ANS 3.5 Working Group Approved Meeting Minutes
Oct 25-26, 2000

Index:

1. Next Meeting:

Location: Atlanta (INPO)
Date: 2001Apr3-6
- Tuesday April 3 - Full Day
- Wednesday April 4 - Full Day
- Thursday April 5 - Full Day
- Friday April 6 - Morning only

2. Motions:

Dennis: Accept minutes with noted changes • Editorial change (FONT) in Re-Affirmation Motion Section	**Motion: Carried** **Editorial Change Completed**
~~**Florence:** Add addition member Kevin Cox of Com Ed (Exelon)~~ ~~**Amendment 1 (Felker):** Offer Mr. Cox a seat without voting privilege.~~	~~**Motion:**~~ ~~**Amendment 1:**~~ ~~**Chair suspended the vote on this issue pending contacting Mr. Cox and determining his ability with organizational support for participation.**~~
Florence: Add additional member Kevin Cox of Com Ed (Exelon) **Amendment 1 (Felker):** Offer Mr. Cox a seat without voting privilege.	**Motion:** **Amendment 1:** **After much discussion and with no resolution the Chair will forward a volunteer form to Mr. Cox for completion**
Felker: Training Impact Assessment to Training Needs Assessment At the 2000mar03 meeting the Phrase Training Needs Assessment was changed to Training Impact Assessment. After input from Collins(see AI-49 in minutes below), the WG agreed to return the wording to Training Needs Assessment, and McCullough will develop a better definition for Training Needs Assessment (AI-58)	**Motion: Carried (Unanimous)**

3. Action Item Activity:

55	Distribute Robert Boire work assignments	
56	Contact Mr. Cox (Com Ed) for 3.5 WG participation (**Complete – 2000Oct26**)	**Colby**
57	Remove all references to 3.1	**Dennis**
58	Send Robert Boire a note of thanks for his participation	**Dennis**
59	Develop a list of Action Items for 3.5-WG resulting from the USUG Ops Test Directors Meeting at DC Cook 2000Oct26	**Florence** **McCullough**
60	Define the Term **Training Needs Assessment** in such a manner that it is clear in intent to both Training and Simulator staffs	**McCullough**
61	Write letter to NRC concerning the WG comments on the proposed rule change	**Welchel** **Dennis**

4. Visitors

Visitor	Date	Affiliation	Email, Phone Fax
Min Ke	2000Oct25	AEP Simulator Support	Email:
Barry Wallace	2000Oct26	AEP Training Manager	Email: bjwallace@aep.com
Terrill Laughton	2000Oct26	Exelon Nuclear	Email: terrill.laughton@exeloncorp.com

