

US-APWR

DCWG Meeting

5/23/2013

Overall Agenda



1. **Review of actions from previous meeting**
2. **Review of goals from previous meeting**
3. General NRC update
4. **DC review status**
5. **RCOLA review status**
6. **ACRS Meeting Schedule**
7. **Integrated DCWG Schedules**
8. **Special Generic Topics (e.g. Fukushima)**
9. **Review of goals for next meeting**
10. Review of actions items from this meeting

BOLD items are included in this presentation.

1. Review of Actions

- NRC (Otto) will provide a schedule for review of DCD RAI 895-6172 (schedule from affected tech staff needed) to MHI. – **COMPLETE, review is pending Containment Rack TeRs and revised response submittal (5/31/2013)**
- MHI and COLs to determine the strategy for Bulletin 2012-01 and communicate it to the NRC staff. – **COMPLETE, RAI response provided, meeting to be arranged for further discussion**
- NRC (PRA Branch) to determine the need for a D-RAP audit and communicate intention to MHI at 3/28 public meeting. – **COMPLETE, D-RAP audit proposed, draft audit plan in May 2013**
- NRC (Reyes) to schedule public meeting for morning of 3/28 on PRA closure plan, severe accidents, Chapter 19 ACRS action items for MHI, D-RAP and LPSD Tech Specs. – **COMPLETE, meeting held 3/28/2013**
- NRC and MHI to gain alignment on any impacts to the LOCA 15.6.5 from the ACC 94c response. – **COMPLETE, pending final RAI response submittal**
- MHI to provide the NRC a draft revised RAI response on LPSD Tech Specs and containment closure in advance of the 3/28 public meeting. – **COMPLETE, draft provided and discussed at 3/28/2013 meeting**

1. Review of Actions

- MHI to reflect that phase 5 will overlap phases 2 and 3 on the integrated schedule slide based on ACRS discussion and planning. – **ONGOING, meetings to be arranged**
- NRC PM Staff to provide feedback by mid-April on the use of the integrated DCD schedule. – **COMPLETE**
- NRC PM Staff to provide the review plan for the Fukushima submittals and Luminant Fukushima submittal by mid-April. – **COMPLETE (DCD), Meeting held 4/29/2013, plan provided for DCD review (RAIs 6/2013, MHI Responses 9/2013, Staff input for SER 1/2014, ACRS TBD)**
- MHI to send RAIs referenced during meeting, related to eRAI status changes. – **COMPLETE, sent 4/16/2013**
- MHI to provide the HFE Closure Plan by 3/29/2013. – **COMPLETE, HFE Closure Plan submitted 3/29/2013.**
- NRC and MHI to arrange a conference call and discuss preparation for AIA Inspection. – **COMPLETE (with Staff), call held 3/19/2013. Additional discussions will be held with ACRS and Inspection Branch.**

2. Review of Goals



➤ Goals from previous DCWG Meeting

1. DCD In-Evaluation RAIs submitted more than 90 days ago, reduce to 50 – **Not met, due to revised 3.7/3.8 responses submitted January (achieved excluding 3.7/3.8)**
2. Mitsubishi and NRC aligned for anticipated Confirmatory Action Changes for DCD Rev 4 – **Not met, comparisons being made to every chapter and communicated through PMs**
3. DCD SERs for Chapters 3, 6 and 7 held on-schedule per 3/7/2013 date – **Achieved for Ch 7, not met for Ch 3 and 6**
4. RCOLA SERs for Chapters 2, 7, and 9 held on-schedule per 3/7/2013 date – **Achieved for Chapters 2 and 7 held on-schedule, Not met for Chapter 9 moved from May to June 2013**
5. Zero “In Evaluation” RCOLA RAIs > 90 days old – **Not met (1 question remains > 90 days old)**
6. Gain alignment for use of Integrated Schedule – **Achieved**



