

NPEC SC-4 Working Group 4.4  
Meeting Minutes July 20, 2010

1. Chairman, Bruce Lord, called the meeting to order at 3:00PM.
2. Attendance (■ - present, A - absent, S – absent with substitute)

Members

A	Brock, D.
■	Carter J. P.
A	Daverio, R.
A	Krvavac, J.
■	Lord, B
■	Mallanda, J.
■	Sehi, D. R.
■	Stark, R. M.
■	Thompson, J

A	McQuillan, P.
A	Goodney, D.
A	Thakur, S.

Corresponding Members

A	Dispigna, A.


Guests



3. Bruce started with the action items previously assigned and discussed the issues which need to be visited for the upcoming revision of IEEE 1290.
4. Bob Stark presented the bank of CDBI reports related to MOVs. It was concluded that these CDBI issues will have no impact to the upcoming revision of IEEE 1290. (See the attached CDBI report- Attachment A)
5. Meeting adjourned at 4:30PM.

Action items

<b>Item #</b>	<b>Assigned to</b>	<b>Action</b>	<b>Due</b>	<b>Status</b>
10-1	Stark	Conduct CDBI review for IEEE 1290 impacts	07/19/2010	Completed
10-2	Lord	Obtain the word file of the latest Standard IEEE 1290	9/15/2010	
10-3	Sehi	Check the word file of IEEE 1290 against its PDF version (Sehi)  Check the word file of IEEE 1290- Appendices against its PDF version (Sehi)	9/15/2010	
10-4	Thompson	Contact Rotorque for recruiting.	9/15/2010	
10-5	Sehi	Determine ComEd Motor method status/availability (i.e., open source) Contact John Bonner	9/15/2010	
10-6	Carter	Review other IEEE Stds for MOV applicability	9/15/2010	
10-7	Goodney	Determine if BWR Owners Group Valve Tech Review has potential IEEE 1290 input	9/15/2010	
10-9	Brock	Identify and contact vendors which will be providing MOVs for AP 1000	9/15/2010	
10-10	Stark	Identify and contact vendors which will be providing MOVs for AREVA's EPR	9/15/2010	
10-11	Lord	Identify and contact vendors which will be providing MOVs for US-APWR Design - Mitsubishi	9/15/2010	
10-12	Lord	To replace torque switch in the control circuit with limit switches due to the unreliability of torque switch settings.	9/15/2010	
10-13	Krvavac	Motor running current need to be expanded based on the new design of the motor	9/15/2010	
10-14	Lord	Need to Expand testing section of the MOVs - Discuss the issue with DiSpigna	9/15/2010	

Davis-Besse	RIII	<a href="#">50-346/09-07</a>	2/19/2010	1
Browns Ferry 1, 2&3	RII	<a href="#">50-259/09-08</a>	2/9/2010	2
St. Lucie 1&2	RII	<a href="#">50-335/09-06</a>	1/19/2010	2
Monticello	RIII	<a href="#">50-263/09-07</a> <a href="#">Errata</a>	1/6/2010	2

**2009**

Hope Creek	RI	<a href="#">50-354/09-06</a>	12/30/2009	1
Limerick 1&2	RI	<a href="#">50-352/09-06</a>	12/11/2009	3
Hope Creek	RI	<a href="#">50-354/09-07</a>	11/23/2009	2
Catawba 1&2	RII	<a href="#">50-413/09-06</a>	11/20/2009	2
Palo Verde 1,2&3	RIV	<a href="#">50-528/09-08</a>	11/19/2009	2
Waterford 3	RIV	<a href="#">50-382/09-09</a>	11/2/2009	2
Calvert Cliffs 1&2	RI	<a href="#">50-317/09-06</a>	10/8/2009	2
Kewaunee	RIII	<a href="#">50-305/09-06</a>	9/29/2009	3
Indian Point 2	RI	<a href="#">50-247/09-07</a>	9/25/2009	2
ANO 1&2	RIV	<a href="#">50-313/09-07</a>	9/11/2009	1
Hatch 1&2	RII	<a href="#">50-321/09-06</a>	8/17/2009	1
TMI-1	RI	<a href="#">50-289/09-06</a>	8/10/2009	2
McGuire 1&2	RII	<a href="#">50-369/09-06</a>	7/27/2009	3
Byron 1&2	RIII	<a href="#">50-454/09-07</a>	5/11/2009	2
Grand Gulf	RIV	<a href="#">50-416/09-06</a>	4/30/2009	2
Farley 1&2	RII	<a href="#">50-348/09-06</a>	4/9/2009	2
Millstone 2&3	RI	<a href="#">50-336/09-06</a>	3/31/2009	2
Palisades	RIII	<a href="#">50-255/08-09</a>	1/15/2009	2
Summer	RII	<a href="#">50-395/08-07</a>	1/7/2009	2