5. Roll Call:

Present	Member	Address	Notes/Proxy:	Email, Phone Fax
Present	Timothy Dennis – Chairman	P. O. Box 119 645 Lehigh Gap St. Walnutport, PA 18088-0119		Email:a243@yahoo.com Phone:610-767-0979 Fax: 610-767-7095
Present	Jim Florence – Vice Chairman	Nebraska Public Power District P. O. Box 98 Brownville, Nebraska 68321		Email: jbflore@nppd.com Phone: 402-825-5700 Fax: 402-825-5584
Present	Keith Welchel – Secretary	Duke Power Company Oconee Training Center- MC:ON04OT 7800 Rochester Hwy Seneca, SC 29672		Email: kwelchel@duke-energy.com Phone: 864-885-3349 Fax: 864-885-3432
Present	F.J. (Butch) Colby – Editor	CAE Inc. 8585 Cote-de-Liesse P.O, Box 1800 Saint-Laurent Quebec, Canada H4L 4X4		Email: butchcolby@cs.com Email: bcolby@cae.com Phone: (410) 381-3557 Fax: (410) 381-2017
Proxy	Frank Collins – Style Editor	US NRC, Office of Nuclear Reactor Regulation 09-D24 Washington, DC 20555	Larry Vick Email:Lxv@nrc.gov Phone: 301-415-3181	Email: JFC1@NRC.GOV Phone: 301-415-3173 Fax: 301-415-2222
Present	George McCullough	American Electric Power Cook Nuclear Plant One Cook place Bridgman, MI 49106		Email: gsmccullough@aep.com Phone: 616-466-3333 Fax: 616-466-3388
Present	Hal Paris	GSE Systems 8930 Stanford Blvd. Columbia, MD. 21004		Email: hal.paris@gses.com Phone: 410-772-3559 Fax: 410-772-3595
Present	Robert Felker	EXITECH Corporation 102 E. Broadway Maryville,TN 37804		Email: rfelker@EXITECH.com Phone: 410-461-4295 Fax: 410-730-4008
Present	Allan A. Kozak	Dominion Generation North Anna power Station P.O. Box 402 Mineral, VA 23117-0402		Email: allan_kozak@dom.com Phone: 540-894-2400 Fax:
Present	William M. (Mike) Shelly	Entergy Services Inc. Grand Gulf Nuclear Station POBox 756 Port Gibson, MS 39150		Email: wshelly@entergy.com Phone: 601-437-6301 Fax: 601-437-6363
Present	Dennis Koutouzis	INPO 700 Galleria Parkway, NW Atlanta, GA 30339-5957		Email: koutouzisjd@inpo.org Phone: 770-644-8838 Fax: 770-644-8120
Absent (1)	William A. DeLuca	Pennsylvania Power & Light, Co. Susquehanna Steam Electric Station P.O. Box 467 Berwick, PA 18603		Email: WADeLuca@pplweb.com Phone: 570-542-1988 Fax: 570-542-3177
Absent (1)	Oliver Havens, Jr	PSEG Power Hope Creek Generating Station, NTC 244 Chestnut St. Salem, NJ 08079		Email: Oliver.Havens@pseg.com Phone: 856-339-3797 Fax: 856-339-3997
Resigned	Robert Boire	CAE PO Box 1800 St-Laurent Quebec, Canada		Email: boire@cae.ca Phone: 514-340 2000 x 2257 Fax: 514-340 5571
Present	SK Chang	S.K. Chang Northeast Utilities POBox 128 Waterford, CT 06385		Email: changsk@nu.com Phone: 860-437-2521 Fax: 860-437-2671
NA	Shawn M. Coyne-Nalbach	NFSC Secretary American Nuclear Society 555 North Kensington avenue La Grange Park, IL 60526-5592		Email: SCoyne-Nalbach@ans.org Phone: 708-579-8269 Fax:

6. Action Item List

Action Item Quicklook Table

Open	Complete

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61									

Action Items

No.	Status	Date	Assigned To:	Work Assignment
1	**Tim** contacted Mike Wright. No Input from Mike. The Scope change approval should be approved soon.		**Dennis**	DOE Nuclear Facility vs. Power Plant Simulators – Check with ANS 3. Inquire as to whether other simulator issues are addressed/referenced in other ANS 3 standards Tim Dennis will contact Mike Wright (ANS-3 chair). Are DOE issues referencing simulators? **2000mar09** Chandler Comments (NUPPSCO) relating to DOE simulators. We need to resolve Open NUPPSCO comments from the 1998 standards approval process.
2	**Date: 2000oct25 Status:** Additional Editorial Review Required **Date: 2000mar09 Status: Complete**		**Colby Welchel**	Obtain a Master Copy of the ANS 3.5 standard in Dual Column (working/1998) format. The WordPerfect copy from Shawn does not port into WORD correctly Assigned to Butch Colby.
3	**Date: 1999sep14 Status: Complete**		**Welchel**	Get NUPPSCO comments to members
4	**Date: 1999sep14 Status: Complete**		**Welchel**	Send copy of meeting minutes 1998Nov04 and 1999Mar02-03 to Jim Florence
5	**Date: 1999sep14 Status: Complete**		**Florence**	Jim will look at creating a survey on the USUG WEB concerning the Action Items and for soliciting info from the industry
6	**Date: 1999sep14 Status: Complete**		**Dennis**	Jeff will contact ANS about ANSI Historical standards Cataudella-Spoke with ANS Standards Secretary, Shawn Coyne-Nalbach Historical Standards: Past standards are retired and are only available as historical standards. 1979, 1981, 1985, and 1993 are no longer endorsed by ANSI and ANS only the 1998 standard is endorsed.
7			**Vick**	Talk to ANS about use of footnotes, asterisks, etc in standards