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3. General NRC Update



- **Update of Staff review of current DCD and RCOLA schedules to be provided.**

4. DC Review Status



- **RAI responses and closure status**
- **Focus topics**
- **Discussion topics**

4. DC Review Status



➤ RAI responses and closure status

Table 3-1 - eRAI Status Overall Summary

eRAI Data Date		12/5/2011	2/21/2012	4/30/2012	7/5/2012	9/10/2012	11/26/2012	3/4/2013	5/20/2013	Difference
Issued/Waiting for Response		221	214	215	316	323	317	331	211	-120
In Evaluation	<90 days	79	80	104	77	118	72	25	190	+165
	>90 days (non-3.7/3.8*)	87	94	82	123	119	167	88	38	N/A
	>90 days (3.7/3.8)								109	N/A
	total	166	174	186	200	237	239	113	337	+224
Confirmatory Action (total)		517	500	476	445	406	421	504	531	+27
Confirmatory Action (closable)					71	37	21			
Unresolved – Closed (total)		897	888	879	807	740	732	713	708	-5
Unresolved – Closed (need disc)					225	61	45	31	26	-5
Resolved – Closed		3138	3249	3354	3496	3566	3607	3690	3705	+15
Total		4939	5025	5110	5264	5272	5316	5351	5492	+141

(*) non-3.7/3.8 starting from 5/20/2013 date, prior to 5/20/2013 this row includes all sections



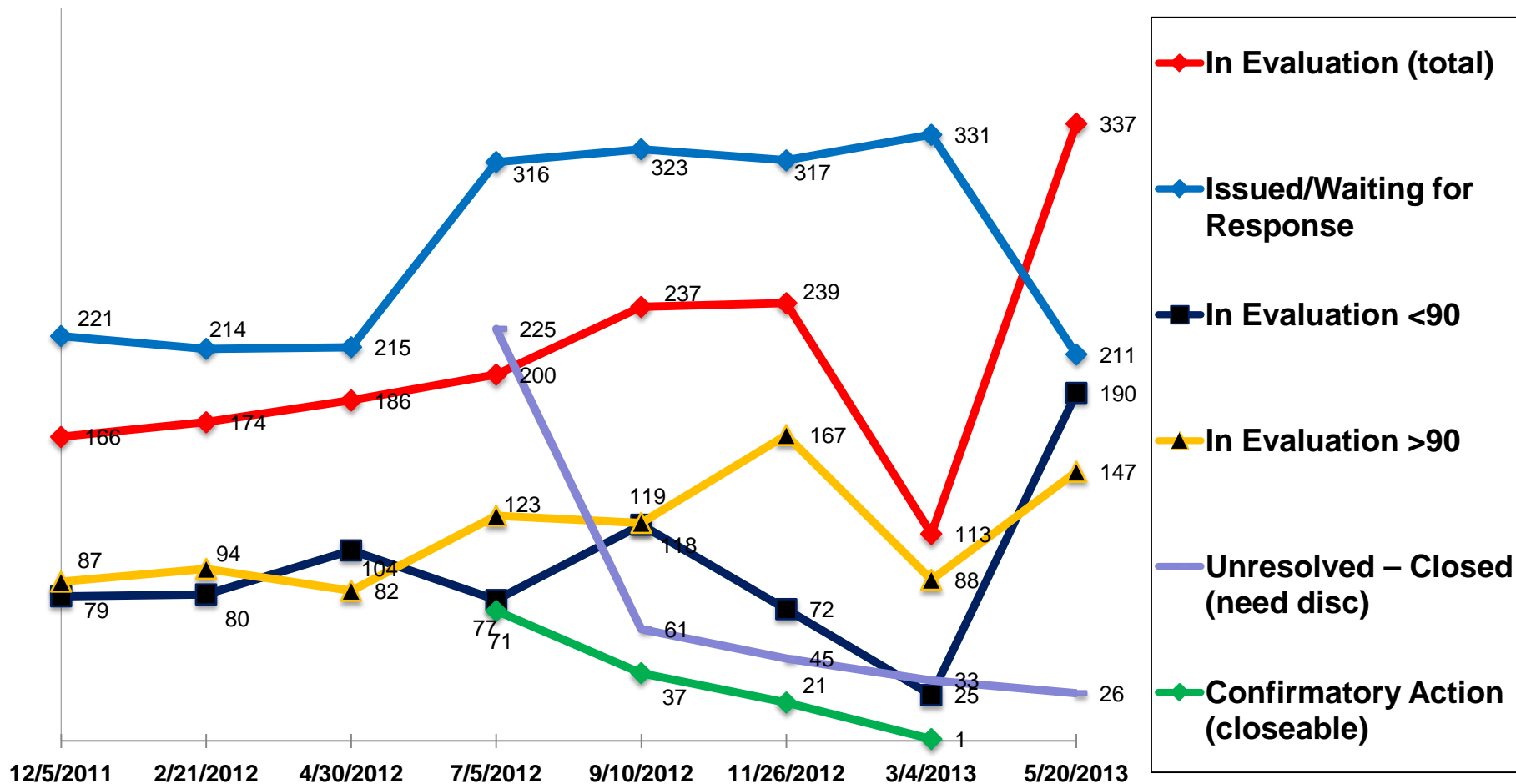
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4. DC Review Status

