



Member Documents





A. RPAC 2024 Summer Attendees

Station	Company	Station Rep	Email
Braidwood	Constellation	Jeffrey Chase	jeffrey.chase@constellation.com
	Constellation	Joe Coughlin	joseph.coughlin@constellation.com
Byron	Constellation	Jacob Burton	iacob.burton@constellation.com
	Constellation	Scott Leach	scott.leach@constellation.com
Calvert Cliffs	Constellation	Roy Lopez	Rouell.Lopez@constellation.com
Clinton	Constellation	Frank Owens	Frank.owens@constellation.com
Corporate	Constellation	Kevin Crymes	kevin.crymes@constellation.com
David Besse	Energy Harbor	Ryan Brown	Ryguy2007@yahoo.com
Diablo Canyon	PG&E	Felix Martinez	felix.martinez@pge.com
LaSalle	Constellation	Angela Bristol-Johnson	angela.bristol@constellation.com
Limerick	Constellation	Randy Weyer	randy.weyer@constellation.com
	Constellation	Robin Miller	robin.miller@constellation.com
Palo Verde	APS	Eilert Meyers	eilert.meyers@aps.com
Point Beach	Next Era Energy	Ryan Meagher	rmeagher97@gmail.com
Prairie Island	EXCEL Energy	Dave Martin	david.martin@xenuclear.com
Quad Cities	Constellation	Darcy Hamilton	darcyjo.hamilton@constellation.com
Seabrook	Next Era Energy	Robert York	robert.york@nexteraenergy.com
Sequoyah	TVA	John Hertz	jjhertz@tva.gov
Services	Framatome	David Howard	david.howard@framatome.com
STP	STPNOC	Eric Hood	eghood@stpegs.com
	STPNOC	Jonah Morgan	jbmorgan@stpegs.com
Vogle	Southern Company	Michael Beyer	mfbeyer@southernco.com
Watts Bar	TVA	TJ Cook	tjcook@tva.gov
Wolf Creek	WCNOC	Bob French	bob.french@evergy.com



B. RPAC 2024 Summer Vendors

Vendor	Link
Alaron Nuclear Services	ALARON Nuclear Services
American Ceramic Tech	American-ceramic
AVANTech	Avantechllc.com/
Curtiss-Wright	Curtisswright.com/
Day & Zimmerman	Day & Zimmerman
Dominion Eng Inc	Dominion Engineering
Eastern Tech/Orex	Eastern Technologies-Orex
Frham Safety Products	FRHAM Safety
Framatome	Framatome
Gamma Reality	Gamma Reality
Gentex Corp - Pure Flo	Genetex Corp
Innovative Ind Solutions	IIS Net
Master-Lee Decon	Master Lee
Mirion Tech	Mirion
NPO	Nuclear Power Outfitters
Radeco	Radeco Inc
Radiation Protection Systems	Radpro Systems
Radiation Safety & Control Services	Rad Safety
Thermo Fisher	Thermo Fisher
Ultra Energy	Ultra Energy
UniTech Services Group	UniTech
Westinghouse	Westinghouse Nuclear

C. High Interest Topics by Station

1. Braidwood – 4LW
2. Calvert Cliffs – CE
3. Davis Besse – B&W
4. LaSalle – BWR
5. Point Beach – 2LW
6. Sequoyah – ICE
7. South Texas Project – 4LW
8. Vogtle – 4LW

D. Breakout Sessions

1. ICE, B&W, Framatome
2. Westinghouse 2L
3. Westinghouse 4L, Group A
4. Westinghouse 4L, Group B
5. Boiling Water Reactors



E. Presentations

1. RP Resource Allocation
2. Clevis Bolt Replacement Project
3. ISI 10YR RV Inspection

F. Meeting Critiques

1. Critique package

High Interest Topics Stations



- Braidwood 4LW
- Calvert Cliffs CE
- Davis Besse B&W
- DCPD 4LW
- LaSalle BWR
- Point Beach 2LW
- Sequoyah ICE
- STP 4LW
- Vogtle 4LW

High Interest Topics Braidwood - 4LW



- 1. Please list 2023 online and outage dose by unit.**

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: PLS list 2023 online dose by UNIT AND outage dose by UNIT.

Name: Joe Coughlin / Dave Miller Contact Info:

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	ONLINE A2R23 U1 - 0.992 mRem 48.282 Rem U2 - 1.962 mRem
Scott Leach	Byron	4LW	ONLINE B1R23 24.690 Rem U1 - 1.584 Rem B2R24 27.744 Rem U2 - 1.807 Rem
Ray Lopez	Calvert Cliffs	CE	I submitted the Calverts Plant status to John. I will email the stat to you
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Online 3.1 Rem Outage 35.2 Rem
Felix MARTINEZ	Diablo Canyon	4LW	ONLINE OUTAGE U1 3.062R U1: 38R U2 2.0R U2: 14R
George Bristol-Johnson	LaSalle	BWR	L2R18 611.268 (ED active) L1R19 190.308 EDA L2R19 570.190 (ED active) L1R20 136.978 EDA -7
Randy Weyer	Limerick	BWR	U1 - 17.77 R (OLR) Last Refuel 158.35R (ED) U2 - 20.134 (OLR) Last Refuel 158.35R 88.94R (OLR)
ERBERT MEYERS	Palo Verde	CE	ONLINE 7.421 REM [INCLUDES OCS] SPRING OUTAGE: 22.519 FALL OUTAGE: 21.489
Ryan Meagher	Point Beach	2LW	U1 2.852 CRE data, let me know if you want something different U1 R41 42 Rem U2 3.623 U2 R39 50.485 Rem
	Prairie Island	2LW	2R33 4056 68.612 Rem 2023-24 2023 64,756 Rem 5,073 Rem online
	Quad Cities	BWR	
Michael Smith	Seabrook	4LW	U1 - 2.68 REM
John Hertz	Sequoyah	ICE	don't have access to data right now U1 R26 - 81.808 REM U1 - U2 R25 - 36.9 REM U2 -
Eric Hood	STP	4LW	I will email
MIKE BEYER	Vogtle	4LW	WILL EMAIL.

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HIGH INTEREST TOPIC QUESTIONNAIRE

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	Watts Bar	ICE	
French	Wolf Creek	4LW	on line 2126 mRem. ISFSI 761mRem No outage

LaSalle DLR Actual
 L1R20 - TBD projected @ 130,129 rem
 L2R19 DLR actual 530,503 rem

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High Interest Topics

Calvert Cliffs - CE



- 1. Posting areas in CTMT for outages. Does your plant have specific posting plans? Entry into bioshield areas. How does your group control the plant when making decisions to be behind the bio wall? What power level does your plant allow entry behind the bio wall?**
- 2. Entry into the bioshield areas. How does your group control the plan when making decisions to go behind the bio wall. What power level does your plant allow entry into?**
- 3. HRA/LHRA briefs. Does your group perform these briefs ahead of time or time of execution?**

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Posting Areas in ETM for outages
 Does your plant have specific Posting Plans

Name: Roy Lopez

Contact Info: rovell.lopez@constellation.com

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Yes we do
Scott Leach	Byron	4LW	Yes, Implemented at mode 5
	Calvert Cliffs	CE	
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Yes. Can send example if desired
Felix MARTINEZ	Diablo Canyon	4LW	Yes. We have detailed plans for SURVEY/POSTING GUIDELINES.
	LaSalle	BWR	
Randy Weyer	Limerick	BWR	NA
FILBERT MEYERS	Palo Verde	CE	Yes Postings Plan Per Mode Change
Ryan Meagher	Point Beach	2LW	yes, I have a Picture Book made for each unit
	Prairie Island	2LW	
Darcy Hamilton	Quad Cities	BWR	n/a
Michael Smith	Seabrook	4LW	Yes we have plans for our 5/6 platform & cavity
John Hertz	Sequoyah	ICE	Yes. We go with broad HRA posting to reduce HRA boundary ^{boundary} problems
Eric Hood	STP	4LW	Yes
Mike Zeyer	Vogtle	4LW	Yes

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HIGH INTEREST TOPIC QUESTIONNAIRE

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TJ Cook	Watts Bar	ICE	Yes we put them in our outage book
French	Wolf Creek	4LW	Yes. Down Post, H ₂ O ₂ , Outage, Normal

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Entry into Bio Shield Areas
 How does your group control the Plant when making decisions to go behind the Bio Wall. What Power level does your Plant allow entry into

Name: Ray Lopez

Contact Info: ray.lopez@constellation.com

Contact (Name)	Plant	NSSS	Comments
<u>Joe Coughlin</u>	<u>Braidwood</u>	<u>4LW</u>	<u>Havent in a while. Would push to go to 30% but successing would be at 100%</u>
<u>Scott Leach</u>	<u>Byron</u>	<u>4LW</u>	<u>Don't do often, but last entry was at 100%</u>
	<u>Calvert Cliffs</u>	<u>CE</u>	
	<u>Clinton</u>	<u>BWR</u>	
<u>Ryan Brown</u>	<u>Davis-Besse</u>	<u>B&W</u>	<u>"Don't allow" in recent years. But it has been evaluated w/ limited survey data. RP consensus is < 30% power</u>
<u>FELIX MARTINEZ</u>	<u>Diablo Canyon</u>	<u>4LW</u>	<u>LAST ENTRY @ POWER (100%) WAS FOR AN RCP OIL HIGH ALARM. ENTRY @ POWER REQUIRES SAC AND IS RISK</u>
	<u>LaSalle</u>	<u>BWR</u>	
<u>Randy Weyer</u>	<u>Limerick</u>	<u>BWR</u>	<u>NA</u>
<u>ELIERT MEYERS</u>	<u>Palo Verde</u>	<u>CE</u>	<u>Entered May of 2024 @ 100% Power ↳ RP M & Plant Manager Approval</u>
<u>Ryan Meagher</u>	<u>Point Beach</u>	<u>2LW</u>	<u>Recently, we've stayed at 100% Power, 5 Rem is our decision point for downpowering. I have a spreadsheet to show the effects of Downpowering, on dose, if you'd like to see</u>
	<u>Prairie Island</u>	<u>2LW</u>	
	<u>Quad Cities</u>	<u>BWR</u>	
<u>Michael Smith</u>	<u>Seabrook</u>	<u>4LW</u>	<u>We don't allow but it would require RP M & Shift Manager Approval</u>
<u>John Hertz</u>	<u>Sequoyah</u>	<u>ICE</u>	<u>We don't do it, but procedurally we have to be < 30% Rx Power</u>
<u>Eric Hood</u>	<u>STP</u>	<u>4LW</u>	<u>Procedure driven lower Rx Power <u>1370 per procedure</u></u>
<u>Mike Reyer</u>	<u>Vogtle</u>	<u>4LW</u>	<u>Don't Allow. We look for investigation and assess need to lower power.</u>

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: HIGH RAD / Locked High RAD Brief
 Does your group perform these briefs ahead of time or time of execution

Name: Ray Lopez Contact Info: ray.lopez@constellation.com

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	usually time of execution
Scott Leach	Byron	4LW	Time of execution
	Calvert Cliffs	CE	
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Time of execution, by our choice
FELIX MARTINEZ	Diablo Canyon	4LW	IT DEPENDS ON THE SCOPE. NORMALLY, HRA/LHRA BRIEFINGS GET DONE AT TIME OF EXECUTION.
	LaSalle	BWR	
Randy Weyer	Limerick	BWR	Time of execution - We'll also do ahead of time for higher evolution jobs (initial DW entry, etc)
ELLIOTT MEYERS	Palo Verde	CE	- RWP Brief Prior - HRA/LHRA Brief Time of Execution
Ryan Meagher	Point Beach	2LW	Usually time of Execution, for larger jobs that could move around in the schedule, Briefs are done beforehand with Multiple Teams, Brief is good for One shift
	Prairie Island	2LW	
Darcy Hamilton	Quad Cities	BWR	Time of execution.
Michael Smith	Seabrook	4LW	Our briefs are good for one shift. AS conditions change. We will do a brief at project starts.
John Hertz	Sequoyah	ICE	Critical path work is ahead of time. Non-critical path is time of execution.
Erick Hood	STP	4LW	Critical path is ahead of time with quick refresh brief at execution. All other at time of execution
Mike Beyar	Vogtle	4LW	Normally time of execution. could happen earlier in shift