			Dennis	To review style guide.
8			**Dennis**	Contact Mike Wright about the scope change Scope and Background submitted to Shawn and Mike. No schedule at present for ANS-3to review scope change.
9			**Dennis**	Is ANS 3 considering that the standard may address other simulators not specific to NRC Regulatory Commission licensing? Tim will verify with Mike concerning additional scope (adding DOE facilities into 3.5). **2000mar09** Tim will check at the next ANS 3 meeting
10			**Kozak** **Collins** **(Vick)** **McCullough**	Propose security criteria for Simulators operating in Exam Mode **2000mar09** Determine source of Exam Security comment
11			**Felker** **Collins** **(Vick)**	Standard Section 3.1.4 - Add information notices and any other information; establish threshold of documents to be reviewed. Correspondences change over time. Discuss at next meeting with Felker present.
12				Intentionally Left Blank
13			**Florence** **Felker** **Colby**	Standard Section 3.1.3(7) - Rated coolant Flow - are BWR's OK with this? Review entire list in section 3.1.3 for applicability. Review present parameter list. Colby has additional information for discussion at the next meeting. Consider instrument accuracy relating to different plant types. Review all List; Combined with the 3.1.3(7) item (Moved from 23);
14			**Paris** **Felker** **Florence**	Review guidance on stimulated devices. Combine stimulated hardware and stimulated devices. Issues relating to various stimulated device functions and compatibility with the simulator (e.g. Run/Freeze, History retention and Recalls/Backtracks, software revision control) **2000mar09** **Determine the source of this comment**
15	**Date: 2000mar09** **Status: Complete** Presentation by Allan Kozak		**Collins** **(Vick)** **Kozak** **McCullough**	Numerous uses of Training Needs Assessment (TNA) Collins - Add paragraph in Section 3.0 detailing TNA and then remove all other references to TNA. Training Needs Assessment was changed to Training Impact Assessment **2000mar09** **Determine Source of this comment**
16			**Welchel** **Dennis**	Coordinate use of Discrepancy and Deviation. Consider Yoder #12. NUPPSCO Comment
17			**Dennis** **Welchel**	Get feedback from industry on actually how the 1998 standard is actually used. Use USUG meetings. Cataudella – Seabrook MANTG meeting (Aug-1999) comments: • How to document Scenario Based Testing? • Expand on what is V&V and what is necessary.

				• Shelly – User feedback is not available for inclusion at this time. • Develop Mission statement for working group. • Cataudella – Problems implementing Scenario Based Testing. • Benchmarking of various sites has shown use of V&V and scenario validation. **2000mar09** Welchel - Add relevant SSNTA meeting minutes to WG minutes. Wait for industry experience
18			**Kozak Shelly**	Part-Task – Should Part-Task become part of the standard or remain as an appendix. Possibly look at tying the Standard body to the Appendix; Application of Full Scope Simulators. Outside interest are asking for uses of simulators that are not related to Operator Training. Do we need to put some boundaries as to the limits simulator; **2000mar09** Presentation of Virginia Power Classroom/Part-task trainer at the 2000mar09 meeting Related AI: 41
19			**Colby Florence**	Using the simulator for other than Operator Training. Uses in predictive analysis and design mods, SAMGS procedures changes; **2000mar09** Scope change. This will require approval from ANS-3
20			**Paris Colby Kozak**	Exploiting technology changes and future industry trends. What's coming around the corner;
21	**Date: 2000mar10 Status: Complete** Keith Welchel wanted to dismiss this item. The WG agreed.		**Collins (Vick) Welchel Chang**	(JFC/KPW/JS) Hybrid Simulators. Hybrid Simulator refers to a simulator that implements many different technologies, source code vendors, different operating systems, integration vendors, etc. Maybe we need to have words that stipulate that testing needs to cover all the other changes we make to the simulator that may affect the operation of the simulator: Instructor Console, Operating Systems, New I/O, etc. (Voted to Dismiss-Consensus) Comments on regulation - The Working Group will not comment on regulations. The Standards Working Group is working in Working Group space. Keith Welchel moved to dismiss this item. Jim Florence Seconded;
22	Jim gave a presentation at the 2000 SCS conference during the USUG meeting.		**Florence Kozak**	Workshops on Testing Philosophy (what are the benefits? testing that provides results); USUG participation; Schedule workshop during USUG at SCS in Jan. 1999. Develop materials for handout. Florence lead material development. Look at the use of Simulator, Simulation Facility; Definitions change Simulation Facility becomes Simulator; Simulation Facility is now defined as the collection of Simulators

				Coordinate use of Simulator and Simulation Facility.
23				Intentionally Left Blank
24	Date: 2000mar09 Status: Complete No Action. Real-time at this time does not seem to be an industry concern at this time. Committee members had no issues with the definition or Section 4.1.1. Therefore, this AI was Closed.		Dennis DeLuca	Real Time - Tim will give further consideration and he will look at industry standards; Measuring Real-Time;
25			Dennis	Process Guidelines (Mods and Testing) ;Institutionalizing Procedures

Dennis: Next meeting, present external review showing procedures etc… and present recommendations using Millstone experience. |
| 26 | Date: 2000mar10 Status: Complete

Historical information was presented at the SCS conference.