➤ RAI responses and closure status - Trending



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4. DC Review Status



- **Results of meeting held 2/20/2013 can be seen in eRAI data before and after the meeting date**

	eRAI Data Date		
	2/12/2013	3/4/2013	5/20/2013
In-Evaluation >90 (non 3.7/3.8)	76	63	38
In-Evaluation, Discussion Needed (non 3.7/3.8)	43	21	4
Confirmatory Action, Closable	2	1	0
Confirmatory Action, Discussion Needed	3	0	2
Unresolved-Closed, Discussion Needed (non 3.7/3.8)	12	11	4

4. DC Review Status



➤ Focus topics

✓ Seismic (Ch 3)

- Submitted documents have completed acceptance reviews, Staff continues to acknowledge progress made
- Critical Sections meeting held 5/15/2013
 - Positive results overall, DCD and Design Reports will incorporate changes resulting from the meeting
 - Tier 2* will be utilized, a proposal will be made through additional Staff interactions
- DCD markup of 3.7/3.8 will be provided by 5/31/2013, to facilitate Staff review
- Plan for review focus and RAI issuance will be beneficial

✓ Fuel Seismic (Ch 4)

- Meeting planned for 5/30/2013, submittals will be made to support Staff review following public meeting
- Key closure plan items will be discussed



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4. DC Review Status



- ✓ Safety Analysis Cleanup (Ch 6 and 15)
 - Meeting held 5/23/2013
 - Additional meetings and submittals planned through early 2014 to provide updates to the Staff, final inclusion as part of DCD Rev 5
- ✓ LPSD TS (Ch 16 and 19)
 - A TS for safety injection system during low inventory shutdown conditions has been proposed
 - Further discussion is needed related to a 4 hour containment closure TS
 - Response to RAI has indicated the basis for including the SI TS is not the sensitivity risk assessment performed at the request of the Staff, concern exists on the Staff insisting on additional TS or changes to current TS
- ✓ Seismic Margin Analysis (Ch 19)
 - Discussion needed with Staff on review needs and timing

4. DC Review Status



➤ Discussion topics

- ✓ Strainer (Ch 6)
 - No GSI-191 Open Items in Ch 6 SER with OIs
 - Revised RAI response will be submitted to provide details on sub-compartment analysis
- ✓ ACC (Ch 6)
 - SER being finalized
 - ACRS meeting scheduled 9/17-18/2013
- ✓ I&C (Ch 7)
 - SER with Open Items completed, ACRS SC Meeting held
 - RAIs, OIs and CIs now the primary focus

