July 20, 2010

APPLICANT: South Carolina Electric and Gas Company

PROJECT: Virgil C. Summer Units 2 and 3

SUBJECT: SUMMARY OF MEETING TO DISCUSS SOUTH CAROLINA ELECTRIC AND GAS COMPANY'S REQUEST FOR AN EXEMPTION TO AN AP1000 WET BULB TEMPERATURE REQUIREMENT FOR V.C. SUMMER UNITS 2 AND 3 COMBINED LICENSE APPLICATION

On June 23, 2010, the staff from the U.S. Nuclear Regulatory Commission (NRC), Office of New Reactors conducted a public meeting at NRC Headquarters with the staff from South Carolina Electric and Gas Company (SCE&G) regarding Virgil C. Summer Nuclear Station (VCSNS) proposed Units 2 and 3. The focus of the meeting was to discuss SCE&G's request for an exemption to the AP1000 wet bulb temperature requirement for VCSNS Units 2 and 3. A list of those in attendance is provided in the Enclosure.

Prior to the meeting the staff issued two requests for additional information related to SCE&G's wet bulb temperature exemption request. SCE&G provided a draft response to these questions dated June 22, 2010, which is available in the Agencywide Document Access and Management System (ADAMS). ADAMS provides text and image files of the NRC's public documents. SCE&G's draft response, which was discussed during the meeting, may be accessed through ADAMS Accession Number ML101730307. Persons who do not have access to ADAMS or who encounter problems in accessing the meeting materials located in ADAMS should contact the NRC Public Document Room (PDR) Reference staff by telephone at 1-800-397-4209, 301-415-4737; or by email to pdr@nrc.gov.

SCE&G's draft response dated June 22, 2010, served as the agenda for the meeting. Based on this draft response the action items below were developed.

Action Items from the Meeting

NRC Actions:

1. Provide any additional comments regarding the draft response to South Carolina Electric and Gas (SCE&G) by June 25, 2010.

2. Identify whether the NRC would like to review additional calculation packages that are referenced in the draft response. For example, calculation package APP-SWS-M3C009 is referenced in the draft response. The staff has not previously audited this calculation package. The staff will provide a list of the calculation packages that it wishes to review by June 25, 2010, so that SCE&G can make them available to the staff the week of June 28, 2010.

Note: Subsequent to the meeting the staff provided additional feedback on the draft response in an email dated June 25, 2010. The additional feedback is available in ADAMS at ML101760288. The feedback included additional comments in accordance with action item 1 above, and indicated that the staff had determined that no additional calculation packages needed to be reviewed in accordance with action item 2 above.

SCE&G Actions:

1. Regarding responding to the question about the affect the increase in the maximum safety wet bulb temperature has on control room habitability, SCE&G took the following actions:

    a. The technical report section in the draft response titled "Nuclear Island Non-Radioactive Ventilation System Design and Performance," will be revised to include a discussion that the initial conditions for the control room habitability accident analysis are not affected by the increased maximum safety wet bulb temperature.

    b. The technical report section titled, "Safety System Design Basis," will be revised to include a discussion of increased humidity from the increase in the maximum safety wet bulb temperature. Any issues associated with the increased humidity on control room habitability will be addressed.

    c. The response will be revised to add a revision to section 6.4 of the Summer FSAR that will note the increased maximum safety wet bulb temperature and that it was reviewed relative to the control room habitability analysis.

    d. The technical report section in the draft response titled "Nuclear Island Non-Radioactive Ventilation System Design and Performance," will be revised to include a discussion or calculation that the conditions (temperature and humidity) for the control room habitability (e.g. heat stress level) post-accident (e.g. station blackout) are not affected by the increased maximum safety wet bulb temperature and associated humidity.

2. The draft response will be revised to include an attachment that addresses RAI 6.2.1-1 and 9.2.2-1. The attachment will include the information provided in a previous draft response to RAI 6.2.1-1 (See ML101410204).

3. SCE&G will provide a reference in the appropriate FSAR sections to technical report VCS-GW-GLE-XXX that is provided in the draft response. Currently the proposed changes to the FSAR do not include listing this report as a reference.

4. VCS-GW-GLE-XXX (the technical report provided in the draft response) will be revised such that it's reference to other technical reports will be provided including the technical report title, revision and date so that future retrieval of these reports, if needed, is made easier.