Tim checked with ANS Headquarters and this issue was discussed in detail | | Dennis | 1985 ANS 3.5 Standard is Historical Standard; Tim Dennis will follow up with Shawn and Mike Wright about Historical/Active Standards and how the present process does not follow the five year; How should we handle or should we comment that the 1985 ANS/ANSI 3.5 standard is now an Historical standard and is no longer in the ANSI catalog.

Does the ANS 3.5 Working Group need to comment on this issue; Utilities would need to take exception by treating Certification as other; Mark up the Form 474 and state the other that you are going to do. Scenario Based testing (> 25%/yr.); Performance Based testing Plan

Dennis will call Mike Wright confirming ANS-3 understands the Historical Standard issue |
| 27 | | | Collins(Vick) Dennis Koutouzis | (JFC/TD) Possible cross-pollination with other standards. Frank and Tim will contact others |
| 28 | Date: 1999sep15 Status: Complete | | Florence | Suggested a letter to Jim Stavely asking for a commitment to attend meetings along with 02Mar1999 meeting minutes; however, Jim Stavely resigned and submitted replacement resume Oliver Havens, Jr; |
| 29 | Date: 2000mar10 Status: Complete | | Florence Dennis | Vice-chair prepare letter to Jim Davis asking for commitment to attend meetings along with 02Mar1999 meeting minutes; Chair to sign and send.
Chair to send letter to Jim Davis and Ken Rach thanking them for their past participation and asking them for substitute resumes. |
| 30 | Date: 1999sep15 | | Florence Welchel | Jim Florence suggested that the following information be placed on the USUG Web Page: ANSI-3.5 Membership List, approved meeting minutes, meeting schedules and meeting agendas. |

				Florence/Welchel will ensure WEB page is updated Florence: • Check with Shawn (ANS) for WEB space. • Check with USUG for WEB Space
31	Date: 1999sep15 Status: Complete		**Dennis**	Mission statement for Working Group for the 2003 standard. AI #31 added 1999sep14 **1999sep15:** Voted not to complete
32		**1999sep15**	**Colby Collins Koutouzis Havens Felker McCulough**	Multi-Units. Application of reference unit simulators to non-referenced units. Butch has offered to survey the industry. INPO will assist by supplying information from their databases; **2000Oct26:** **Butch will request bullets on Multi-Unit from the Group for next meeting**
33			**Havens Kozak Shelly Welchel**	Change 24-month design change limit to some shorter period.
34		**1999sep15**	**Welchel McCullough DeLuca Koutouzis**	Present standard does not address software bugs, discrepancies, and enhancements. Time limits only relate to plant design changes, no time limits are associated for simulator fidelity and enhancements. Related AI: 36
35		2000mar08	**McCullough Collins(Vick)**	Review the double column Draft Working Document prepared by Butch Colby
36		2000mar08	**Koutouzis Havens**	Questions from Review of INPO Documents: • Timeline for incorporation of Plant design changes into the simulator • Instructor Qualification • Long Term Open Simulator Fidelity Issues This is an information AI Related AI: 34
37		2000mar08	**Koutouzis Collins(Vick)**	Five Required Control Manipulations Clarification
38		2000mar08	**Dennis**	Discuss the ANS definitions and process of Clarification and Interpretation
39		2000mar08	**McCullough Florence Felker**	Consider differentiating validation of Requal and Initial License Scenarios
40		2000mar08	**Florence Collins(Vick) McCullough**	Appendix Update for Scenario Based Testing Documentation
41	Date: 2000Oct26 Status: Complete	2000mar08	**DeLuca Colby**	Appendices consideration up-front and not as an after thought. Tie documentation and Testing to the Standard Body Related AI: 18 **Resolution (2000Oct26 – Colby):** • Continue using Appendices A and B as is

				• Recommendation to revisit appendices content • Consider moving Appendix D (Part-Task) into standard main body • Related AI-18
42		2000mar08	**Chang Felker**	Use of Verification and Validation Origination: Colby Survey **2000Oct26:** **Chang to look at Survey and determine the issues with Verification and Validation and bring to next meeting**