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HIGH INTEREST TOPIC QUESTIONNAIRE

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<i>J. Cook</i>	Watts Bar	ICE	HRA Ahead of time LHRA Time of execution
<i>French</i>	Wolf Creek	4LW	Both. outage HRA - Ahead LHRA @ Entry

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High Interest Topics

David Besse - B&W



- 1. How does your site budget online security dose? Is your forecast budget consistent with DLR reads?**
- 2. For PWRs. If you still jump Steam Generators, what style of respiratory protection do you use?**
- 3. Who hangs your outage shielding? Include specifics if possible.**

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: How does your site budget online security dose?
 Is your forecast budget consistent with DLR reads? 567-708-8700
 Name: Ryan Brown Contact Info: Ryan.Brown1@vistracorp.com

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	No dose
Scott Leach	Byron	4LW	Zero dose for security
Ray Lopez	Calvert Cliffs	CE	Zero dose for security normally
	Clinton	BWR	
Felix Martinez	Davis-Besse	B&W	WE BUDGET SECURITY IN THE "OTHER" CATEGORY ALONG WITH FIRE PROT. BUDGET IS CONSISTENT WITH DLR READS.
	Diablo Canyon	4LW	
	LaSalle	BWR	
Randy Weyer	Limerick	BWR	about 3mr a day
ELBERT MEYERS	Palo Verde	CE	No Dose for security
Ryan Meagher	Point Beach	2LW	Budget of ~30 mR/year, No dose assigned daily, dose assigned based on non-routine work as it arises (new fuel receipt, etc.)
	Prairie Island	2LW	
Darcy Hamilk	Quad Cities	BWR	2-3 mR per day for Security Bands Stays pretty consistent over the year
Michael Smith	Seabrook	4LW	Security dose isn't a concern for us. we use historical data
John Hertz	Sequoyah	ICE	not a concern. 5-10 mrem/month
Jonah Morgan	STP	4LW	50 mRem for unit 1, all SRP dose 75 mRem for unit 2 all SRP dose
MILK BAUER	Vogtle	4LW	2-3 MR depending on online or outage.

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

	Watts Bar	ICE	
<i>French</i>	Wolf Creek	4LW	<i>Yes. Yes. Reach out</i>

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: For PWR's: If you still jump Steam Generators, what style of respiratory protection do you use?

Name: Ryan Brown

Contact Info: Ryan.Brown1@vistracorp.com

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	PAPR with belt pack
Scott Leach	Byron	4LW	PAPR w/ belt pack
Roy Lopez	Calvert Cliffs	CE	PapR's w/ belt pack
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	PAPR's w/ belt pack for filters
Felix MARTINEZ	Diablo Canyon	4LW	PAPR WITH BELT PACK
	LaSalle	BWR	
	Limerick	BWR	N/A
Eliot Meyers	Palo Verde	CE	We don't do We install FME Covers - No Entry
Ryan Meagher	Point Beach	2LW	PAPR w/ Belt pack
Dave Math	Prairie Island	2LW	It entry No Entries
Darcy Hamilton	Quad Cities	BWR	N/A
Michael Smith	Seabrook	4LW	We have a zero entry Nozzle Dam system (ZEND).
JOHN HERTZ	Sequoyah	ICE	Pureflo helmet PAPR's
David Morgan	STP	4LW	Bubble Hoods, Air line connected to Instrument Air
MIKE BEYER	Vogtle	4LW	Delta Suits.

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

TJ Cook	Watts Bar	ICE	we are looking @ max Air for our fall outage had vendor bring units on site for Step
	Wolf Creek	4LW	

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Who hangs your outage shielding? Include specifics if possible

Name: Ryan Brown

Contact Info: Ryan.Brown1@vistra.com
567-708-8700

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Labs working for RP
Scott Leach	Byron	4LW	laborers working for RP
Ray Lopez	Calvert Cliffs	CE	Allied laborers work for RP Alara
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	DZ decon personnel
Felix Martinez	Diablo Canyon	4LW	RP DECON IS RESPONSIBLE FOR HANGING SHIELDING
Angie Bristol	LaSalle	BWR	RP seconded laborers that hang shielding @ Every Station
Robin Miller	Limerick	BWR	Allied laborers working w/ RP guidance
Eilert Meyers	Palo Verde	CE	ALARA does qualified buy off Labor Force comes from Site Management & Engineers
Ryan Meagher	Point Beach	2LW	Laborers, Contract Deconers, RP Techs, anyone who isn't busy
Daniel	Prairie Island	2LW	LABORERS WORKING W/ RP
Darcy Hamilton	Quad Cities	BWR	Laborers working for RP, Alara individual runs the crew.
Michael Smith	Seabrook	4LW	Alara coordinates with help from laborers & new NSO's to hang lead.
John Hertz	Sequoyah	ICE	Radcon Laborers
John Morgan	STP	4LW	Decon staff hangs lead with SLORD techs as POC
MIKE BAKER	Vogtle	4LW	DECON TECHS

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

TJ Cook	Watts Bar	ICE	RP Laborers
French	Wolf Creek	4LW	ALARA RP Coverage } Each Pkg 4-Decon } is Resourced in P6

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High Interest Topics

Diablo Canyon - 4LW



1. **Filtration.** What PWRs utilize 0.05-micron letdown filters? Can any station prove any source term reduction from using: 0.1-micron filter, microporous resin, or zinc addition?
2. **Radiation Shielding.** What steps does your station take to make sure workers understand that they must contact RP prior to shielding removal?
3. **Exposure Reporting Outage.** What method and program does your station utilize for tracking and reporting outage exposure? How effective is it for your station? Can you share your report?
4. **Exposure Reporting Online.** DCPD utilizes an automated report for daily online exposure reporting. Does your station utilize a similar format? If not, could you please share your reporting?
5. **TEDE ALARA justifications.** How does your station perform TEDE ALARA justifications? How many times do you perform them? Can you share your procedures?
6. **Has your station performed 10-YR ISI, Baffle Bolt, or BMI/CLEVIS Bolt connection inspections?** Can you share documents?
7. **ALARA Plans.** Do your ALARA plans include special briefings about use of volatile compounds?
8. **Robotics.** Do you utilize the Spot robot for routine plant activities such as ISFSI pad inspections.
9. **Exposure Reporting.** Do your dose reports utilize color coding? Does your station take action based upon changes in that color coding? Is this effective for your station?
10. **Fuel Defects.** Has your station experienced a fuel defect? What means of detection did you use with respect to RP processes or chemistry analyses?
11. **Remote Briefings.** Does your station perform remote briefings where a work group calls RP for a briefing on Microsoft Teams? If so, is this effective for your station?
12. **Work Scope Changes.** What processes does your station have in place to report work scope changes to RP ALARA?
13. **Electronic Dosimeter (ED) Setpoints.** What industry guidance does your station utilize to set electronic dosimeter setpoints. Can you provide or identify this industry guidance?

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Filtration. What PWRs utilize 0.05-micron letdown filters? Can any station prove any source term reduction from using: 0.1-micron filter, macroporous resin, or zinc addition?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Yes, 0.05 online, PRCOIM resin, zinc addition
Scott Leach	Byron	4LW	Yes with zinc addition 0.05 micron online OI outages
	Calvert Cliffs	CE	
	Clinton	BWR	
	Davis-Besse	B&W	
	Diablo Canyon	4LW	
	LaSalle	BWR	
	Limerick	BWR	n/a
Eileen Meyers	Palo Verde	CE	We only use 0.1 on letdown ↳ We inject H2O2 no zinc
	Point Beach	2LW	
Dave Matz	Prairie Island	2LW	PRCOIM Resin/Purification ^{80-300gpm} mod.
	Quad Cities	BWR	
	Seabrook	4LW	
John Hertz	Sequoyah	ICE	don't have good data
Eric Hood	STP	4LW	Yes - zinc addition

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

Topic: Filtration. What PWRs utilize 0.05-micron letdown filters. Can any station prove any source term reduction from using: 0.1-micron filter, macroporous resin, or zinc addition?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
<i>MILLS BEYER</i>	Vogtle	4LW	<i>0.1 micron - use zinc chemical addition during shutdown.</i>
	Watts Bar	ICE	
	Wolf Creek	4LW	

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Radiation Shielding. In DCP's 2024 spring outage, a contractor directed personnel to remove shielding on the assumption that the shielding in place was not required. What steps does your station take to make sure workers understand that they must contact RP prior to shielding removal?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Only touched by RPTs or Laborers. Each shield has a work package.
Scott Leach	Byron	4LW	Only RPTs or RP laborers can remove shielding. Directed by Shielding coordinator.
	Calvert Cliffs	CE	All shielding in Tagged w/ ALARA Shielding Tags w/ Instructions about Removal.
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Informational tag with "Do not remove" verbiage hung on each package.
	Diablo Canyon	4LW	
Angel Bristol	LaSalle	BWR	Rad worker training, only RP ^{authority} have ^{can} remove shielding. Some times shielding has RP Briefs. Some times shielding has to not remove tags/postings to prevent uncovering an LHA.
Rodan Miller	Limerick	BWR	shielding is posted → WD's assigned to removal of shielding (only RP + iron workers)
Eileen Meyers	Palo Verde	CE	We have TSP placards and only qualified individuals can remove shielding.
Ryan Meagher	Point Beach	2LW	Instructions in RWP to not move shielding, as well as bright pink tagging on shielding to emphasize not moving shielding.
Darwin	Prairie Island	2LW	Rad worker training / RP Brief / RWP's
Darcy Hamilton	Quad Cities	BWR	shielding is only installed and removed by RP / RP Laborers.
Michael Smith	Seabrook	4LW	Training is part of the RP Fundamentals only RP can remove/install shielding.
John Hertz	Sequoyah	ICE	It's part of RP brief not to adjust shielding.
Eric Hood	STP	4LW	No specific measures. Workers know that only RP has that authority, it's in our GOTO's.

training and if happens Restricted from RCA

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HIGH INTEREST TOPIC QUESTIONNAIRE

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Topic: Radiation Shielding. In DCP's 2024 spring outage, a contractor directed personnel to remove shielding on the assumption that the shielding in place was not required. What steps does your station take to make sure workers understand that they must contact RP prior to shielding removal?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
MILK PREFER	Vogle	4LW	Outage briefing & individual Job briefings
	Watts Bar	ICE	
	Wolf Creek	4LW	

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Exposure Reporting Outage. What method and program does your station utilize for tracking and reporting outage exposure? How effective is it for your station? Can you share your report?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Daily outage report.
Scott Leach	Byron	4LW	Daily outage exposure report
	Calvert Cliffs	CE	Daily outage Report / Yes
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Daily exposure report. Published in shiftly OCC report. Will share report
	Diablo Canyon	4LW	
	LaSalle	BWR	
Robin Miller	Limerick	BWR	Daily outage Report - mostly automated
Robert Meyers	Palo Verde	CE	Daily Manual Input via excel ↳ Generating Automative w/ Power BI
Ryan Meagher	Point Beach	2LW	MS Access Database, Not Very Effective - Working on a new spreadsheet that you may like
Dave Martin	Prairie Island	2LW	Some report as noted. Runs at midnight.
Darcy Hamilton	Quad Cities	BWR	Outage exposure report. It works well and easy to read/understand.
Michael Smith	Seabrook	4LW	Automated system
John Hertz	Sequoyah	ICE	Excel. We are working on converting to Power BI
Eric Hood	STP	4LW	Somewhat automated. Moving towards new more automated system

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

Topic: Exposure Reporting Outage. What method and program does your station utilize for tracking and reporting outage exposure? How effective is it for your station? Can you share your report?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Mike Baker	Vogle	4LW	P6 DAILY REPORT OR HESDO Reports / Daily
	Watts Bar	ICE	
	Wolf Creek	4LW	

Return completed form to the Secretary prior to the end of the meeting so that it may be included in the meeting report.