4. DC Review Status



- ✓ Bulletin 2012-01 (Ch 8)
 - RAI has been issued and response provided, awaiting Staff guidance to be issued
 - Mitsubishi requested a meeting to discuss possible design changes
 - Engaged with industry discussions
- ✓ Fuel Rack Mechanical Report (Ch 9 and 12)
 - RAIs issued
- ✓ OI 15.6.5-14 Boron Precipitation/HLSO time (Ch 15)
 - Discussion held 5/8/2013, revised response to be provided 5/24/2013 to address remaining items

4. DC Review Status



- ✓ DRAP Audit (Ch 17)
 - Staff have confirmed Audit, expecting information by the end of May
 - Audit expected in Fall 2013
- ✓ HFE (Ch 18)
 - Closure plan has been provided, first submittals in June 2013
- ✓ PRA Closure Plan (Ch 19)
 - Closure plan has been submitted to NRC 4/26/2013

5. RCOLA Review Status



➤ Phase Status by Chapter – as of May 15

	Chapter																				
	1	2	2.4, .5	3	3.7, .8	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Phase 1																					
Phase 2	9/13			9/13				8/13			6/13					9/13					
Phase 3 Sub	11/13			10/13				9/13			10/13					11/13					
Phase 3 Full	11/13			11/13				11/13								11/13					
Phase 4																					
Phase 5																					

	Complete		Not complete (date indicates forecast date for completion)		Date not changed subsequent to 3/7/13 DCWG
	Complete subsequent to 3/7/13 DCWG		Date changed subsequent to 3/7/13 DCWG		

*Progress made on ACRS review for eight chapters, five chapters delayed.
Begin scheduling Phase 4 & 5 dates.*

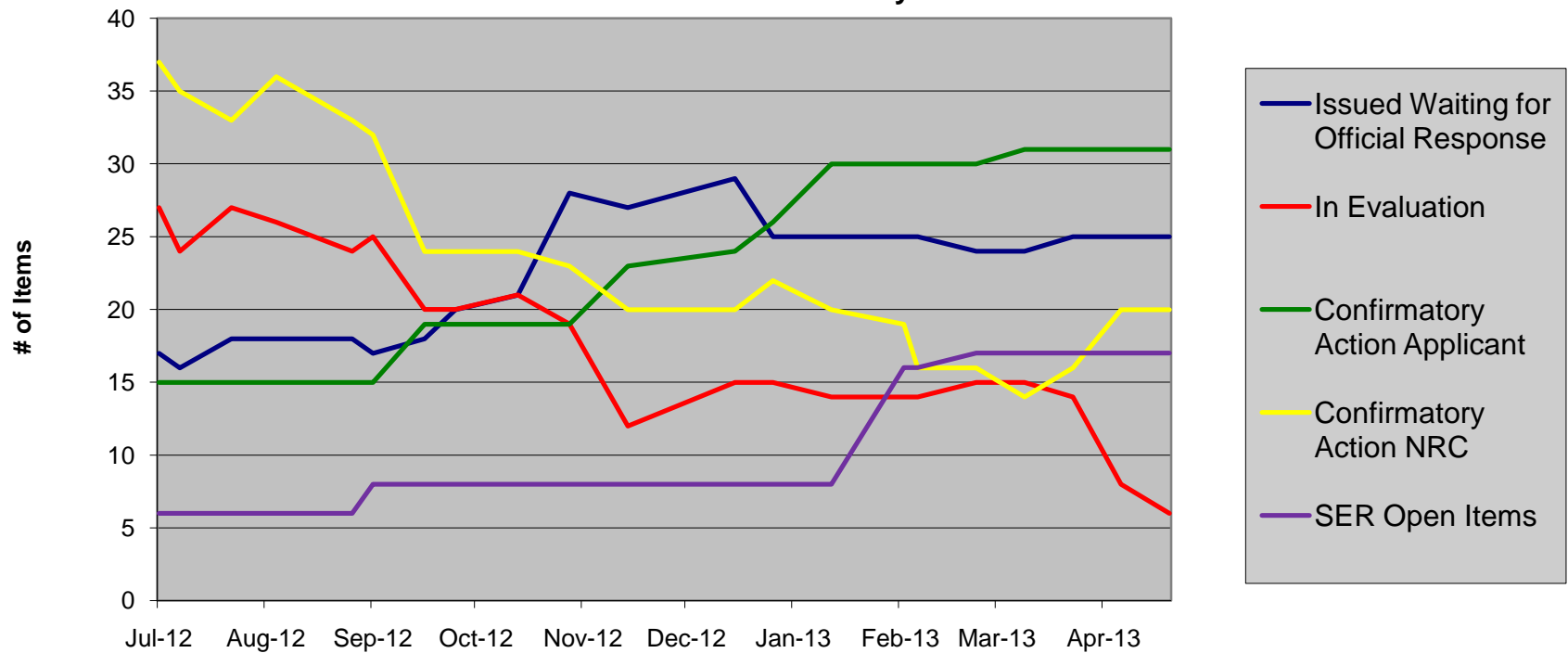
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5. RCOLA Review Status