5. The technical report section in the draft response titled, “Component Cooling System and Service Water System Design and Performance,” will be revised to include a discussion of calculation package TPG-SWS-M3C001 which discusses a service water system temperature change from 91.4 F to 91.8 F.

6. Regarding the discussion of the temperature of the component cooling water supplied to the reactor coolant pumps contained in “Component Cooling System and Service Water System Design and Performance,” of the technical report, SCE&G will include a discussion of the more important parameters that are monitored (e.g., reactor coolant pump stator temperatures) relative to reactor coolant pump operation.

7. SCE&G will determine if there are any departures in the instrumentation and control system for the higher component cooling water temperatures associated with the increased maximum safety wet bulb temperature.

8. Regarding the discussion contained in the section of the technical report titled, “Nuclear Island Non-Radioactive Ventilation System Design and Performance,” SCE&G will do the following:

    a. Check that the 35% number quoted as the margin is accurate and add a discussion for the margin at the Summer site given the higher maximum safety wet bulb temperature.

    b. Add a sentence or two to the discussion that notes the results of the analysis contained in APP-GW-MIC-002 apply to Summer for the low capacity chiller system but do not apply to the hi-capacity chiller system at Summer. The APP-GW-MIC-002 calculation was performed for Turkey Point which had a change to the maximum normal wet bulb temperature in addition to a change in the maximum safety wet bulb temperature. Because the hi-capacity chiller system changes in the technical report are driven by the change to maximum normal wet bulb temperature they are not applicable to Summer.

9. Page 8 of the enclosure includes typos. In some cases the values should by 97.6 F instead of 97.3. These typos will be corrected.

10. SCE&G will review the AP1000 DCD and let the staff know if there is a discussion about the low capacity chiller design. The staff could not find such a discussion.

11. SCE&G indicated that it would address the staff's comments and provide a formal RAI response by June 30, 2010. Note: Subsequent to the meeting SCE&G provided a formal RAI response on June 30, 2010. The ADAMS accession number for the letter is ML101830391.

Sincerely,

/RA/

Joseph M. Sebrosky, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-027 and 52-028

Enclosures: List of Meeting Attendees for June 23, 2010 Public Meeting

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Sincerely,

/RA/

Joseph M. Sebrosky, Project Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos. 52-027 and 52-028

Enclosures: List of Meeting Attendees for June 23, 2010, Public Meeting

DISTRIBUTION:

PUBLIC	SPeng
JCruz	Manny Comar
JSebrosky	TSimms
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MWentzel	RJoshi
AMinarik	Samuel Lee
John Segala	Larry Wheeler
John McKirgan	Michelle Hayes
Shie-Jeng Peng	John Budzynski
RidsNroDnrlNwe1	JMartin, OGC
RidsNroDnrlNwe2	MSheikh, Rgn2
RidsNroOd	RidsAcrsAcnwMailCenter
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RidsNroLAKGoldstein	

ADAMS Accession No.: ML102000347 NRC-001

OFFICE	LA:NWE1	PM:NWE1
NAME	KGoldstein	JSebrosky
DATE	07/19/2010	07/20/2010

*via e-mail **OFFICIAL RECORD COPY**

NRC/SOUTH CAROLINA ELECTRIC AND GAS MEETING

TO DISCUSS AN EXEMPTION REQUEST FROM AP1000 WET BULB TEMPERATURE

REQUIREMENTS JUNE 23, 2010

List of Attendees

Name	Organization
Samuel Lee	NRO/DSRA/SBPB
John Segala	NRO/DSRA/SBPA
Larry Wheeler	NRO/DSRA/SPB
John McKirgan	NRO/DSRA/SPCV
Michelle Hayes	NRO/DSRA/SPCV
Shie-Jeng Peng	NRO/DSRA/SPCV
John Budzynski	NRO/DSRA/SRSB
Don Habib	NRO/DNRL/NWE1
Anthony Minarik	NRO/DNRL/NWE1
Tanya Simms	NRO/DNRL/NWE1
Joe Sebrosky	NRO/DNRL/NWE1
Amy Monroe	South Carolina Electric and Gas (SCE&G)
Julie Giles	SCE&G
Mark Stella*	Westinghouse
Gary Sedgelock*	Westinghouse
John Deblasio*	Westinghouse
William Freebairn*	Nucleonics Week

Enclosure

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