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Exposure Reporting Online. DCPD utilizes an automated report for daily online exposure reporting. Does your station utilize a similar format? If not, could you please share your reporting?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Automated
Scott Leach	Byron	4LW	Automated Report
	Calvert Cliffs	CE	Half Automated half Manual (Excel)
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Not automated. HIS-2D report data manually entered into dose report
	Diablo Canyon	4LW	
	LaSalle	BWR	
Randy Weyer	Limerick	BWR	NO AUT REPORT NO AUT Report yet
Eileen Meyers	Palo Verde	CE	We are developing an automatic reporting program w/ SENTINEL 2.0 and IT through
Ryan Meagher	Point Beach	2LW	MS Access DB, some manual input required, I'd be happy to show you this + the Excel sheet ^{much} _{BI}
D. Mark	Prairie Island	2LW	SAP/PL/Sentinel.
Darcy Hamilton	Quad Cities	BWR	estimates must be input into program automated Report - APOD in BPM
Michael Smith	Seabrook	4LW	We use an automated daily report - information is gathered by Sentinel
John Hertz	Sequoyah	ICE	yes. Excel → Tableau report HIS20 → month to date per dept + less weekly/daily per dept numbers
Eric Hood	STP	4LW	Somewhat automatic. Moving towards a new more automated process

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

Topic: Exposure Reporting Online. DCPD utilizes an automated report for daily online exposure reporting. Does your station utilize a similar format? If not, could you please share your reporting?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
MILAN MARTINEZ	Vogle	4LW	# QUARTER DOSE INFO FROM NOW ON WE DO HAVE A DAILY DOSE PROJECTION
TJ Cook	Watts Bar	ICE	Failed Fuel Issues (Procedures)
	Wolf Creek	4LW	

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Vogtle cont. → sheet (DDPS) which is created from Pb and populated daily by RP techs which is shared with site
* Moving to Dose tracking By work order and pulling information from Power Bi.

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

Diablo Canyon POD Dose Report for Thursday, June 13, 2024

Work Week 202424 (Mon 06/10 through Sun 06/16)

Actual Dose as of Wed 06/12 23:59

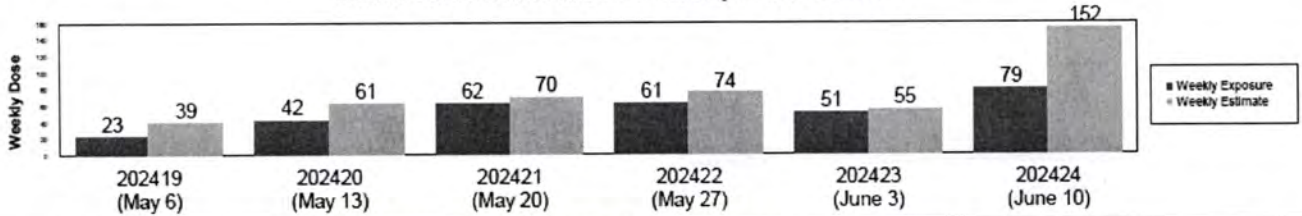
Order Work Ctr	Week to Date Actual	Total Week Est	Month to Date Actual	Month to Date Est	Month to Date Perf	Total Month Est	Year to Date Actual	Total Year Goal
E	12	16	29	29	100%	39	216	500
ME	18	35	18	33	55%	35	104	325
MI	0	3	4	7	57%	8	127	250
MM	17	19	17	17	100%	21	184	450
OC	3	12	8	15	53%	36	122	250
OP	10	16	29	28	104%	55	423	900
OR	16	31	26	38	68%	52	628	1,100
MC	0	8	0	8	0%	8	19	325
MS	2	0	2	0	0%	0	135	300
Other	1	12	3	14	21%	18	81	200
Reserve	0	0	0	0		0	0	1,000
	79	152	136	189		272	2,039	5,600

June Month to Date Dose Performance (MS not graded)

- Delta between Actual & Estimate < 10 mRem
- OR
- Actual / Estimate <= 100%
- Act. / Est. > 100% AND
- Act. Est. Delta >= 10 mRem
- OR
- Actual / Estimate > 120%
- Actual / Estimate > 120% AND
- Delta between Actual & Estimate >= 10 mRem

• "Other" includes Security, Fire, Safety, Training, etc.

Online Historical Unit 1&2 Total Exposure in mRem



Estimated Dose or Actual Dose >= 5 mRem on Wed 06/12

Order Work Ctr	Sched Start Sched End	Task Code	Task Name	Act Dose	Total Act Dose	Total Est Dose	Total Dose Perf	User Status
None								

Estimated Dose >= 5 mRem on Thu 06/13

Order Work Ctr	Sched Start Sched End	Task Code	Task Name	Total Act Dose	Total Est Dose	Total Dose Perf
None						

Total Dose Performance

- Delta between Actual & Estimate <= 5 mRem
- OR
- Recurring Actual / Estimate < 120%
- Non-Recurring Actual / Estimate < 150%
- Recurring Actual / Estimate >= 120%
- Non-Recurring Actual / Estimate >= 150%

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: TEDE ALARA Justification. How does your station perform TEDE ALARA Justifications? How many times do you perform them? Can you share your procedures?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	conduct work risk screening and complete TEDE as required.
Scott Leach	Byron	4LW	complete risk screening
Ray Lopez	Calvert Cliffs	CE	Risk Assessment of work drives TEDE
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Reach out if I can explain process Ryan.Brown1@vistriscorp.com
	Diablo Canyon	4LW	
	LaSalle	BWR	
Robin Miller	Limerick	BWR	Procedure driven → email me
Eilert Meyers	Palo Verde	CE	ALARA submits request: TEDE/ALARA Flowchart RP Engineering makes decision
Ryan Meagher	Point Beach	2LW	we have a spreadsheet that runs a calculation. I can share / explain it further
David Mark	Prairie Island	2LW	Procedure Email me.
Darcy Hamilton	Quad Cities	BWR	we screen every job using the procedure, and complete the TEDE Alara if warranted
	Seabrook	4LW	
John Hertz	Sequoyah	ICE	procedure form is tedious so we have spreadsheet form to auto-calculate. Used any time resp. needs consideration
Eric Hood	STP	4LW	We screen and perform a limited evaluation. Looking to improve the process

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

Topic: TEDE ALARA Justification. How does your station perform TEDE ALARA Justifications? How many times do you perform them? Can you share your procedures?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
MIKE BEUER	Vogle	4LW	Activities are risk assessed & TEDE ALARA performed as needed during performance of
	Watts Bar	ICE	
	Wolf Creek	4LW	

Always plan

Return completed form to the Secretary prior to the end of the meeting so that it may be included in the meeting report.

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: INSPECTIONS. HAS YOUR STATION PERFORMED 10-YR ISI, BAFFLE BOLT, OR BMI/CLEVIS BOLT CONNECTIONS? CAN YOU SHARE DOCUMENTS?

Name: FELIX MARTINEZ

Contact Info: FELIX.MARTINEZ@AGE.COM

Contact (Name)	Plant	NSSS	Comments
Jeff Chase	Braidwood	4LW	Not that I know of. Have done Core Barrel Inspections
Scott Levech	Byron	4LW	yes
Ray Lopez	Calvert Cliffs	CE	10 YR ISI No Baffle Bolts or Clevis, yet. write me.
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	10 Year ISI in 2022 - Can share documents
	Diablo Canyon	4LW	
	LaSalle	BWR	
Randy Weyer	Limerick	BWR	NA
EDUERT MEYERS	Palo Verde	CE	Not
Ryan Meagher	Point Beach	2LW	yes, Email me
Dave Mark	Prairie Island	2LW	Email me/Dave all of above
Darcy Hamilton	Quad Cities	BWR	not that I'm aware of.
Michael Smith	Seabrook	4LW	Not sure about Clevis Bolts or Baffle Bolts
John Hertz	Sequoyah	ICE	yes.
Jonah Morgan	STP	4LW	Core Barrel in 2018, no baffle clevis CORE BARREL INSPECTIONS
MIKE BEJER	Vogtle	4LW	YES. WILL LOOK FOR DOCS. NOT SURE WHAT ALL INSPECTIONS WERE DONE @ THAT TIME. WILL LOOK.

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

	Watts Bar	ICE	
<i>French</i>	Wolf Creek	4LW	<i>RF26</i>

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: ALARA Plans. Do your ALARA plans include special briefings about use of volatile compounds?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	No
Scott Leach	Byron	4LW	No
Ray Lopez	Calvert Cliffs	CE	No
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	No, occasionally found in our RWP's with DE on that
	Diablo Canyon	4LW	
Angie Bristol-Johnson	LaSalle	BWR	yes if we are using P.T. Process for NDE. we will include contain limits additional controls as appropriate
Robin Miller	Limerick	BWR	No
ERIC MEYERS	Palo Verde	CE	No
Ryan Meagher	Point Beach	2LW	No
Don Mark	Prairie Island	2LW	No
Darcy Hamilton	Quad Cities	BWR	no
Michael Smith	Seabrook	4LW	No
John Hertz	Sequoyah	ICE	No.
Eric Hood	STP	4LW	No

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Robotics. Do you utilize the Spot robot for routine plant activities such as ISFSI pad inspections?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coniglio	Braidwood	4LW	No
Scott Leach	Byron	4LW	No
Roy Lopez	Calvert Cliffs	CE	No
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	No
	Diablo Canyon	4LW	
Angie Bristol Johnson	LaSalle	BWR	no
Randy Weyer	Limerick	BWR	No but we need to work on it
EDWERT MEYERS	Palo Verde	CE	No
Ryan Meagher	Point Beach	2LW	NO, But will be working on Training to change that
Dave M... (unclear)	Prairie Island	2LW	Yes regen entry
Darcy Hamilton	Quad Cities	BWR	no
Michael Smith	Seabrook	4LW	No
John Hertz	Sequoyah	ICE	starting to.
Eric Hood	STP	4LW	No

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Exposure Reporting. Do your dose reports utilize color coding? Does your station take action based upon changes in that color coding? Is this effective for your station?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	yes / no
Scott Leach	Byron	4LW	yes / no
Roy Lopez	Calvert Cliffs	CE	yes especially the color Red
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	No
	Diablo Canyon	4LW	
Angie Bristol-Johnson	LaSalle	BWR	yes / no
Randy Meyer	Limerick	BWR	No
EVERETT MEYERS	Palo Verde	CE	No
Ryan Meagher	Point Beach	2LW	Kind of... we need to update the colors, station does not take action
Dave/Mart	Prairie Island	2LW	No / Just Action -> 10 min Reproduction
Darcy Hamilton	Quad Cities	BWR	The color coded report we have is only distributed to ops. no action based on color.
Michael Smith	Seabrook	4LW	No
John Hertz	Sequoyah	ICE	No. too visually confusing.
Eric Hood	STP	4LW	No

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Fuel Defects. Has your station experienced a fuel defect? What means of detection did you use with respect to RP processes or chemistry analyses?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	No
Scott Leach	Byron	4LW	No
	Calvert Cliffs	CE	No
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Need to talk with longer tenured ALARA staff, email me
	Diablo Canyon	4LW	
Angie Bristol	LaSalle	BWR	Yes chemistry tracks in POD
Robin Miller	Limerick	BWR	Yes - chemistry -> email me + I'll get you chem contacts
Ellent Meyers	Palo Verde	CE	Yes - Bowing of new Framatome Fuel Required use of shoe horn 2x long for Fuel Reload
Ryan Meagher	Point Beach	2LW	Yes - email me
Davis Martin	Prairie Island	2LW	Yes / Years ²⁵ ago. Chemistry detected.
Darcy Hamik	Quad Cities	BWR	NO
Michael Smith	Seabrook	4LW	No
John Hertz	Sequoyah	ICE	No
Eric Hood	STP	4LW	Yes - email or talk RCS samples