➤ RAI Questions – Progress to Closure – as of 5/13/13

eRAI Question & SER Open Item Status Trends
Since July 2012



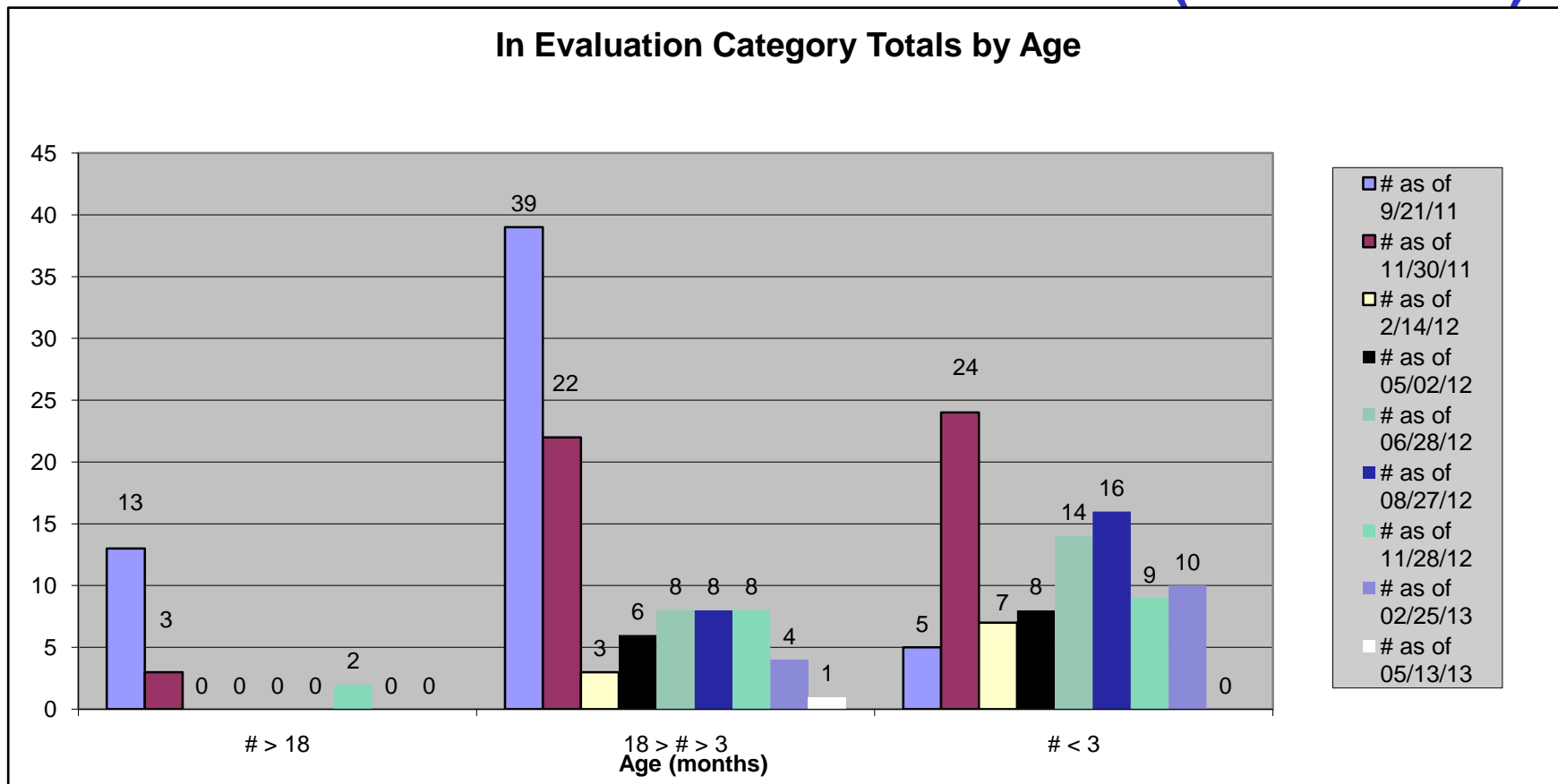
In Evaluation questions continue downward trend. Confirmatory questions to be incorporated into next RCOLA revision (Nov 2013). SER Open Items increasing but low.

