45 days cumulative in a rolling 3-year time period for each KHU. For example, if KHU-1 is inoperable for 15 days, the 45-day Completion Time for KHU-1 is reduced to 30 days for the rolling 3-year time period containing the 15 day inoperability. This requires a review of entries for the previous 3 years to determine the remaining time allowed in the 45-day Completion Time. If the 72 hour Completion Time of C.2.1 is not exceeded, the 45-day Completion is not applicable and is not reduced.

Required Actions C.2.2.1, C.2.2.2, C.2.2.3, and C.2.2.4 must be met in order to allow the longer restoration times of Required Action C.2.2.5. Required Action C.2.2.1 requires that both standby buses be energized using an LCT through the 100 kV transmission circuit. With this arrangement (100 kV transmission circuit electrically separated from the system grid and all offsite loads), a high degree of reliability for the emergency power system is provided. In this configuration, the LCT is serving as a second emergency power source, however, since the 100 kV transmission circuit is vulnerable to severe weather a time limit is imposed. The second Completion Time of Required Action C.2.2.1 permits the standby buses to be re-energized by an LCT within 1 hour in the event this source is subsequently lost. Required Action C.2.2.2 requires suspension of KHU generation to the grid except for testing. The restriction reduces the number of possible failures which could cause loss of the underground emergency power path. Required Action C.2.2.3 requires verifying by administrative means that the remaining KHU and its required underground emergency power path and both required offsite sources are OPERABLE. This provides additional assurance that offsite power will be available. In addition, this assures that the KHU and its required underground emergency power path are available.

Required Action C.2.2.3 also requires verifying by administrative means that the requirements of the following LCOs are met:

BASES

ACTIONS

H.1 and H.2 (continued)

Verifying by administrative means allows a check of logs or other information to determine the OPERABILITY status of required equipment in place of requiring unique performance of Surveillance Requirements. If the AC Source is subsequently determined inoperable, or an LCO stated in the Note to Condition H is subsequently determined not met, continued operation up to a maximum of four hours is allowed by ACTION L.

With both standby buses energized from an LCT via an isolated power path (100 kV transmission circuit electrically separated from the system grid and all offsite loads), a high degree of reliability for the emergency power system is provided. In this configuration, the LCT is serving as the Oconee emergency power source, however, since the Oconee Units are vulnerable to a single failure of the 100 kV transmission circuit a time limit of 60 hours is imposed. Required Action H.1 permits the standby buses to be re-energized by an LCT within 1 hour in the event this source is subsequently lost. The second Completion Time of Required Action H.2 limits the amount of time two KHUs can be inoperable during the 45-day Completion Time of Required Action C.2.2.5 to a cumulative 240 hours over a rolling 3-year period. This requires a review of entries for the previous 3 years to determine the remaining time allowed in the 240-hour Completion Time. This limits the dual KHU outage time when using the 45-day Completion Time of Required Action C.2.2.5 on a cumulative basis over a 3-year time period.

If both emergency power paths are restored, unrestricted operation may continue. If only one power path is restored, operation may continue per ACTIONS C or D.

I.1, I.2, and I.3

With both KHUs or their required emergency power paths inoperable for reasons other than Conditions G and H, insufficient standby AC power sources are available to supply the minimum required ES functions. In this Condition, the offsite power system is the only source of AC power available for this level of degradation. The risk associated with continued operation for one hour without an emergency power source is considered acceptable due to the low likelihood of a LOOP during this time period, and because of the potential for grid instability caused by the simultaneous shutdown of all three units. This instability would increase the probability of a total loss of AC power. Operation with both KHUs or their required power paths inoperable is permitted for 12 hours provided that Required Actions I.1 and I.2 are met. Required Action I.1 requires that both standby buses be energized using an LCT via an isolated power