

March 4, 2013

MEMORANDUM TO: Michael Junge, Chief  
Operator Licensing and Human Performance Branch  
Division of Construction, Inspection  
& Operational Programs  
Office of New Reactors

FROM: Jim Kellum, Sr. Reactor Engineer */RA/*  
Operator Licensing and Human Performance Branch  
Division of Construction, Inspection  
& Operational Programs  
Office of New Reactors

SUBJECT: SUMMARY OF FEBRUARY 20, 2013, PUBLIC MEETING WITH  
AP1000 OWNERS GROUP ON NEW REACTOR OPERATOR  
LICENSING

On February 20, 2013, the U.S. Nuclear Regulatory Commission (NRC) staff held a category 2 public meeting with the AP1000 Owners Group (APOG) on New Reactor Operator Licensing at the Region II Offices in Atlanta, GA to discuss the ongoing issues, challenges and concerns to administering licensed operator examinations under the existing process for new AP1000 units. Enclosure 1 lists the attendees at the meeting. Enclosure 2 is the meeting agenda.

The NRC staff discussed with the APOG the future examination schedule and potential issues to completing the exams. The industry has identified issues facing use of the existing examination process. Most of the issues can be waived and completed at a later time, but prior to issuing the license. Possible methods of conducting Job Performance Measures (JPMs) 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. The NRC staff viewed 3D models at Vogtle and determined they were not of sufficient fidelity to be used in the JPM portion of the exam at this time; however a recent virtual reality demonstration at an industry conference showed significant improvement from earlier models. It was also reiterated by the NRC staff that the in-plant JPMs are part of the operational test and will be required to complete that portion of the examination.

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 (when simulator availability allows them to be performed). The revision to NUREG-1021, Rev. 10, Operator Licensing Examination Standard for Power Reactors, is on track to be issued in calendar year 2013.

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The NRC staff and APOG discussed whether or not the 'structured observations' for cold license candidates, stated in the NRC endorsed NEI 06-13A document, required the license candidates to be in the control room the entire time or included operational shift activities outside the control room. The NRC staff agreed to evaluate this issue.

The next quarterly meeting is tentatively scheduled for July 2, 2013 at NRC Technical Training Center in Chattanooga, TN.

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.

Enclosures: As stated

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NRC/APOG AP-1000 OWNERS GROUP ON  
 NEW REACTOR OPERATOR LICENSING  
 February 20, 2013

Name	Organization
Mike Junge	NRC / NRO
Michael Donithan	NRC / R-II
Jim Kellum	NRC / NRO
J. Amanda Toth	NRC/ R-II
Malcolm Widmann	NRC / R-II
Charles Sawyer	Duke Energy
Tom Kuhar	Westinghouse
Charlie Nesbitt	Southern Nuclear
Phil Capehart	NRC / R-II
Keith Pope	Southern Nuclear
Rick DeVercelly	NRC / TTC
Tim Dennis	Public
Leon Ray	Southern Nuclear
Richard Baldwin	NRC / R-II
Wesley Sparkman	Southern Nuclear
Michael LLewellyn	INPO
Paul Mothena	SCANA
Dick Swiegart	Duke
Mark Bates	NRC / R-II
Al Harris	SCANA
Jim Smit	Nexus Technical Services
Neil Constance	SCANA

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

Wednesday, February 20, 2013  
8:30 a.m. - 12:30 p.m.  
Nuclear Regulatory Commission  
Marquis One Tower,  
Conference Room R2-945-30p (9<sup>th</sup> floor)  
245 Peachtree Center Avenue N.E.  
Atlanta, GA 30303

<u>TOPIC</u>	<u>LEAD</u>
Introductions and opening remarks	NRC
Public input	Public
Action Item Review from Previous Meeting	NRC
Examination schedule (RIS response)	APOG/NRC
Discussion of White Paper on Exam Processes	APOG/NRC
<ul style="list-style-type: none"><li>• JPMs – in plant system availability / alternate methods</li><li>• Reactivity manipulations</li><li>• Timelines/Physicals</li></ul>	NRC/APOG NRC/APOG NRC/APOG
Status of revision to NUREG-1021	NRC
AP-1000 simulator development	APOG/NRC
Miscellaneous/Emergent topics	NRC/APOG
Public input	Public
Summary / Conclusion / Action item review	NRC