43		2000mar08	**Welchel**	Send 1998 Standard NUPPSCO comments to:
				  • Hal Paris
				  • Bob Felker
				  • Bud Havens
				  • Robert Boire

44		2000mar08	**Paris Havens Chang Boire**	Clarify Simulator Repeatability wrt to Real-time and not Scenario Based Testing. Repeatability is not specified for Scenario Based Testing but is related to Real-time. **2000Oct26:** **Hal and Group will review the use of these terms and consistency**
45	**Date: 2000Oct26 Status: Complete**	2000mar08	**Shelly Chang Havens**	Clarify Overrides do not have to be tested like Malfunctions and are not Malfunctions. (Survey Comment 3.15 p20) **2000Oct26:** **Non-issue because it's related to CFR and not the standard** • Not all Overrides need to be tested • Only Overrides in Scenarios need to be tested • AI45 Originated from Colby survey • Confusion between the CFR about 25%/yr and the 98 standard linking Overrides to Malfunctions • Recommend that this is a non-issue and should be closed because its not an issue with the standard but is with the 10CFR Part 55
46		2000mar09	**Committee**	Request members review the other parts of the survey and comment. Members are ask to review and submit two bullets that they consider important for further ANS3.5WG consideration
47	**Date: 2000Oct26 Status: Complete**	2000mar09	**Colby**	Send Thank You notes to all Survey Participants
48	**Date: 2000Oct26 Status: Complete**	2000mar09	**Colby**	Modify DCD Training Needs Assessment to Training Impact Assessment **2000Oct26:** **Deleted due to Motion by Felker being Carried** **WG decided to revert back to Training Needs Assessment**
49	**Date: 2000Oct26 Status: Complete**	2000mar09	**Kozak**	Determine source of Training Needs Assessment Related AI: 15 **2000Oct26:** **Could not determine the Source of Training Needs Assessment**
50		2000mar09	**Colby**	Additional survey concerning Exam Security Concerns
51		2000mar09	**Colby**	Send out another survey concerning Multi-unit questions and will

				try to target Simulator, Training, and OPS
52	Date: 2000Oct26 Status: Complete	2000mar09	**Felker**	Locate previous Multi-Unit work completed by the 1993 WG. Bob will contact Bill Geiss **Resolution**: 2000Oct26 Felker Material does not exist.
53		2000mar09	**Florence (Conaway)**	Review the Appendix A – A(3) (BOM). Consider removal of the BOM list and replace with I&C list
54		2000mar09	**Vick**	Aquire US Government Style Guide
55		2000oct25		Distribute Robert Boire work assignments
56	Date: 2000Oct26 Status: Complete	2000oct25	**Colby**	Contact Mr. Cox (Com Ed) for 3.5 WG participation. **2000Oct26** **Colby called Mr Cox but Mr Cox is out until 2000Oct30.** **Terrill Laughton attended on behalf of Mr Cox**
57		2000oct25	**Dennis**	Remove all references to 3.1
58		2000oct25	**Dennis**	Send Robert Boire a note of thanks for his participation
59		2000oct26	**Florence McCullough**	Develop a list of Action Items for 3.5-WG resulting from the 2000Oct26 USUG Ops Test Directors Meeting at DC Cook
60		2000oct26	**McCullough**	Define the Term **Training Needs Assessment** in such a manner that it is clear in intent to both Training and Simulator staffs
61		2000oct26	**Welchel Dennis**	Write letter to NRC concerning the WG comments on the proposed rule change
61	Date: Status:	2000oct26	**Welchel Dennis**	Write letter to NRC concerning the WG comments on the proposed rule change

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7. **Rules of the Chair**

- **Interim Voting (Motions) shall be by Consensus;**
- **Administrative issues by simple majority;**
- **The Chairman rules that no Motions will be accepted when not in session;**
- **The Chair shall be informed of absences;**
- **The absent member is encouraged to send a proxy;**
- **A Proxy shall not have voting privileges;**
- **Members attend the full length of the meeting;**
- **The two absent policy will be enforced;**
- **Word 7.0 will be the document format;**
- **The Host will collect and send all handout material for absent members without proxy;**

8. **Wednesday 2000Oct25 (Day 1)**

Opening Comments (Tim Dennis):

- Roll Call
- Review of Meeting minutes Dated 2000mar08-10
  - Determine Roberts Work Assignments…
  - 3.5WG is an ANS Working Group not ANSI…
  - Editorial change (FONT)
  - Motion to accepted minute with revision

Welchel – How long can Larry proxy for Frank Collins?