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Remote Briefings. Does your station perform remote briefings where a work group calls RP for a briefing in Microsoft Teams? If so, is this effective for your station?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Nope
Scott Leach	Byron	4LW	no
Scott Ryan Lopez	Calvert Cliffs	CE	No
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	NO
	Diablo Canyon	4LW	
Angie Bristol-Johnson	LaSalle	BWR	no
Robin Miller	Limerick	BWR	No
ERIC T MEYERS	Palo Verde	CE	Some RWP Briefs ↳ Not as effective as in person
Ryan Meagher	Point Beach	2LW	No
Dave M... (unclear)	Prairie Island	2LW	Yes/Yes.
Darcy Hamilton	Quad Cities	BWR	NO
Michael Smith	Seabrook	4LW	No, we do not use remote meetings for our briefs
John Hertz	Sequoyah	ICE	No.
Eric Hood	STP	4LW	No

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Work Scope Changes. What processes does your station have in place to report work scope changes to RP ALARA?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	0610 and 1300 we mtgs daily, work week mgr comms.
Scott Leach	Byron	4LW	See [↑] above
Roy Lopez	Calvert Cliffs	CE	If work in outside of the work order, workers log change in the WO
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	RP/ALARA @ work week meetings. Emergent Rose forms catch some changes
	Diablo Canyon	4LW	
	LaSalle	BWR	
Robin Miller	Limerick	BWR	They're supposed to inform us, rarely happens we're always the last to know
Ellen Meyers	Palo Verde	CE	Contact ALARA directly ↳ SCF Process via Work management
Ryan Meagher	Point Beach	2LW	We have a tech at all work week meetings, should communicate changes, but usually does not. - Usually found by accident when I'm reviewing work weeks. ... yes, there is a spreadsheet.
Dave Mat	Prairie Island	2LW	Work management ^{of litg outage} @ 200! ^{only}
Darcy Hamilton	Quad Cities	BWR	Work week manager is supposed to contact Alara. does not always happen.
Michael Smith	Seabrook	4LW	Attend work week meetings and review ww schedules
John Hertz	Sequoyah	ICE	HIT meetings. ALARA attends outage planning meetings. Personal engagement w/ groups
Eric Hood	STP	4LW	If scope change is prior to work start ALARA usually gets informed. Very rarely informed after work start.

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

Topic: Work Scope Changes. What processes does your station have in place to report work scope changes to RP ALARA?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Mike Bayar	Vogle	4LW	Dose Awareness Champion (DAC) members from each department track their own work. Conducted reports written to T-Process by Dose Champion
French ↓	Watts Bar	ICE	↓
	Wolf Creek	4LW	↓

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Electronic Dosimeter (ED) Setpoints. During a recent evaluation, DCPD was told that their setpoints are not reflective of the industry's approach to ED setpoints. What industry guidance does your station utilize to set electronic dosimeter setpoints. Can you provide or identify this industry guidance?

Name: **Felix Martinez**

Contact Info: (DCPP) **felix.martinez@pge.com**

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Per procedure and RP setpoint tool.
Scott Leach	Byron	4LW	RP Set Point tool
Ray Lopez	Calvert Cliffs	CE	We use a tool called ED setpoint tool that analysis historical Sentinel Data
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Review access records, "ALARA math" paired w/ ENPD & NRC feedback
	Diablo Canyon	4LW	
Angie Bristol	LaSalle	BWR	RP Setpoint tool
Robin Miller	Limerick	BWR	ED setpoint tool based from historical data from Sentinel tower database
Ethan Meyers	Palo Verde	CE	would like info We use historical data
Ryan Meagher	Point Beach	2LW	Email me
Dave Martin	Prairie Island	2LW	Proceduralized
Darcy Hamilton	Quad Cities	BWR	we have a set point tool ran using Sentinel, to determine the highest dose seen
Michael Smith	Seabrook	4LW	Recently compared TCD readings with SED readings and applied a 5% bias
John Hertz	Sequoyah	ICE	Historical data to identify max rate seen and % of entries > 50% of setpoints
Eric Hood	STP	4LW	Attempt to take a common sense approach and minimize the number of different set points was it INPD or NRC

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

Guideline
WANO GL 2004-01 (Rev-1)

Guidelines for radiological protection at nuclear power plants

March 2012
Limited Distribution



High Interest Topics

LaSalle - BWR



- 1. Has anyone been able to get an EC for external ultrasonic cleaning on class 1 piping approved?**

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: *Has anyone been able to get an EC for External Ultrasonic cleaning on class 1 piping approved?*

Name: *Angie Bristol Johnson* Contact Info: *angela.bristol@Constellation.com*

Contact (Name)	Plant	NSSS	Comments
<i>Joe Coughlin</i>	Braidwood	4LW	<i>Not attempted</i>
<i>Scott Lewis</i>	Byron	4LW	<i>Not attempted</i>
<i>Ray Lopez</i>	Calvert Cliffs	CE	<i>Not Yet</i>
	Clinton	BWR	
<i>Ryan Brown</i>	Davis-Besse	B&W	<i>Not attempted</i>
<i>Felix Martinez</i>	Diablo Canyon	4LW	<i>Not attempted</i>
	LaSalle	BWR	
<i>Randy Meyer</i>	Limerick	BWR	<i>Not attempted</i>
<i>EVERETT MEYERS</i>	Palo Verde	CE	<i>Name</i>
<i>Ryan Meagher</i>	Point Beach	2LW	<i>Not Attempted</i>
	Prairie Island	2LW	
<i>Darcy Hamilton</i>	Quad Cities	BWR	<i>no</i>
<i>Michael Smith</i>	Seabrook	4LW	<i>Not sure. I can find out</i>
<i>John Hertz</i>	Sequoyah	ICE	<i>not yet.</i>
<i>Erich Hood</i>	STP	4LW	<i>Not attempted</i>
<i>Mike Beyer</i>	Vogtle	4LW	<i>Not Attempted</i>

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

	Watts Bar	ICE	
<i>French</i>	Wolf Creek	4LW	<i>NOT YET Exploring = Dominion Eng. Process</i>

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High Interest Topics

Point Beach



- 1. HRA/LHRA brief sheets. Can I see an example of the HRA/LHRA briefing sheets/checklists you use at your site? Do you use the NISP?**
- 2. What kinds of encapsulants have you used in High Contamination Areas (Lower cavity for example)?**

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: HRA/LHRA Brief sheets - Can I see an Example of the HRA/LHRA Briefing sheets/checklists you use at your site? Do you use the NISP?

Name: Ryan Meagher

Contact Info: Ryan.Meagher@FPL.COM

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	use NISP example
Jake Burton	Byron	4LW	Nisp-RP-005
Ray Lopez	Calvert Cliffs	CE	I will send to you Yes.
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Yes - include me on email request & will send
Felix MARTINEZ	Diablo Canyon	4LW	Yes - I'll send you examples. We also incorporate NISPs in our procedures.
Angie Bristol	LaSalle	BWR	We use NISP
Randy Weyer	Limerick	BWR	We use the NISP
Eilert Meyers	Palo Verde	CE	We have a briefing checklist and Logbook Stamp. Email Me and I will send it to you
	Point Beach	2LW	
Dave Martin	Prairie Island	2LW	email me, we use NISP.
Darcy Hamilton	Quad Cities	BWR	We use NISP
Michael Smith	Seabrook	4LW	Yes, we use the NISP. Email me and I can send you copies.
John Hertz	Sequoyah	ICE	NISP ..
Eric Hood	STP	4LW	Brief Sheets - yes NISP - Mostly
MIKE BELER	Vogtle	4LW	WILL SEND YOU COPY.

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

TJ Cook	Watts Bar	ICE	we use NISP
	Wolf Creek	4LW	

Return completed form to the Secretary prior to the end of the meeting so that it may be included in the meeting report.

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: What kinds of encapsulants have you used in High Contamination areas (Lower Cavity for Example)

Name: Ryan Meagher

Contact Info: Ryan.Meagher@FPL.com

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	None
Jake Burton Roy Lopez	Byron	4LW	None
Roy Lopez	Calvert Cliffs	CE	None
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	None
Felix MARTINEZ	Diablo Canyon	4LW	None
Angie Bristol	LaSalle	BWR	We changed to different scrubbers and soaps. At this process, called
Randy Weyer	Limerick	BWR	Bertlett paint, it worked well but you need to dry the cavity. We do not do it anymore.
	Palo Verde	CE	
Robert Moters	Point Beach	2LW	None
Chris Math	Prairie Island	2LW	None We don't use.
Darcy Hamilton	Quad Cities	BWR	None
Michael Smith	Seabrook	4LW	None
John Hertz	Sequoyah	ICE	instacote in the past... now we just decon
Eric Hood	STP	4LW	None
Mike Baker	Vogtle	4LW	None

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

TJ Cook	Watts Bar	ICE	decon solution Aquamax gets us down to 50K need decon solution using upcoming outage R8
French	Wolf Creek	4LW	None

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High Interest Topics Sequoyah - ICE



- 1. Do you continuously monitor RCS filter dose rates? Have you run into issues with fire impairment?**
- 2. Do you have RCS cavity leakage? How do you mitigate? What are the sources?**

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Do you continuously monitor RCS filter dose rates? Have you run into issues with fire impairment?

Name: John Hertz

Contact Info: SQN jjhertz@trgov

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	No at times during outage, No issues
Scott Leach	Byron	4LW	Continuous during outage weekly on-line
Roy Lopez	Calvert Cliffs	CE	Rp Periodical Chemistry does continuously
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Weekly online
Felix Martinez	Diablo Canyon	4LW	Yes, we continuously monitor. Fire impairment has never come up.
	LaSalle	BWR	
	Limerick	BWR	N/A
ESUERS METERS	Palo Verde	CE	We use old DMC 2000's configured as ARMS changeout every 6 months; No Fire Impairment
Ryan Meagher	Point Beach	2LW	ARM's with Telemetry, unsure of Fire Impairment implications
	Prairie Island	2LW	
Darcy Hamilton	Quad Cities	BWR	N/A
Michael Smith	Seabrook	4LW	We monitor but have not run into issues
John Hertz	Sequoyah	ICE	Used to keep ARM's RDS-31s ^{monitoring} area . Eng said it's a fire impairment issue.
Eric Hood	STP	4LW	ARM's in area. No fire impairment issues
Mike Bayer	Vogtle	4LW	Weekly, dp is monitored by ops shift. -

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

T Cook	Watts Bar	ICE	Yes that we fill out Fire impairment permits
French	Wolf Creek	4LW	Yes. No Fire I. Issues

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Do you have R_x Cavity Leakage? How do you mitigate? What are the sources?

Name: JOHN HERTZ

Contact Info: jjhertz@tra.gov

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Not usually. Have had sand/diox cover gasket leak before
Some Scott Leach	Byron	4LW	Sometimes, usually boot seal
Roy Lopez	Calvert Cliffs	CE	We are still in the discovery phase
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	NO
Felix MARTINEZ	Diablo Canyon	4LW	WE HAVE A PERMANENT CAVITY SEAL ON UNIT 1 & TEMP CAV SEAL ON UNIT 2.
	LaSalle	BWR	
Randy Weyer	Limerick	BWR	NO
EVERETT MEYERS	Palo Verde	CE	None that I know of
Ryan Meagher	Point Beach	2LW	I don't believe so
	Prairie Island	2LW	
Darcy Hamilton	Quad Cities	BWR	NO
Michael Smith	Seabrook	4LW	UN AWARE OF ANY LEAKAGE
John Hertz	Sequoyah	ICE	
Eric Hood	STP	4LW	None
Mike Boyer	Vogtle	4LW	NO

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HIGH INTEREST TOPIC QUESTIONNAIRE

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	Watts Bar	ICE	
<i>French</i>	Wolf Creek	4LW	<i>NO</i>

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Have you replaced Thimble Tubes in the last 5 years?