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5. RCOLA Review Status



➤ RAI Questions – “In Evaluation” Status (NRC Action)



The number of “In Evaluation” questions greater than 3 months remains small.

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5. RCOLA Open Questions



➤ Issued Waiting for Response – 25

- ✓ 12 – IHCP/ISCP & Fukushima (Luminant response pending)
- ✓ 5 – IHCP/ISCP (Luminant response provided 4/29/13; with NRC for review)
- ✓ 8 – Luminant response pending (fuel security, hydrogen burn, DCD certification)

➤ In Evaluation – 6

- ✓ 2 – Luminant action (Fukushima, severe winds)
- ✓ 3 – MHI action (procurement specs, EQ, Bulletin 2012-01)
- ✓ 1 – Chapter 19 Open Item (NRC action)

➤ Open Items – 17

- ✓ Response submitted – 14
- ✓ Response confirmatory or resolved-closed - 8

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5. RCOLA Open Questions



- **Confirmatory (awaiting NRC action) – 1**
 - ✓ Was incorporated into COLA Rev 3 issued in June 2012
- **Confirmatory (awaiting Luminant action) – 50**
 - ✓ All to be incorporated into COLA Rev 4 in November 2013, including those associated with IHCP/ISCP

5. RCOLA Review Topics



➤ **Site-specific Seismic (ISCP)**

- ✓ 5 submittals completed from November 2012 to May 2013. Remaining 2 scheduled for August and September 2013.

➤ **Hydrology (IHCP)**

- ✓ 2 submittals completed as of May 2013. Remaining 2 scheduled for May and September 2013.

➤ **Negation Action Plan**

- ✓ Reinstate discussion with NRC on or before fourth quarter of 2014
- ✓ Following generic activity in this area

➤ **Containment Sampling for Latent Debris**

- ✓ Safety concerns regarding sampling every second outage with dose and personnel safety

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5. RCOLA Review Topics



➤ Chapter 3

- ✓ DCWG developing coordinated response to NRC request for procurement specifications

➤ Chapter 8

- ✓ Luminant has submitted changes to address the GDC 5 Offsite Power System Open Item including proposed words for the FSAR. NRC to assess acceptability.