Welchel - Welchel ask if the group would be willing to waiver the Proxy No-Vote rule for Larry Vick. Welchel stated that Vick is filling in for Collins during an extended absence and that the NRC has not vote. Dennis stated that Collins does not represent the NRC at the WG meetings, but represent an industry view. Larry Vick then stated that Frank would probably return at the next ANS 3.5 WG meeting.

Dennis:
- There is no set time for proxy representation
- Determination is up to the Working Group
- Discussion for long term proxy's to waive the proxy no-vote rule. Agreement was reached that since Frank would probably return at the next meeting, the group would take up this issue if Collins is not able to be present at the next meeting.

Colby – Discussion of Butch to represent CAE on committee.
- Robert Boire sent an Email to Dennis stating that he would resign and that Butch Colby would represent CAE.
- **AI-61** The Chair will send Robert Boire a letter of gratitude for his participation.

Discussion of increasing WG membership
- Discussions that the 3.5WG membership (15) is large from a WG perspective. Other WG's are in the 8-10 membership range.
- Discussions not to accept addition members. We are already two years into the process and time is limited.
- Discussions for adding Kevin Cox of Com Ed. Com Ed has six simulators and his expertise could a value for the committee.
- Consider offering Mr. Cox a seat without voting privilege. Additional discussion concerning the offer to Mr. Cox a seat without voting privilege. Mr. Cox was contacted asked if he could attend this meeting.
  - Mr Cox is out of the office this week. He will be contacted by Colby.
  - **AI 54**

Review of the Rules of the Chair

- Interim Voting (Motions) shall be by Consensus
- Administrative issues by simple majority
- The Chairman rules that no Motions will be accepted when not in session
- The Chair shall be informed of absences;
- The absent member is encouraged to send a proxy;
- A Proxy shall not have voting privileges;
- Members attend the full length of the meeting;
- The two absent policy will be enforced;
- Word 7.0 will be the document format;

Reports:

Dennis:
- MANTG
  - Issues on testing
  - Use feedback from
- NFSC 200019-20 (Nuclear Facility Standards Committee)
  - ANS 3 is now NFSC Sub-Committee-1
  - Discussions concerning ANS 3.5 Scope change
    - NFSC Sub-Committee-1 accepted ANS 3.5 Scope Change
    - 2003 SCOPE REVISION from 1999mar02 meeting:

      This standard establishes the functional requirements for Simulation Facilities used in the Training and Examination of Nuclear Power Plant Operators. Criteria are established for the degree of simulation, performance, and functional capabilities of the replicated systems and components. The replication may encompass full-scope, part-task, or limited scope. This standard does not address simulators for test, mobile, research reactors, or reactors not subject to U.S. Nuclear Regulatory Commission licensing.

      This standard does not establish criteria for application of simulators in training programs. Training criteria are established in American National Standard for Selection, Qualification, and Training of Personnel for Nuclear Power Plants, ANSI/ANS-3.1-1993 [1].
  - ANS 3.5's reference to 3.1 appropriateness
    - NFSC Sub-Committee-1 suggested that we eliminate the reference to 3.1 since it does not establish training criteria. ANS 3.1 establishes selection, qualification and training of Personnel for Nuclear Power Plants.

Colby:

- Working copy is in double sided format, but needs additional editorial review
- Colby will keep track of all changes to the 3.5 document using separate revision numbers or by using some other means

Vick:
- Style Book:
  United States Government Printing Office
  Style Manual
  March 1984
- Online Style Book: **www.opm.gov**

Koutouzis (INPO Observations):

- Issues in fidelity and realism (making a distinction between fidelity and realism)
- Issues in changes in plant configuration that are not carried to the simulator
- ASER/SER – Some plants in their SER are referring to the Reg. 10CFR Part 55 change related to Reactivity Manipulations even thought the Regulation change is not yet law

Vick (NRC 10CFR Part 55 Rulemaking and Reg. Guide 1.149 Status):
- Larry presented a status concerning the 10CFR Part 55 Proposed Rulemaking. 10CFR Part 55 is tentatively scheduled for issue in the 3rd or 4th Qtr 2001.
- Larry presented a status concerning the Reg. Guide 1.149. Reg. Guide is tentatively scheduled for issue in Qtr. 2 of 2001.
-

3.5WG Rulemaking Comments

The WG used the afternoon to discuss the comment submitted by members.
The results of these discussions are located below in Day 2.