Name: JOHN HERTZ

Contact Info: jjhertz@tva.gov

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	No
Yes Scott Leach	Byron	4LW	Yes
	Calvert Cliffs	CE	
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	No
Felix Martinez	Diablo Canyon	4LW	No, BUT I RETAIN THE DOCUMENTATION ON LAST JOB. ALSO, WE'RE REPLACING ALL THIMBLE TUBE NEXT 2 OUTAGES
	LaSalle	BWR	
Randy Weyer	Limerick	BWR	No
ERBERT MEYERS	Palo Verde	CE	No
Ryan Meagher	Point Beach	2LW	No
	Prairie Island	2LW	
Darryl Hamrick	Quad Cities	BWR	no
Michael Smith	Seabrook	4LW	No
	Sequoyah	ICE	
Eric Hood / Sarah Morgan	STP	4LW	No / call Sarah
Mulle Bejar	Vogtle	4LW	No

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

	Watts Bar	ICE	
<i>French</i>	Wolf Creek	4LW	<i>Greater Than 5yrs</i>

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High Interest Topics

South Texas Project - 4LW



1. PWR RCB at power entries a year, month, and week?

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: PWR RCB at Power Entries a year, month, week

Name: Jonch Morgan Contact Info: jbmorgan@stpegs.com

Contact (Name)	Plant	NSSS	Comments
Joe Coughlin	Braidwood	4LW	Average 1/month per unit
Scott Leach	Byron	4LW	About Four at power entries per unit per year
Ray Logan	Calvert Cliffs	CE	2 Power Entries / unit / Year all are schedule
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Previously had quarterly entries. Now there are no planned entries online (until emergent issues arise)
FELIX MARTINEZ	Diablo Canyon	4LW	All SCHEDULED. WEEKLY ENTRIES. LONGER ENTRIES ONCE/MONTH SCHEDULED
Angie Bristol	LaSalle	BWR	1x mo during down power to headstay to assess valves
	Limerick	BWR	N/A
Eibert Meyers	Palo Verde	CE	only as needed; Post outage lubrication scheduled twice a year
Ryan Meagher	Point Beach	2LW	Once per month, per unit at a minimum
Dave Mark	Prairie Island	2LW	See Email
	Quad Cities	BWR	
Michael Sirt	Seabrook	4LW	Once a month
John Hertz jjhertz@tva.gov	Sequoyah	ICE	1-2 per week (not inside biowall)
	STP	4LW	1-2 per week
McKE BEYE	Vogtle	4LW	4x scheduled per unit. Numerous other emergent activities happen such as leakage walkdown.

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

AA			
TJ Cook	Watts Bar	ICE	1-2 per week
	Wolf Creek	4LW	
FELIX MAGNINER	DCPP	4LW	ENTRIES MAY OCCUR FOR EMERGENCY ISSUES & MAINTENANCE

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High Interest Topics

Vogtle 1&2 - 4LW



1. **HRA briefings. NISP no longer requires documentation of them. Do you document?**
2. **Self-briefing RWPs. Do you use them? What sort of challenges, if any, and you encountered with their use, if used? Most of our unanticipated dose rate alarms have been from people using self-briefing RWPs.**

HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: HRA AREA BRIEFINGS, NISP NO LONGER REQUIRES DOCUMENTATION OF THEM. DO YOU DOCUMENT?

Name: MIKE BEUER

Contact Info: Vogtle 1&2 mpbeyer@southern.com
706-848-1523

Contact (Name)	Plant	NSSS	Comments
Jeff Chase	Braidwood	4LW	Yes
Scott Leach	Byron	4LW	Yes
Roy Lopez	Calvert Cliffs	CE	Yes
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Mixed. Most techs use as a template, then discard at end of shift
Felix MARTINEZ	Diablo Canyon	4LW	No, BUT WE USE BRIEFING GUIDELINES
Arge Bristol	LaSalle	BWR	use brief form as a template typically. Sometimes its laminated and erasable
Randy Weyer	Limerick	BWR	NO - use as a template to brief from
Elliott Meyers	Palo Verde	CE	Yes
Ryan Meagher	Point Beach	2LW	Yes
	Prairie Island	2LW	
Darry Hammit	Quad Cities	BWR	Yes
Michael Smit	Seabrook	4LW	Yes
John Hertz	Sequoyah	ICE	no. but we still have a briefing checklist to use.
Eric Hood	STP	4LW	Use a checklist. Typically documented but not required. Add individuals into Sante
	Vogtle	4LW	

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

	Watts Bar	ICE	
French	Wolf Creek	4LW	mostly captured at Shift Tech Access control - Not always well doc,

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE



Topic: Self-Briefing RWP's.

- Do you use them?

What sort of challenges, if any, have you encountered with their use, if used.

Most of our unanticipated dose rate alarms have been from people using self-briefing RWP's.

Name: Michael Beyer

Contact Info:

mfbeye@southernco.com

Work: 706-848-1523

Cell: 803-571-3777

Contact (Name)	Plant	NSSS	Comments
Jeff Chase yes	Braidwood	4LW	No issues. Areas clearly defined
Scott Leach	Byron	4LW	Self brief areas are clearly defined. No self brief in containment
Ray Lopez	Calvert Cliffs	CE	Parameters for use of self brief + self brief Rups are clearly defined at SCOs
	Clinton	BWR	
Ryan Brown	Davis-Besse	B&W	Yes for online - self brief task on most generic RWP's. No for CTMT during outages
Celix Martinez	Diablo Canyon	4LW	WE USE SELF BRIEF RWPs. RESTRICTED TO SECURITY & NON-CTMT ENTRIES, VIA EMAIL WILL RESPOND
Angie Bristol	LaSalle	BWR	YES we use them Lack of understanding of when it's appropriate
Robin Miller	Limerick	BWR	Yes we use them - no HRB access GA only
Ellen Meyers	Palo Verde	CE	They are active but are not used to its full capability - Challenge work groups wage
Ryan Meagher	Point Beach	2LW	yes, GA only
Don Mark	Prairie Island	2LW	No self briefs / Reverse briefs online Rups only - general areas only
Darcy Hamilton	Quad Cities	BWR	
Michael Smith	Seabrook	4LW	Yes, online for routine work, work groups are asked to still stop by control point with questions

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HIGH INTEREST TOPIC QUESTIONNAIRE

2024 Summer RP-ALARA CONFERENCE

John Hertz	Sequoyah	ICE	Yes. Most workers don't use because they want RP brief. Any rooms w/ high dose rates do not allow self-brief.
Sandra Morgan	STP	4LW	Yes, we allow Self Briefs but not used often. 1 Dose Rate Mammogram 2024
	Vogle	4LW	
TJ. Cook	Watts Bar	ICE	not during outages
French	Wolf Creek	4LW	Just discontinued them

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RP ALARA Conference Breakout Sessions



- 1. ICE, B&W, Framatome**
- 2. Westinghouse 2L**
- 3. Westinghouse 4L, Group A**
- 4. Westinghouse 4L, Group B**
- 5. BWRs**

Breakout Sessions
ICE, B&W, Framatome



Group – Ice, B&W, Framatome
Successes – What has gone right

Facilitator: John Hertz



Davis-Besse
Ryan Brown

- First success – best ever outage dose 35.2 REM
- Second success – expansion of semi-permanent scaffolds

Watts Bar
TJ Cook

- First success – 3 H3D gamma cameras for outage analysis of crud burst. Allowed early release of crud burst affected areas.
- Second success – 4.0 critiques on all High Risk and infrequently performed (IPTE) jobs.

Framatome
David Howard

- First success – Cavitation peening equipment improved shielding and flushing.
 - Second success – development of robot for SG ECT and plugging requires no robot changes in the most recent outage.
-

Group – Ice, B&W, Framatome
Successes – What has gone right

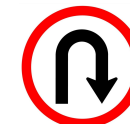
Facilitator: John Hertz



Sequoyah
John Hertz

- First success – Recovery of legacy rad waste areas (decontaminated, consolidated and shipped filters and other legacy waste).
 - Second success – Self-contained tensioners saved 1 REM on U2 outage, 2 REM on U1 outage
-

Group – Ice, B&W, Framatome Facilitator: John Hertz
Challenges – What has gone wrong



Davis-Besse
Ryan Brown

- First challenge – security dose estimate/reporting. SRD/DLR discrepancy due to reduced frequency of DLR reads.
- Second challenge – company acquisition creating confusion regarding program ownership

Watts Bar
TJ Cook

- First challenge – work group dose ownership
- Second challenge – new RP techs (75% < 5 years experience)

Framatome
David Howard

- First challenge- finding qualified people
 - Second challenge- development of robot for some of the heavier repair processes
-

Group – Ice, B&W, Framatome Facilitator: John Hertz
Challenges – What has gone wrong



Sequoyah
John Hertz

- First challenge – Maintenance Services ALARA planning engagement

 - Second challenge – SG Rad Worker practices: locked 23 workers out of RCA due to willful disregard
-

Golden Nuggets:

- **Davis Besse** – backup contract with INS (Mexican Techs) prior to outage even though they didn't think they needed it... they needed it.
- **Watts Bar** – assign outage control points to RP techs 8 months prior to outage
- **Framatome** – clean/dirty bins for headsets needing survey/decon

Group – Ice, B&W, Framatome Facilitator: John Hertz
Challenges – What has gone wrong



- **Sequoyah** – Power App to show room postings/access status.

Breakout Sessions
Westing House 2L



Group – 2 Loops Facilitator: Dave Martin
Successes – What has gone right



Calvert Cliffs ➤ First success – Reduced time RCP from 24 to 8 hours.
Roy Lopez,
Norberto
Mendez ➤ Second success – ALARA advocate program dose ownership is better. But took involvement of SLT.

Point Beach ➤ First success – Eight months of asking automating
Ryan Meagher workorder to RWP in progress

➤ Second success – SLT paying for RPALARA group.

Palo Verde ➤ First success – RCP impeller 4.0 performance 110%
Eilert Meyers estimate

➤ Second success – RCP motor oil level inside bio. Job went well.

Prairie Island ➤ First success – 150 Day outage two unit shut down no
Dave Martin NRC more than one minor Rad violations

➤ Second success – ALARA trinkets a must with a estimated 63 day outage.

Group – 2 Loops **Facilitator: Dave Martin**
Challenges – What has gone wrong



Calvert Cliffs
Roy Lopez,
Norberto Mendez

- First challenge – Contaminated hic needs deconned before shipment.
- Second challenge – No Radwaste group controlled by RP. Hard getting money for shipping.

Point Beach
Ryan Meagher

- First challenge – Had to cancel barrel shipment due plant support.
- Second challenge – No consistent RP supervision, plant supervision are not consistent either.

Palo Verde
Eilert Meyers

- First challenge- Level 2 PCE's
- Second challenge- House staffing and experience is low.

Prairie Island
Dave Martin

- First challenge – Radworker behaviors new nuclear.

Group – 2 Loops Facilitator: Dave Martin
Challenges – What has gone wrong



-
- **Second challenge – Hiring house RP's with good work ethic**
-

Golden Nuggets:

- **Calvert Cliffs – RP Challenger: someone not involved with job challenges workers at end of brief on what they understood from the brief (stay times, dose rates, set points, controls, etc)**
- **Point Beach – SLT paid for UDEMY 1000's hours of training for \$250 Year.**
- **Palo Verde – AWM Mirion technology for dose rates and monitoring dose.**
- **Prairie Island – Money for upgrading RP equipment. NRC recommended.**

Breakout Sessions
Westinghouse 4L Group A



Group – 4 Loops (A) Facilitator: Scott Leach
Successes – What has gone right



Vogtle
Michael Beyer

- First success – RP Supervisors involved in outage schedule reviews prior to the start of the outage.
- Second success – second set of safety valves purchased so they can be replaced without waiting for the testing/rebuilds.

Wolf Creek
Bob French

- First success – Used more senior supplemental techs than junior techs during outage. Opposite of normal staffing.
- Second success – engagement of leadership team for steam generator planning.

STP
Eric Hood

- First success – Planned ahead for Westinghouse to not be able fully staff supplemental techs. Had three different companies supporting.
 - Second success – Prepared for failed fuel ahead of the outage. Reduced WBC's and no level 2 or 3 contamination. Good use of lessons learned.
-

Group – 4 Loops (A) Facilitator: Scott Leach
Successes – What has gone right



Byron
Scott Leach
Jacob Burton

- First success – Fully staffed experienced team. Everyone works well together.
- Second success – DCS campaign completed five containers for 312 mrem. There were no Radworker issues and no PCE's.

