

January 2, 2014

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

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

SUBJECT: SUMMARY OF DECEMBER 17, 2013, PUBLIC MEETING WITH  
AP-1000 OWNERS GROUP ON NEW REACTOR OPERATOR  
LICENSING

On December 17, 2013, 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 NRC Region II Offices in Atlanta, GA to discuss the ongoing issues, challenges and concerns to administering licensed operator examinations for new AP-1000 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. One of the biggest factors that may affect the scheduled exams is plant reference simulator (PRS) development. Both APOG and Westinghouse personnel discussed actions they are taking to have the PRS available when needed to support the exam schedule. The NRC staff reiterated that scheduling for operator examinations is done well in advance and affects not only new reactors but the examination schedule for the operating plants as well. The industry is continuously evaluating the examination schedule and will inform the NRC as far in advance as possible of any required schedule adjustments. The industry proposed the number of applicants for the operating exam to exceed 24 candidates. The NRC staff does not believe more than 24 candidates in one exam is feasible but agreed to evaluate an industry provided schedule.

Possible methods of conducting Job Performance Measures (JPMs) were discussed, including 3D models and labs, since a significant portion of plant equipment may not yet be installed when the first exams are given. However, with the first scheduled exam now being moved from December of 2014 to May of 2015, there will be more systems available in plant for selection of these test items. The NRC staff is currently evaluating options for conducting the required three in plant JPMs. 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.

CONTACT: Jim Kellum, NRO/DCIP  
(301) 415-5305

M. Junge

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It was stated by the NRC staff that the revision (Rev. 10) to NUREG-1021, Operator Licensing Examination Standard for Power Reactors is drafted and out for public comment. The public comment period ends on February 6, 2014. After this comment period, all comments will be reviewed and incorporated if appropriate.

The NRC staff and APOG discussed inspection of the differences training for candidates licensed before fuel load and plant startup (Gap Training). It is expected that this evaluation will be similar to a requalification inspection. NRC staff observations of the INPO accreditation follow-up visit to Summer 2 & 3 were discussed which included cold license requirements and robustness of requalification programs.

The next quarterly meeting is tentatively scheduled for February 19, 2014, at NRC Region II Offices in Atlanta, GA.

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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NAME	JKellum	MJunge
DATE	01/2/2014	01/2/2014

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JClark, RIV

TBlount, RIV

VGaddy, RIV

SRutledge, TTC

JKellum, NRO

SCochrum, TTC

REgli, TTC

Charles Sawyer ([charles.sawyer@duke-energy.com](mailto:charles.sawyer@duke-energy.com))

NRC/APOG AP-1000 OWNERS GROUP ON  
 NEW REACTOR OPERATOR LICENSING  
 December 17, 2013

Name	Organization
Gene Guthrie	NRC / R-II
Dan Bacon	NRC / R-II
Jim Kellum	NRC / NRO
J. Amanda Toth	NRC/ R-II
Ken Schaaf	NRC / R-II
Charles Sawyer	Duke Energy
Tom Kuhar	Westinghouse
Jason Weathersby	SCE & G
Mike Junge	NRC / NRO
Mark Verbeck	Southern Nuclear
Charlie Nesbitt	SCE & G
Bob Hirmanpour	Southern Nuclear
Leon Ray	Southern Nuclear
Paul Hippley	Westinghouse
Melinda Bogart	GEH
Wes Sparkman	Southern Nuclear
Terry McCool	FPL
Thomas Ray	Westinghouse
Scott Egli	NRC / TTC
Al Harris	SCE & G
Neil Constance	SCE & G
Ben Howard	Southern Nuclear
Mark Bates	NRC/ R-II
Michael Meeks	NRC / R-II
Phil Capehart	NRC/ R-II
Andreas Goldau	NRC / R-II
Keith Pope	SCE & G
Paul Mothena	SCE & G
Tim Dennis	Public

AGENDA FOR THE CATEGORY 2 PUBLIC MEETING WITH THE  
AP1000 OWNERS GROUP ON NEW REACTOR OPERATOR LICENSING

Tuesday, December 17, 2013  
8:30 a.m. - 12:30 p.m.  
Nuclear Regulatory Commission  
Marquis One Tower,  
Conference Room RII-1486-32p (14<sup>th</sup> floor)  
245 Peachtree Center Avenue N.E.  
Atlanta, GA 30303

TOPIC	LEAD
Introductions and opening remarks	NRC
Public input	Public
• Written exam	
- Schedule	NRC/APOG
- How to address differences in conduct of operations for simulator exams	NRC/APOG
- Potential differences in written questions due to admin procedures	NRC/APOG
- Exam Security	NRC/APOG
• Simulator	
- Status – schedule changes	APOG
- Discuss procedures and how much to observe of FAT and HFE V & V	APOG
- Overview of 8/20 Cranberry meeting	NRC/APOG
- Simulator inspection	NRC
- Schedule	NRC/APOG
- Core model for reactivity manipulations: clean core (no Xe or Sm)?	NRC/APOG
• Licenses Amendment Request and ISV (W. Sparkman)	APOG
• JPMs – in-plant system availability / alternate methods, etc.	

- Region II review of Greenville virtual capabilities	NRC
• Discuss Summer Ops accreditation follow-up visit	NRC/APOG
- 240 hour cold license requirement	NRC
- Requal program	NRC
• Review waiver paper	NRC/APOG
• Ensure alignment on GAP training/inspection	APOG
• NUREG 1021 revision status update	NRC
Miscellaneous/Emergent topics	NRC/APOG
Public input	Public
Summary / Conclusion / Action item review	NRO