Adjourned 2000Oct25: 1800

8. Thursday 2000Oct26 (Day 2)

Rule(s) of the Chair:

> The Host will collect and send all handout material for absent members without proxy

ANSI Style Guide:

> http://web.ansi.org/public/library/guides/pdf/styleman.pdf

Reports:

Paris - RNI Users Group Meeting:
- Presentations for Non-US simulation
- CRT Based simulation
- Presentation on Intellectual Property Rights
- RNI is considering moving towards having more trainers attend
-

McCullough - Test Operators Meeting:
- **Date**: 2000Oct23-24
- **Location**: DC Cook Nuclear Station
- 22 Utilities Represented
- Discussions:
  - Reactivity Management and Rule Change
    - Catawba has procedure with Nuclear Fuels Group that determines when a Simulator Core Upgrade will occur
  - Core Neutronics/Thermal-Hydraulics
  - Scenario Based Testing – How much
  - Time frame for Reactivity Management Testing and Core Cycle at testing time
  - Installing design changes on the simulator before the plant, the plant never closed nor installed the design change. The plant when shutting down discovered the difference between the plant and the simulator.
  - Mid-Loop Ops
  - V&V
  - Design D.B. and Fidelity
  - MANTG White paper on Scenario Based Testing
    - The WG reviewed of the MANTG Scenario Based Testing Form
    - The WG discussed how the form would be used and how often a scenario would be validated.
    - Florence also brought up that the WG already has AI39 that will review differentiating Requal and License Class scenarios. This issue will need further 3.5-WG discussion and give addition guidance concerning scenario based testing:
      - How long is a scenario valid
      - Provide guidance on-the-fly/Just In Time scenarios
      - License Class vs. Requal Documentation
      - Consider tying Normal OPS to Performance testing
    - *(AI-58) Incorporate USUG Test Operators items for 3.5-WG here (McCullough) (AI58)*
  - How long is a scenario that was validated using scenario based testing valid?
  - Can Utilities do Reactivity Manipulations when staying on the 1985 3.5-Standard?
  - Where do classroom simulators fall into the Standards area?
  - 45% have classroom simulators
  - 70-75% have plans to build classroom simulators
  - LC time spans between class
    - > 60% of utilities run continuous License Classes

Dennis – Next SCS Conference:

- **Date**: 2000Jan7-11
- **Location**: Phoenix, AZ
- Welchel is on the SCS2001 agenda for a 3.5-WG for panel discussion
    - Felker expressed interest in participating

Continuation of the Rulemaking 3.5-WG Comments:

- Location of the NRC Proposed Rule 41021-41029 [00-16751]
    www.access.gpo.gov/su_docs/fedreg/a000703c.html
- SECY-99-225 (CHANGES TO 10 CFR PART 55)
    http://www.nrc.gov/NRC/COMMISSION/SECYS/1999-225scy.html
- SECY-00-0083 (RULEMAKING NOTATION VOTE)
    http://www.nrc.gov/NRC/COMMISSION/SECYS/2000-0083scy.html

The WG developed three Comments on the 10CFR Part 55 proposed rule change. The bulk of the meeting time was devoted to this discussion. The comments are directed to:

1. Possible inconsistency in the use/interpretation of Performance Testing between the Standard and the proposed rule change
2. WG supports the NEI revised wording relating to "reasonably represent"
3. Ensuring linkage exist between the standard, Reg. Guide 1.149, and 10CFR Part 55

Below are the comments that will be sent to the NRC regarding the proposed rule change:

Comment 1:
The ANS 3.5-1998 Standard defines performance testing as "Testing characterized by a comparison of the results of integrated operation of the simulation facility to actual or predicted reference unit data. Performance testing encompasses testing other than software development testing", and Section 4.4.3 states, "Simulator performance testing comprises operability and scenario-based testing."

In section 55.4, Definitions, the proposed rule change defines performance testing as "Performance testing means validation, scenario-based, or operability testing conducted to verify a simulation facility's performance as compared to actual or predicted reference plant performance."

The ANS 3.5 Working Group recommends that the proposed rule be changed to read as follows: "Performance testing means scenario-based and operability testing conducted to verify a simulation facility's performance as compared to actual or predicted reference plant performance."