➤ Fukushima

- ✓ Site-specific RCOLA RAI responses to be submitted by August 2013

➤ RCOLA Revision 4

- ✓ Exemption request submitted requesting a revision date of November 2013. NRC response in process.

6. ACRS Meeting Schedule



Chapter	Phase Completion Dates (Comparison to 3/7/2013 DCWG Meeting)						
	Phase 1	Phase 2	Phase 3		Phase 4	Phase 5	Phase 6
	PSER	SER w/ OIs	ACRS SC	ACRS FC	SER w/o OIs	ACRS	FSER
1	Complete	8/19/13	11/05/13 (+2)	TBD			
2	Complete	Complete	Complete	Complete	9/30/14		
3 (except 3.7/8)	Complete	9/16/13 (+4)	10/15-16/13 (+4)	11/07/13	11/03/14		
3.7/8	Complete	5/28/14	7/14	TBD	11/03/14		
4	Complete	Complete	Complete	Complete	8/25/14		
5	Complete	Complete	Complete	Complete	12/27/13		
6	Complete	6/25/13 (+2)	9/17-18/13 (+2)	11/07/13	7/07/14		
7	Complete	Complete	Complete	11/07/13	12/05/13		
8	Complete	Complete	Complete	Complete	1/29/14		
9	Complete	Complete	Complete	Complete	9/16/14		
10	Complete	Complete	Complete	Complete	12/27/13		
11	Complete	Complete	Complete	Complete	1/30/14		
12	Complete	Complete	Complete	Complete	4/15/14		
13	Complete	Complete	Complete	Complete	Complete	TBD	
14 (except 14.3.2, 14.3.9)	Complete	8/19/13 (-3)	11/05/13 (+2)	TBD	11/03/14		
14.3.2 (Seismic)	Complete	TBD	7/14				
14.3.9 (HFE)	Complete	TBD	TBD				
15	Complete	Complete	Complete	Complete	8/05/13		
16	Complete	Complete	Complete	Complete	11/03/14 (+11)		
17	Complete	Complete	Complete	Complete	11/03/14 (+15)		
18	Complete	2/28/14	TBD				
19 (except SMA)	Complete	Complete	Complete	Complete	11/03/14		
19 SMA	Complete	5/28/14	7/21/14	TBD	11/03/14		
AIA			TBD	TBD			
LTCC			TBD	TBD			