Group – 4 Loops (A) Facilitator: Scott Leach
Challenges – What has gone wrong



Vogtle
Michael Beyer

- First challenge – Supporting the initial entry during shutdown. Controlling number of people going into containment.
- Second challenge – Lead tech position and difficulties with the union.

Wolf Creek
Bob French

- First challenge – Changed work control process seven months prior to outage.
- Second challenge – Difficult to get computer access for incoming supplemental support.

STP
Eric Hood

- First challenge- Work management process at the station. Use a lot of emergent dose.

Byron
Scott Leach

- Second challenge- Radworker performance declining
 - First challenge – Hard to staff laborers during outage.
-

Group – 4 Loops (A) Facilitator: Scott Leach
Challenges – What has gone wrong



Jacob Burton

- **Second challenge – Budget constraints and Business Ops challenges.**
-

Golden Nuggets:

- **Vogle – Color coded dose markers for work on top of cask during DCS.**
- **Wolf Creek – Junior RPT program – sponsor initial training of junior class.**
- **STP – Utilize more junior supplemental technicians and provide opportunities for them to learn.**
- **Byron – Lead tech program to support supervisors during outages.**

Breakout Sessions
Westing House 4L Group B



Group – 4 Loops (B) Facilitator: Joe Coughlin
Successes – What has gone right



**Constellation
Corp
Kevin Crymes**

- First success – Outage management estimating tool being utilized for task risk evaluations and outage estimating/planning
- Second success – Dose report refinement during outages with revision of daily dose estimates based on work performed and comparing work completed to estimates to understand variances

**Seabrook
Michael Smith,
Robert York**

- First success – New SVP was a previous RPM. Champions dose reductions initiatives. Challenged work groups on annual dose reduction plans and associated/specific actions
 - Second success – Ownership OPs has taken with training of new Operators and dose aspects of the field activities
-

Group – 4 Loops (B) Facilitator: Joe Coughlin
Successes – What has gone right



Diablo Canyon
Felix Martinez

- First success – Embracing new technology. Virtual tour 360 being utilized and workers are finding benefits. Laser scan RCA being utilized by engineering and planning. Now moving forward with 3D printing for shielding applications
- Second success – P6 monitoring of schedule and data analysis of work activities to refine daily outage estimates

Braidwood
Joe Coughlin,
Jeffrey Chase

- First success – Cameras are named/configured specific to network and are recognized as soon as deployed
 - Second success – Radworker quiz given prior to DLR issuance to raise awareness to RP fundamentals. INPO strength
-
-
-
-

Group – 4 Loops (B) Facilitator: Joe Coughlin
Challenges – What has gone wrong



-
- Constellation Corp*** ➤ First challenge – Fleet ALARA knowledge. Conducting an ALARA Analyst training session this summer to help fill the knowledge void
- Kevin Crymes**
- Second challenge – Sometimes a lack of engagement in SAC meetings. More often an RP meeting versus overall challenge and understanding impacts of performing dose reduction initiatives

-
- Seabrook*** ➤ First challenge – Last outage in the radioactive material storage building found hot particles outside of posted area. Challenges with Outage Coordinator and movement of equipment
- Michael Smith,**
- Robert York**
- Second challenge – Centralized training getting generic and not specific to plant needs/details

-
- Diablo Canyon*** ➤ First challenge- During outage performing pipe replacement outside worker became contaminated due to being on work platform versus outside of work area
- Felix Martinez**
-

Group – 4 Loops (B) Facilitator: Joe Coughlin
Challenges – What has gone wrong



-
- Second challenge- Mechanics removed lead shielding from work area without RP knowledge accumulating more dose during work activity.

Braidwood
Joe Coughlin,
Jeffrey Chase

- First challenge – HRA event during spring outage due to not briefing ISI workers to current radiological conditions
- Second challenge – Scaffold built around Rx Head while on stand for inspections. Looking for modular system to hang via bolt holes for inspection access

Golden Nuggets:

- **Constellation Corp – Utilize questions on Sentinel during digi login to challenge radworker knowledge/awareness**

Group – 4 Loops (B) Facilitator: Joe Coughlin
Challenges – What has gone wrong



- **Seabrook – 55 inch TV staged at login stations with power point looped with RP fundamentals and radworker practices**
- **Diablo Canyon – Workgroups ownership of dose and comparison of previous history to validate estimates**
- **Braidwood – Off network camera system to be used for quick setups and deployments; freezes, fire watch, valve tasks, etc**

Breakout Sessions
BWRs



Group – BWRs Facilitator: Jonah Morgan
Successes – What has gone right.



LaSalle
AJ Bristol-
Johnson

- First success – Dose estimates, tribal knowledge, better surveys, high risk radiological, working with RP techs on survey templates, Alpha/Beta Surveys, risk evaluations in ALARA plans. Survey Templates to have reproduceable records for planning and ALARA plans and NRC information. It sets expectations and standards. Provides Proof of results, ultra-sonic decontamination.

 - Second success – Having TEDE templates to apply to multiple RWP to improve efficiencies and reduce multiple revisions. Having RWPs structured to handle Moisture Carryover, remove temp revs to eliminate error traps.

 - Bundling LHRA entries to reduce RP Burdens.
-

Group – BWRs Facilitator: Jonah Morgan
Successes – What has gone right.



Quad Cities
Darcy Hamilton

- First success – Lowering Hydrogen Addition when going into Steam Affected Area, coordinating with Ops and Chemistry to lower dose rates and overall dose.
- Second success – Last Outage ISI Points, Core Spray Lines are high dose, had plans to flush but didn't have the correct equipment. Worked with Engineering to defer inspection on the these lines to next outage to prove that they didn't have to be done, 4 rem just for the shielding.

Limerick
Robin Miller
Randy Weyer

- First success – Cavity Decon, down to 4 hours, Diakont Robot for Cavity Cleaning (\$230k), reactor services put them in schedule. RP funded
 - Second success – 17C valve, LIPSI Line 39 Rem/hr, 22 Rem/Hr hotspots, Bump the pump to remove hotspots, 30 rem to do the job, with shielding was 20 Rem, B RWCU down to 20-50 mrem/hr, job was a overall completed for less than 1 Rem.
-

Group – BWRs Facilitator: Jonah Morgan
Successes – What has gone right.



STP

Jonah Morgan

- First success – Multiple Vendors for Backup Contracts on RP techs, INS techs were excellent.
 - Second success – Use of Junior RP techs to support Critical Path Work in 2RE23
-

Group – BWRs **Facilitator: Jonah Morgan**
Challenges – What has gone wrong.



LaSalle
AJ Bristol-
Johnson

- First challenge – Moisture Carry Over due to different fuel design and core design. Unit 1 13 Rem additional dose, 60 curies in Unit 2 Nuclear Fuel Design, only care about core design, adding new bundles

- Second challenge – Bringing ALARA plans and estimates 4-6 months before and outage. Outage freeze does not apply, and work is added up until 2 weeks prior to outage, can sway dose estimates 10-15 rem

Quad Cities
Darcy Hamilton

- First challenge – Issues with Radwaste, LHRA, tanks reading 20 -30 REM with resin on the floor, 25 Rem dose estimate to clean, seal floors to contain Tritium from leaking into ground water.

 - Second challenge – Department engagement is tough do save dose, dose advocates don't show up, ALARA department runs the entire meeting with no involvement.
-

Group – BWRs **Facilitator: Jonah Morgan**
Challenges – What has gone wrong.



Limerick
Robin Miller
Randy Weyer

- First challenge- GNF3 Fuel, Higher burn, dryer not designed for Higher Burn. Mrad in Condenser, moister carrier over increased, dose goals and performance.
- Second challenge- New Filters on demins, was 200 mrem for a job, but now over a Rem for the job, which leads to poor chemistry, which leads to more dose

STP
Jonah Morgan

- First challenge – Work order compliance, using wrong Work orders which is a challenge for dose tracking, Refuel dose planned for 13 Rem, picked up 19 Rem but RCB coordinators and O-ring project picked up 3-4 rem.
 - Second challenge –
-

Group – BWRs Facilitator: Jonah Morgan
Challenges – What has gone wrong.



Golden Nuggets:

- **LaSalle** – Challenging Engineering and organizations to save over 100 Rem of dose. Building Relationships to allow that work to be deferred work and get things done that need to get done when it needs to be done.
- **Quad Cities** – Mid Month SAC to get more involvement from Craft to get emergent dose and large dose jobs to get approved.
- **Limerick**- Flexible hours for seasoned worker to keep that knowledge in house, until knowledge transfer is complete. Ask Bruno!!
- **STP** – Not being a Boiler. Having a OneNote to capture a central location for teaching a learning website to capture videos, pictures, walkdowns to reinforce standards and knowledge transfer.

RP ALARA Conference Presentations



- 1. RP Resource Allocation**
- 2. Clevis Bolt Replacement Project**
- 3. ISI 10YR RV Inspection**

RP ALARA Conference
RP Resource Allocation





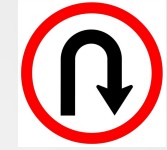
Radiation Protection

Resource Allocation



Q.*Supply constraints of Radiation Protection Technicians

- A. - Alignment of work within the radiologically controlled area with supporting Radiation Protection Technicians.
- B. -Risk based decision making.



Use the work controls process to help !!!

- Wolf Creek uses P6 as the scheduling tool.
- P6 has user defined fields.
 - Two of these fields are assigned to identify risk: Dose Goal and RWP.
- Planners resource work orders based upon Building-Location-Area (BLA).
 - ALL locations in the RCA are assigned an RP resource.
 - IF the planner perceives more are needed, they will assign multiple RP role ids.
- ALARA team evaluates the work and craft, assigns RWPs, and assigns (projected) dose goals.
 - *(Dose goals are projections NOT dose ESTIMATES)*

Define Resources within Work controls



Our Role ID in P6 is “RP” RP-General to be specific.

The RP resource structure is further defined as:

RP	RP - General
RPALARA	RP - ALARA
RPBOP	RP - BAL OF PLANT
RPCMT	RP - CONTAINMENT
RPCV	RP - CAVITY FOCUS
RPDEC	RP - DECON
RPSG	RP - S/G FOCUS
RPSUPV	RP - SUPERVISOR

RP Industry Task Force



To set up Resource allocation I have the targeted Project open as well as the activities selected. For me it looks like this:

Outage	Outage Projects	Active
Outage Working	Working Projects for Outage	Active
R26 NEW	R26 OUTAGE - NEW ACTIVITIES SIM	Active
R26 OUTAGE	R26 OUTAGE	Active
Outage Staging	Outage Staging Project	Active
Archived Outage Activities	Archived Tasks - not for scheduling	Active

P6 Primavera P6 Professional 19 : R26 NEW, R26 OUTAGE (R26 OUTAGE - NEW ACTIVITIES SIM, R26 OUTAGE)

Online Staging	Online Staging Project
Archive for Old Weeks	Archive Project
POD	T-1 through T-0
Online Published Projects	Published Projects for Online
Online Published Archive	Online Published Projects Archive
Online Templates	Template Projects for Online
Online Archive	Archived Projects for Online
Online TSEO Templates	New EPS
Outage	Outage Projects
Outage Working	Working Projects for Outage
R26 NEW	R26 OUTAGE - NEW ACTIVITIES SIM
R26 OUTAGE	R26 OUTAGE
Outage Staging	Outage Staging Project
Archived Outage Activities	Archived Tasks - not for scheduling

First phase set up:



I ensure the columns I want are aligned, for me that is Dose Goal, RWP, Activity name, Role IDs and BLA. My overall set up looks like this:

The screenshot shows the Primavera P6 Professional 19 interface. The title bar reads "Primavera P6 Professional 19 : R26 NEW, R26 OUTAGE (R26 OUTAGE - NEW ACTIVITIES SIM, R26 OUTAGE)". The menu bar includes "File", "Edit", "View", "Project", "Enterprise", "Tools", and "Help". The toolbar contains various icons, with a calendar icon circled in blue. The main window displays a table of activities under the "Activities" tab. The table has columns for "Activity ID", "Acco", "Dose_Goal", "RWP", "Activity Name", "Role IDs", and "BLA". A filter "Filter All: RP" is applied to the "Activity Name" column. Arrows point to the "Dose_Goal", "RWP", "Activity Name", "Role IDs", and "BLA" columns. The table contains three rows of activity data.