**2008**

Turkey Point 3&4	RII	<a href="#">50-250/08-06</a>	12/18/2008	2
Nine Mile Point 1&2	RI	<a href="#">50-220/08-08</a>	12/15/2008	2
Quad-Cities 1&2	RIII	<a href="#">50-254/08-07</a>	12/5/2008	3

Callaway	RIV	<a href="#">50-483/08-08</a>	12/5/2008	1
Beaver Valley 1&2	RI	<a href="#">50-334/08-08</a>	11/24/2008	2
River Bend	RIV	<a href="#">50-458/08-06</a>	10/27/2008	3
San Onofre 2&3	RIV	<a href="#">50-361/08-10 Errata</a>	10/24/2008	2
Vermont Yankee	RI	<a href="#">50-271/08-08</a>	9/26/2008	2
Salem 1&2	RI	<a href="#">50-272/08-07</a>	9/22/2008	3
Point Beach 1&2	RIII	<a href="#">50-266/08-09</a>	9/2/2008	2
Pilgrim	RI	<a href="#">50-293/08-07</a>	7/30/2008	2
Perry	RIII	<a href="#">50-440/08-06</a>	7/18/2008	2
Shearon Harris	RII	<a href="#">50-400/08-06</a>	7/10/2008	2
Peach Bottom 2&3	RI	<a href="#">50-277/08-07</a>	5/21/2008	2
Palisades	RIII	<a href="#">50-255/08-08 CDBI Follow-Up</a>	5/19/2008	1
Duane Arnold	RIII	<a href="#">50-331/08-06</a>	4/24/2008	3
Surry 1&2	RII	<a href="#">50-280/08-06</a>	4/7/2008	3
South Texas 1&2	RIV	<a href="#">50-498/07-07</a>	2/13/2008	3
Clinton	RIV	<a href="#">50-461/0708</a>	2/4/2008	2
Indian Point 3	RI	<a href="#">50-286/07-06</a>	2/1/2008	3
Browns Ferry 1, 2&3	RII	<a href="#">50-259/07-07</a>	1/25/2008	2
Cooper	RIV	<a href="#">50-298/07-11</a>	1/25/2008	2
Brunswick 1&2	RII	<a href="#">50-324/07-06</a>	1/23/2008	2
Dresden 2&3	RIII	<a href="#">50-237/08-07</a>	1/17/2008	1

**LEGEND**

1. No MOV inspections/No MOV findings				
2. MOV inspections/No MOV findings				
3. MOV inspection with MOV finding(s)				

## **FINDINGS**

URI – NRC questioned if license requirements are met for bypassing TOL's for Class 1E MOV's during an accident. (Limerick)

MOV motors maybe operating at higher than analyzed voltages. (Kewaunee)

MOV in-service test requirements did not account test inaccuracies associated with limit switch actuation or minimum EDG frequency specifications. (McGuire)

Failure to evaluate the effect of lower transient terminal voltage on MOV performance. ( Quad Cities, River Bend))

Failure to assure SR MOV TOL's are sized properly and periodically tested. ( Quad Cities, Duane Arnold))

Failure to promptly identify MOV magnesium rotor degradation. (River Bend)

Failure to evaluate most limiting differential pressure for opening MOV. (Surry)

Failure to use correct pressure in MOV weak link analysis. (South Texas Project)

Did not evaluate MOV for susceptibility to pressure lock phenomenon. (Indian Point)