Comment 2:
Based on public comments from the NRC's public WEB page "Proposed Rulemaking – Operator License Eligibility and Use of Simulation Facilities in Operator Licensing Public Comments Library", Original File "780-0017.pdf, Date 09/22/00, Description "Comment letter from James W. Davis, Nuclear Energy Institute", the ANS 3.5 working group supports the revised wording:
"The plant referenced simulator uses models relating to nuclear and thermal-hydraulic characteristics that reasonably represent the core load that exists in the nuclear power reference plant for the facility at which a license is being sought…" as proposed by NEI in their comments submitted with respect to the subject.

Comment 3:
As stated in SECY-00-0083, dated April 12, 2000, "The current revision of the national standard, ANSI/ANS 3.5-1998, "Nuclear Power Plant Simulators for Use in Operator Training and Examination," employs a scenario-based testing and quality control philosophy that is inconsistent with the testing assumptions and requirements of the rule. The staff believes that implementation of ANSI/ANS 3.5 - 1998 by facility licensees without revision of the rule would result in duplicate and inefficient

simulator performance testing. The requirements of 10 CFR 55.45(b), in its present form, have become an impediment to facility licensees who might seek to reduce unnecessary regulatory burden and increase training program efficiency by adopting the staff's endorsement of later revisions of the national standard."

With the elimination of the certification process and the Form 474, please explain where the linkage between the proposed regulatory rule change, Reg. Guide 1.149, and the ANSI/ANS 3.5–1998 Standard is maintained.

How does the proposed rule change facilitate the voluntary implementation of the ANSI/ANS 3.5–1998 Standard?

New Standards Category
    Dennis phone call to Shawn Coyne-Nalbach
- Superseded – New category for Standards
  - 1998 – Active
  - 1993 – Superseded
  - 1985 – Superseded

Discussion of Items for the next meeting:
- Operating Experience (Reactivity Management Issue)
- Action Items

Discussion of Action Items

    Felker – AI-11 (Removal of the Malfunction List in section **<u>3.1.4 Malfunctions</u>**)
- Felker researched the origin of the Malfunction list using the Denton original letter and the 10CFR55.59 Re-qualification List
  - Denton Letter
  - 10CFR55.59 Re-qualification Malfunction List
  - ANS 3.5-1998 Malfunction List
- Conclusion – The Malfunction List is no longer the Denton letter and may be in conflict with the SAT based approach (Scenario Based Testing)
- The list today is not the list as initially intended
- No further guidance from 3.5 as to the malfunction list
- **Recommendation**
  - the malfunction list in section 3.1.4 Malfunctions should be deleted
  - remove the following:
    - from - **The malfunctions listed below shall be included:**
    - to just before - **The simulator shall support the conduct of abnormal, off-normal, and emergency events**
    - basically removes the malfunction list of 25
- Discussion that the proposed rule change does not malfunction testing
- Standard is inconsistent by retaining list
- Discussion on getting rid of the list in totally
- The SAT program would now define what malfunctions are required
- The standard has moved from a procurement standard to a maintenance standard
- **Continue this discussion at the next meeting**

    Kozak – AI-49 (Determine the source of Training Need Assessment)
- No mention of training needs assessment or training impact assessment
- Unable to pin-point Source Document but appears to have originated in earlier standards discussions
- Colby – Note from Collins that **Training Needs Assessment** is a required part of the design database
  - Collins wrote:

- The Training Needs Assessment is based on whether training decides that simulation is the best way to teach according to guidance provided by the accredited training program
  - Felker - **Motion** to return to **Training Needs Assessment**
    - **Motion Carried**
- **Training Needs Assessment** occurs in Training
  - George – (**AI-60**) Will develop a better definition for the term **Training Needs Assessment** in such a manner that it is clear in intent to both Training and Simulator staffs

Colby – AI-32

Colby will request bullet items, from WG members, concerning Multi-Unit issues

Shelly – AI-45

- Not all Overrides need to be tested
- Only Overrides in Scenarios need to be tested
- AI-45 Originated from Colby survey
- Confusion between the CFR about 25%/yr and the 98 standard linking Overrides to Malfunctions
- Recommend that this is a non-issue and should be closed because its not an issue with the standard but is with the 10CFR Part 55

Chang – AI-42

- Chang will review the survey and bring to the next meeting the surveys concerns

Colby (DeLuca) - AI 41

- Continue using Appendices A and B as is
- Recommendation to revisit appendices content
- Consider moving Appendix D (Part-Task) into standard main body
- Related AI-18

Adjourned 2000Oct26: 1930

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