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ONS-2015-053

10 CFR 50.90

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May 20, 2015

Attn: Document Control Desk
U. S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

Subject: Duke Energy Carolinas, LLC
Oconee Nuclear Station, Units 1, 2 and 3
Renewed Facility Operating License Numbers DPR-38, 47 and 55
Docket Numbers 50-269, 50-270 and 50-287

Revised Response to Request for Additional Information (RAI) Associated with
License Amendment Request (LAR) Regarding Keowee Hydro Unit (KHU)
Steady State Frequency Requirements

On April 26, 2013, Duke Energy Carolinas, LLC (Duke Energy) submitted a LAR (ML13121A460) requesting Nuclear Regulatory Commission (NRC) approval to add steady state frequency requirements for the emergency power sources, KHUs, at the Oconee Nuclear Station (ONS). Duke Energy letter dated February 12, 2015 (ML 15055A168), responded to a January 16, 2015, NRC RAI (ML 15014A231). This letter revises the response to one of the RAI questions. Duke Energy notified the ONS NRC Project Manager of the need to revise the RAI response on April 20, 2015.

There are no regulatory commitments within this letter. Inquiries on this submittal should be directed to Boyd Shingleton, ONS Regulatory Affairs Group, at (864) 873-4716.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 20, 2015.

Sincerely,

Scott L. Batson
Vice President
Oconee Nuclear Station

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cc w/Enclosure:

Mr. Victor McCree, Regional Administrator
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Mr. Eddy Crowe
NRC Senior Resident Inspector
Oconee Nuclear Site

Ms. Susan 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
Revision to Duke Energy Response to Request for Additional Information (RAI)**

Four close to open stroke times in the table provided in the response to RAI b.i are revised to correct transcription errors made when creating the table. The changed values are circled. The stroke times in the table were used by Duke Energy in our response to RAI b.ii as part of the basis for concluding sufficient margin is available that a reduction in allowed frequency is not significant. This change does not impact the conclusions made in that response, nor does it result in a need to change the response. The response to RAI b.ii is re-stated below for reviewer convenience.

Upon discovery of the transcription errors on April 20, 2015, the NRC Project Manager (PM) for ONS was notified. The PM concluded that the changes were insignificant and had no effect on the safety evaluation for the license amendment. The license amendment was subsequently issued on April 23, 2015 (ML 15093A349). The PM requested Duke Energy to submit a revision to the RAI response.

NRC RAI b.i

MOV Performance: Operation of the KHUs at the high end of the frequency range may cause a higher differential pressure across MOVs as compared to nominal conditions. Operation of MOVs at lower end of the allowable frequency may negatively affect the MOV stroke time.

- i. Please provide a listing of critical valves, the required stroke times as considered in accident analyses, and the measured stroke times during the last surveillance.*

Duke Energy Response to NRC RAI b.i

MOV Critical Valves on an ES Actuation that supports the ESF

Valve	Unit-1 Close to open	Unit-1 Max limit Close to open	Unit-2 Close to open	Unit-2 Max limit Close to open	Unit-3 Close to open	Unit-3 Max limit Close to open
BS-1	13.95	19	16.42	19	16.47	19
BS-2	13.43	19	16.16	19	16.03	19
HP-24	13.21	20	12.64	20	13.03	20
HP-25	13.41	20	12.57	20	12.86	20
HP-26	12.88	16	13.59	16	13.31	16
HP-27	13.27	16	13.34	16	13.54	16
LP-17	29.21	36	29.43	36	28.78	36
LP-18	28.43	36	30.82	36	28.76	36

NRC RAI b.ii

Please provide a summary of the analyses performed to demonstrate that sufficient margin exists between actual stroke times and maximum allowed stroke times to account for the minimum expected KHU frequency.

Duke Energy Response to NRC RAI b.ii

Analyses to demonstrate that sufficient margin exists between actual stroke times and maximum allowed stroke times to account for the minimum expected KHU frequency have not specifically been performed. The system calculations and Generic Letter 89-10 program are based on degraded electrical conditions which bound the minimum expected KHU frequency. It should be noted that the valves will not be exposed to steady state frequency fluctuation since they would have already fulfilled the design function position prior to a KHU reaching steady state conditions. By inspection of the tabulated results presented above for the critical valves that have been identified the ratio of maximum limit to actual stroke time is greater than 115%. It can therefore be concluded that sufficient margin is available that a reduction in allowed frequency is not significant.