October 10, 2012

MEMORANDUM TO: Michael Junge, Chief

**Operator Licensing** 

and Human Performance Branch Division of Construction, Inspection

and Operational Programs
Office of New Reactors

FROM: James Kellum, Senior Reactor Engineer /RA/

Operator Licensing

and Human Performance Branch Division of Construction, Inspection,

and Operational Programs
Office of New Reactors

SUBJECT: SUMMARY OF SEPTEMBER 18, 2012, PUBLIC MEETING WITH

AP-1000 OWNERS GROUP ON NEW REACTOR OPERATOR

LICENSING

On September 18, 2012, the U.S. Nuclear Regulatory Commission (NRC) staff held a category 2 public meeting with the AP-1000 Owners Group (APOG) on New Reactor Operator Licensing at the Region II Offices in Atlanta, GA, to discuss potential changes to the licensed operator examination process. Enclosure 1 lists the attendees at the meeting. Enclosure 2 is the meeting agenda. This meeting discussed the ongoing progress in developing and administering effective new reactor operator licensing examinations.

The meeting discussed the NRC examiners mock simulator exams given to Vogtle and Summer licensed instructors on the Vogtle simulator during the week of August 20, 2012. The NRC used six qualified examiners and three observers who validated and administered the scenarios. The NRC staff determined, from the administration of the scenarios, that they would be able administer a valid operator exam with only minor enhancements needed to NUREG-1021, Operator Licensing Examiner Standards. The staff also determined the Senior Reactor Operator was able to be evaluated in the command and control role. The biggest factor in a valid exam on the AP-1000 simulator was determined to be scenario construction.

The NRC staff discussed with the APOG the future examination schedule and potential issues to completing the exams. Possible methods of conducting Job Performance Measures (JPM) were discussed, such as mockups, 3D models and labs, since it is likely a significant portion of plant equipment will not yet be installed in the plant when the first exams are given. It was decided that the NRC staff will visit the Vogtle 3D models to assess suitability for use in JPM

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M. Junge - 2 -

performance. This visit will likely take place in October 2012. Performance of licensed operator candidate's reactivity manipulations was also discussed and it was determined that these could potentially be waived, with the license not being issued until their completion, until simulator availability allows them to be completed.

The NRC staff and APOG discussed the industry developed critical tasks for AP-1000 and agreed that the list is a final draft. These critical tasks will be used for exam development per NUREG-1021 including its tentative new section (ES-401N) for AP-1000 exams.

The next quarterly meeting is tentatively scheduled for January 2013, at NRC Region II in Atlanta.

Action items for both the industry and the NRC were assigned and will be reviewed at the next meeting. Tentative agenda items for the next meeting were also listed.

Questions and comments raised by meeting participants will be evaluated by the NRC staff.

Enclosure: As stated M. Junge - 2 -

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Enclosure:

As stated

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## NRC/APOG AP-1000 OWNERS GROUP ON NEW REACTOR OPERATOR LICENSING September 18, 2012

Name	Organization
Mike Junge	NRC / NRO
Mark Franke	NRC / R-II
Jim Kellum	NRC / NRO
Dan Bacon	NRC/ R-II
Malcolm Widmann	NRC / R-II
Charles Sawyer	Duke Energy
Dave Neal	Westinghouse
Tony Spring	Southern Nuclear
W. Tom Ryan	TVA
Mark Verbeck	Southern
Andy Barbee	SCANA
Phil Capehart	NRC / R-II
Tim Dennis	ANSI3.5 Working Group
Leon Ray	Southern Nuclear
Gary Calloway	NRC / TTC
Edwin Lea	NRC / R-II
Amanda Toth	NRC / R-II
James Chang	NRC / RES
DaBin Ki	NRC / RES
Paul Mothena	SCANA
Wes Sparkman	Southern
Mark Bates	NRC / R-II
Rodney Delop	SCANA

## AGENDA FOR THE CATEGORY 2 PUBLIC MEETING WITH THE AP-1000 OWNERS GROUP ON NEW REACTOR OPERATOR LICENSING

Tuesday, September 18, 2012 8:30 a.m. - 12:30 p.m. Nuclear Regulatory Commission Marquis One Tower, Executive Conference Room R2-1486-32p (14<sup>th</sup> floor) 245 Peachtree Center Avenue N.E. Atlanta, GA 30303

<u>TOPIC</u>	<u>LEAD</u>
Introductions and opening remarks	NRC/APOG
Public input	Public
Discussion of August 20-24 mock simulator examinations	NRC
Examination schedule (RIS response)	NRC/APOG
Discussion on 'final' critical tasks draft	APOG
JPMs – in plant system availability/alternate methods	NRC/APOG
AP-1000 simulator development	NRC/APOG
Simulator physical fidelity for simulator inspection	NRC
Reactivity manipulations	NRC/APOG
Miscellaneous/Emergent topics	NRC/APOG
Public input	Public
Summary/Conclusion/Action item review	NRC/APOG