Activity ID	Acco	Dose_Goal	RWP	Activity Name	Role IDs	BLA
485747000-001	O&M		240006	1.1 PERFORM STS MT-008/TT-05 FOR ABV0059.	MMEC, MMEC, QC, RP	1508 MAIN STEAM ISOLATION VALVE RI
485384000-001	O&M		240006	PERFORM STS MT-008/TT-05 FOR ABV0045.	MMEC, MMEC, RP, RP, RP, QC, ANI	1508 MAIN STEAM ISOLATION VALVE RI
485745000-001	O&M		240006	PERFORM STS MT-008/TT-05 FOR ABV0046.	MMEC, MMEC, QC, RP, RP, RP, ANI	1508 MAIN STEAM ISOLATION VALVE RI

First phase



- The goal is to align the proper resource and level.
 - Filter on “RP” to generate the report.
- The highlighted activity is for removing a portion of RCA fencing.
 - RWP is general
 - Minimal dose
 - 1 RP technician is assigned in the role ID
- I assign RPBOP and remove the RP-General role.

Role IDs	BLA
CHM, OPS, OPSCR, CMT, RPSUPV	
PIRO, PIRO, PIRO, RP, SEC, PEQU	
ANI, ENG, ENG, RP	//

Role ID	Role Name
RP	RP - General
RPALARA	RP - ALARA
RPBOP	RP - BAL OF PLANT
RPCMT	RP - CONTAINMENT
RPCV	RP - CAVITY FOCUS
RPDEC	RP - DECON
RPSG	RP - S/G FOCUS
RPSUPV	RP - SUPERVISOR

Role IDs	BLA
CHM, OPS, OPSCR, CMT, RPSUPV	
PIRO, PIRO, PIRO, SEC, PEQU, RPBOP	

Save the work and the resource is now assigned to RPBOP.

This lets me know this step is done. The next phase will further align the resource.

First phase cont.



- We now see a report filtered on RPBOP
 - The same activity is highlighted as before with the Details listed and Resources tab selected (in the details field).

Activity ID	Acco	Dose_Goal	RWP	Activity Name	Role IDs	BLA
483879002-001	D&M		240017	Remove the removable sections of chain link security fence between the Condensate Storage Tank and t	PIRO, PIRO, PIRO, SEC, PEQU, RPBOP	
40001004-001	D&M		241100	CONTINGENT - PERFORM POST UBT (4) - (4) CONTAINMENT DIBCE EVALUATE INSIDE and OUTSIDE	ENC, ENC, DROPP	1507

Status	Predecessors	Successors	Codes	Relationships	Steps	Summary	WPs & Docs	Notebook	Discussion	Expenses	Feedback	General	Resources
						Activity 483879002-001							Remove the removable sections of chain link security fence between the Condensate Storage Tank and t
Resource ID Name	MPAC_Linked	Role	Primary Resource	ing Units / Time	Original Lag	Start	Finish	Budgeted Units	Actual Regular Units	Remaining Units			
	Y	Projects - IRONWORKER	<input type="checkbox"/>	1.0h/h	0.0h	25-Mar-24 10	25-Mar-24 12	2.0h	0.0h	2.0h			
	Y	Projects - IRONWORKER	<input type="checkbox"/>	1.0h/h	0.0h	25-Mar-24 10	25-Mar-24 12	2.0h	0.0h	2.0h			
	Y	Projects - IRONWORKER	<input type="checkbox"/>	1.0h/h	0.0h	25-Mar-24 10	25-Mar-24 12	2.0h	0.0h	2.0h			
	Y	SECURITY	<input type="checkbox"/>	1.0h/h	0.0h	25-Mar-24 10	25-Mar-24 12	2.0h	0.0h	2.0h			
		Projects - EQUIP OPERATOR	<input type="checkbox"/>	1.0h/h	0.0h	25-Mar-24 10	25-Mar-24 12	2.0h	0.0h	2.0h			
		RP - BAL OF PLANT	<input type="checkbox"/>	1.0h/h	0.0h	25-Mar-24 10	25-Mar-24 12	2.0h	0.0h	2.0h			

This activity shows the resources assigned to support this work.

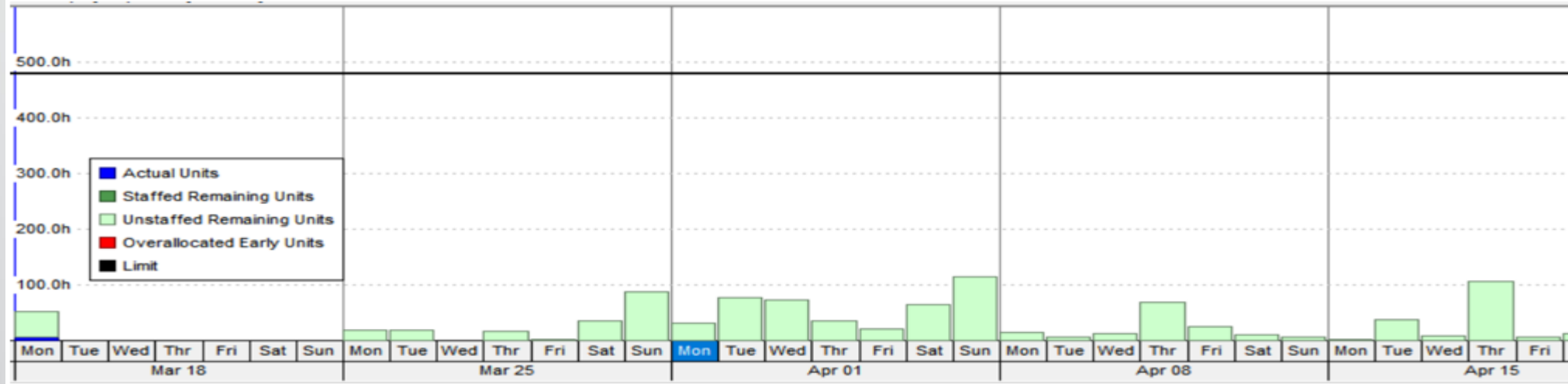
- The duration for this work is 2 hours.
- Each resource is listed at 1.0/h = 100% of the time for the resource.
 - This means that each role (resource) is allocated 100% time per unit.
 - 12 man-hours are required for the 2-hour job.
 - This activity is a low-risk activity. However, it is a Radiological Controlled Area boundary breach.
 - ✓ The RP technician must control the area and work then restore postings when work is complete.
 - ✓ I will not alter the RP technicians time, based upon the posting and control Risks.
- Roles such as Decon can be added and the timeline adjusted so 25% of the total time is applied to this role.
 - This allows for set up or tear down of an area or additional Decon presence.

Why all the work focused on this level?

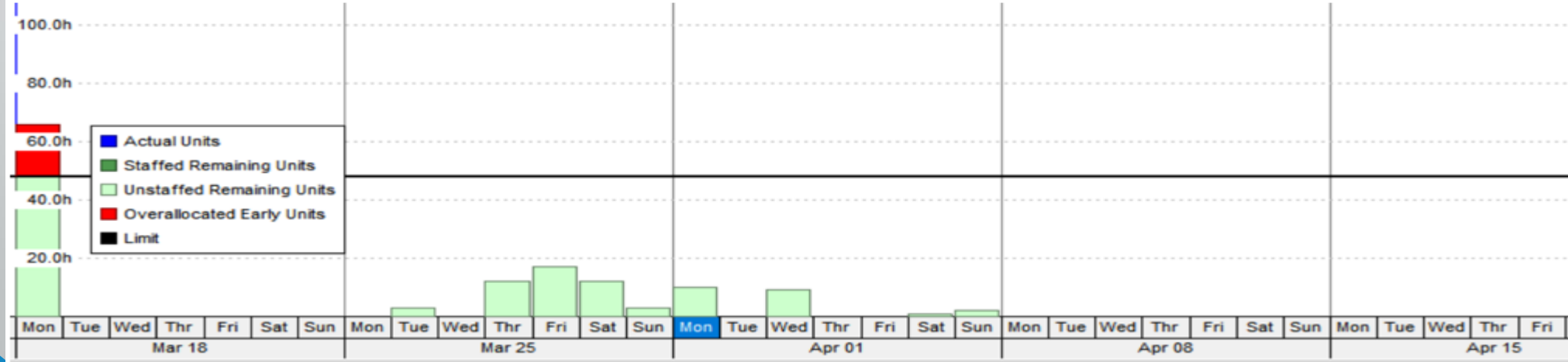
Here are some of the downstream effects.



RP 1124 hrs.



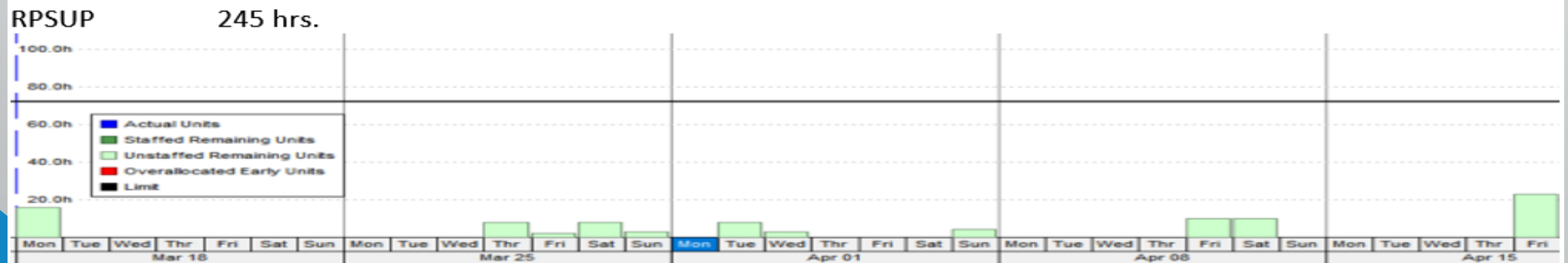
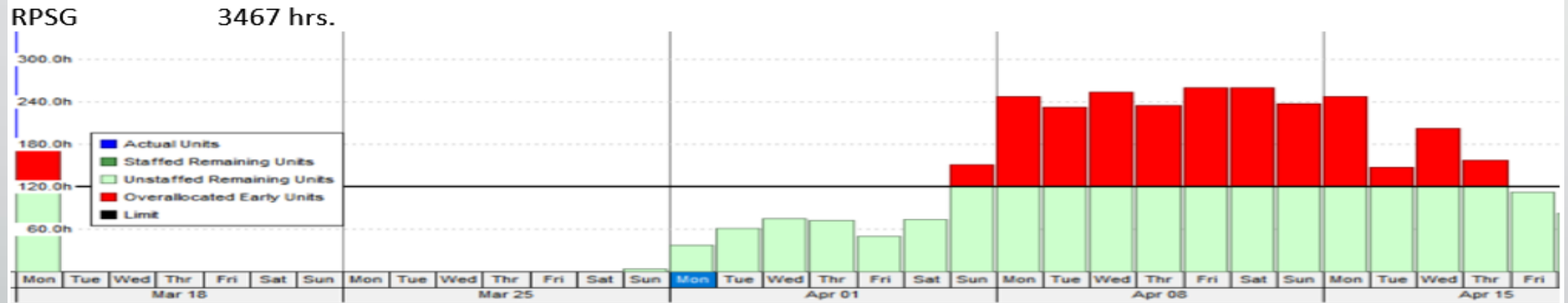
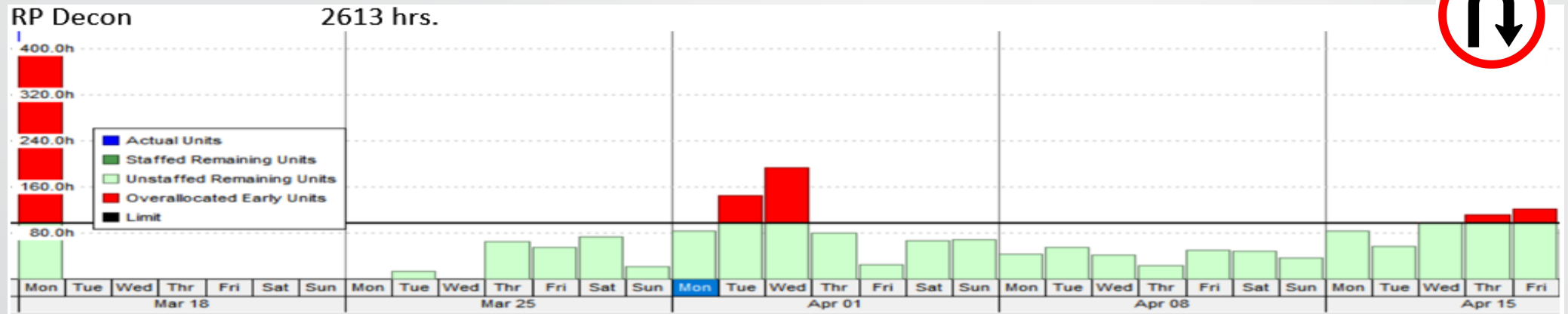
RP ALARA 198 hrs.