YELLOW: Date Change
BLUE: New Information

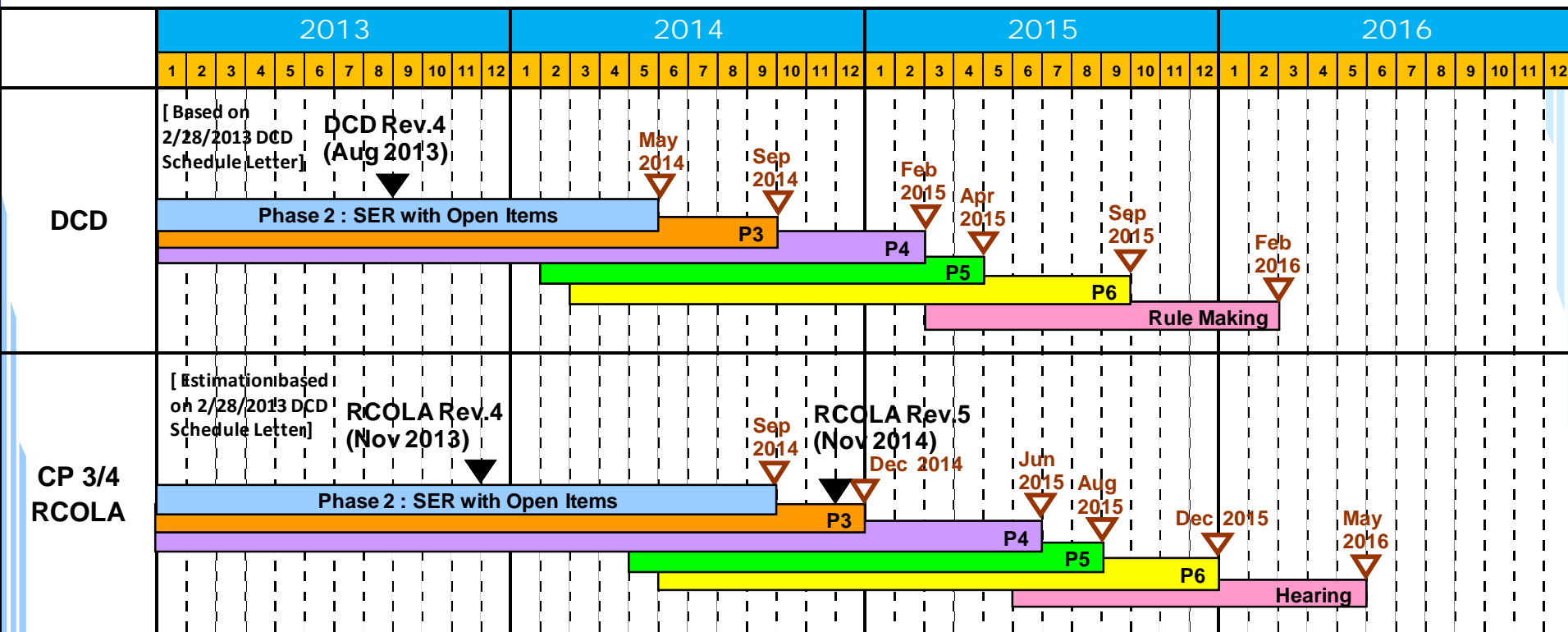
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7. Integrated DCWG Schedules



US-APWR NRC Review Schedule DCD and R-COLA



7. Integrated DCWG Schedules



➤ End-game planning

- ✓ Progress being made, increased focus on scheduling tool within the DCWG
- ✓ P6 schedule to be utilized as a communication tool to ensure alignment among Mitsubishi, Luminant and the NRC
- ✓ RCOLA schedule has been developed, will be refined and linked to the DCD schedule with an update by the next DCWG meeting

8. Special Generic Topics



➤ Fukushima Task Force

- ✓ Good support and feedback received during the 4/29/2013 Meeting
- ✓ RCOLA response to be provided August 2013
- ✓ Credit for AAC is a key aspect of mitigation strategy, which Staff has recognized. Staff position is needed.
- ✓ Staff provided review plan for DCD
 - RAls to be issued by June 2013
 - Mitsubishi responses by September 2013
 - Staff SER input by January 2014
 - ACRS meeting TBD

9. Review of Goals



➤ **Goals for next DCWG Meeting (NRC)**

1. Historical DCD 3.7/3.8 RAI responses reviewed
2. Issue Fukushima RAIs for DCD review
3. On-track to issue RCOLA Ch 6 and 9 SERs before 8/15/2013
4. Complete review of all RCOLA questions greater than 90 days under NRC review

➤ **Goals for next DCWG Meeting (Applicants)**

1. Public meeting to communicate all changes for DCD Rev 4
2. Reduce DCD 'Waiting for Response' RAIs to 180, from 211
3. On-track to submit COLA update to address Fukushima lessons learned by 8/30/2013
4. On-track to submit remaining ISCP and IHCP products by 9/30/2013

10. Review of Actions



- **Actions captured throughout this meeting will be reviewed at the start of future DCWG meetings**
- **Going Forward**
 - ✓ Maintain focus on RAI status
 - ✓ Utilize integrated schedule in preparation for Phase 4 'bow wave'
 - ✓ Long-term goals (2013-14):
 - Provide quality submittals to address pending issues
 - Maintain deliverables and review schedules to eliminate further schedule delay
 - ✓ Next DCWG meeting proposed July 18, 2013