Downstream effects cont.



Downstream effects cont.



Downstream effects Summary



- Resource loads provide insight for a time that could tax RP resources, allowing for staffing adjustments beforehand.
- Resources can be further aligned within the scheduled item by assigning the allotted percentage of RP hours associated with that task.
- Hours-per-Role category allows break out of work and resources.

A few things to consider:

- ❖ Analysis of overload time frames may reveal overlapping work orders or redundant work.
- ❖ Grouping work by work area creates an overview of what is happening within the area.
- ❖ Assigning RP technician to an area that includes the complement of work rather than assigning technicians per work order-crew.
- ❖ Is the activity covered cradle to grave? Decon, set up – clean up ?
- ❖ Graphs highlight challenging shifts and allow staffing to be realigned through the Outage Control Center (moving technicians from one area to another).
- ❖ On a larger scale the graphs provide Coverage Hours that can be interpolated into overall outage/Project work loading for Radiation Protection.
- ❖ Assigned shifts, break times, and work areas all factor into the actual hours needed. The current hours indicated are those the craft project for the activity NOT what may be needed for Radiation Protection support.

In closing



There are a lot of ways to accomplish our tasks.

Risk at the forefront.

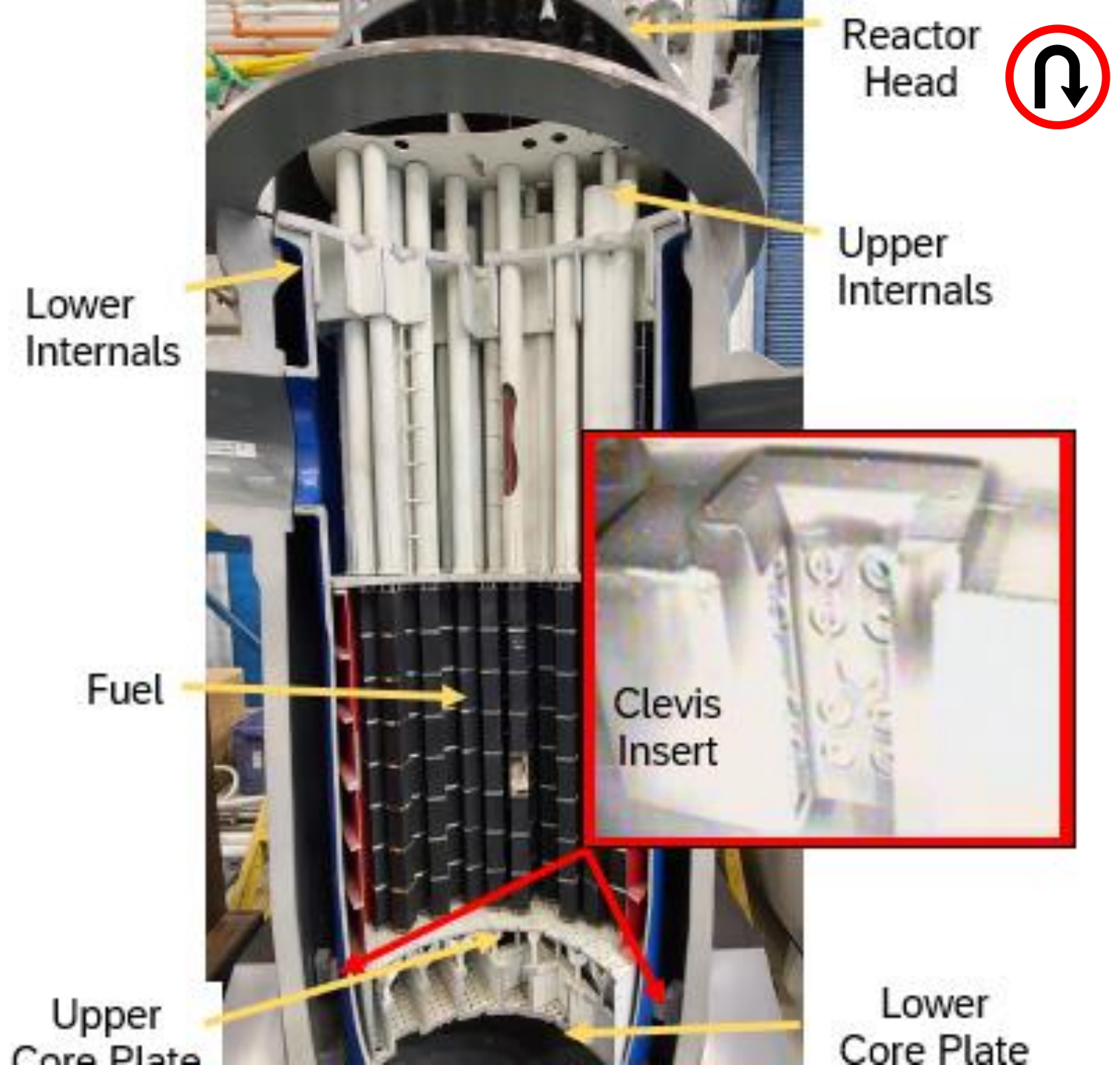
This is just a snapshot of a process that exists at all our utilities that can be utilized.

Questions?

**RP ALARA Conference
Clevis Bolt Replacement Project**

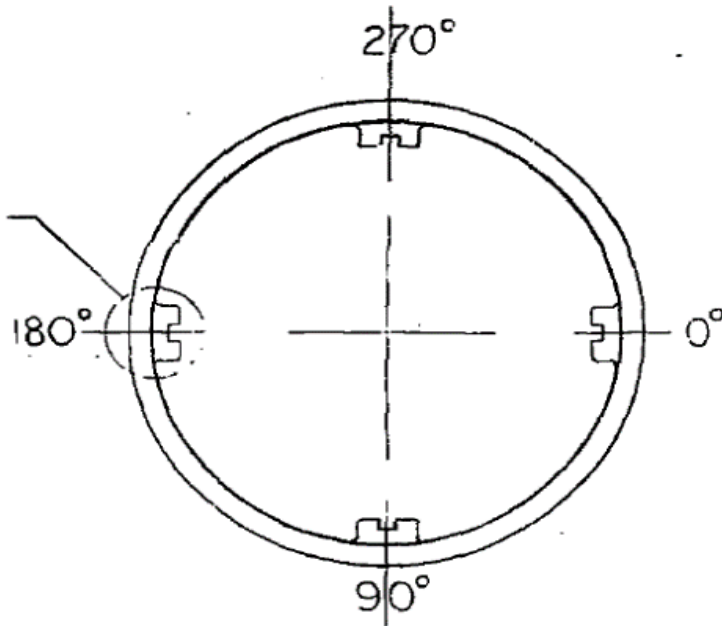


Clevis Bolt Replacement Project

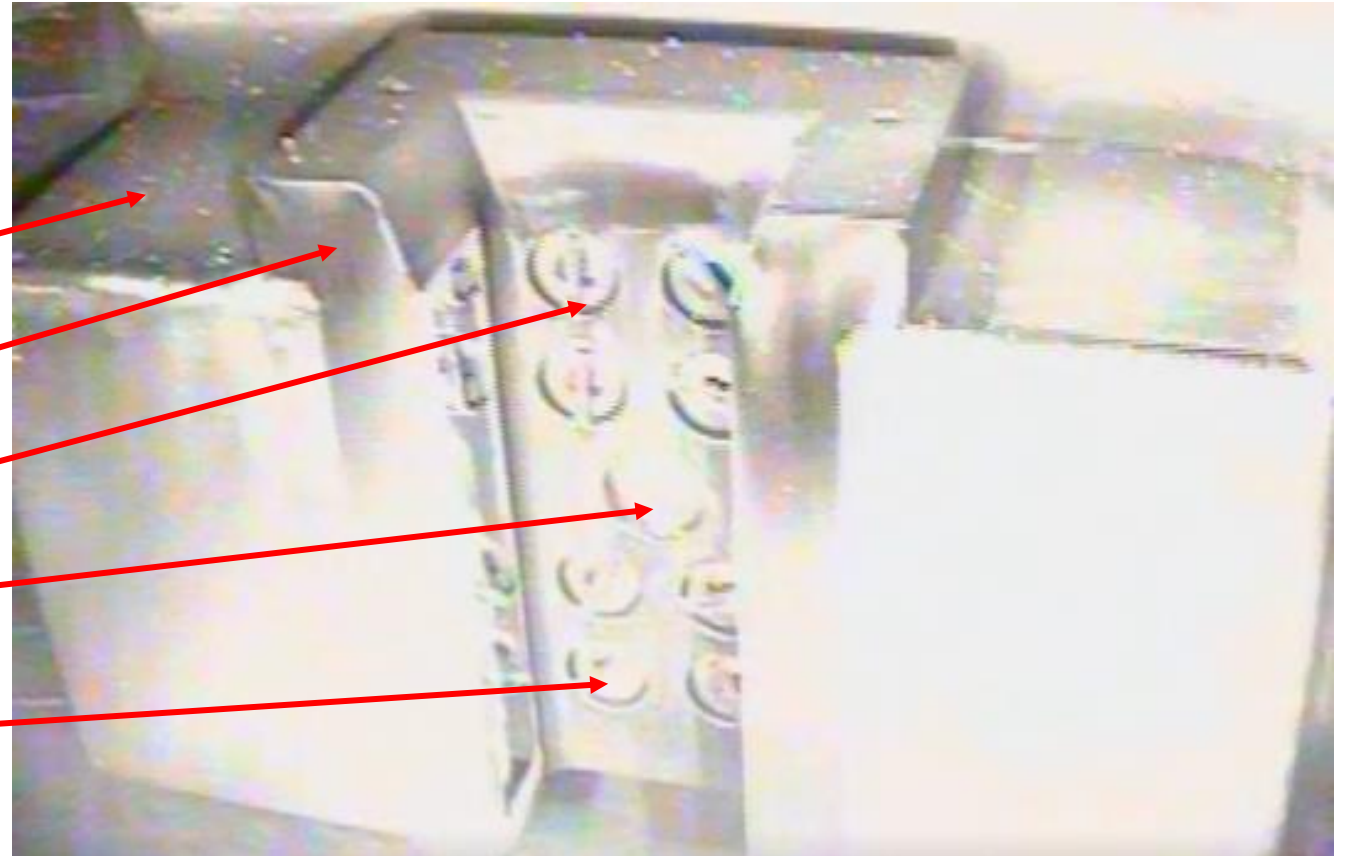




Clevis Bolt Replacement



- RV Lug
- Clevis Insert
- Lock Bar
- Dowel Pin
- Clevis Bolt





Latest Industry Guidance



The following NEI 03-08 “Needed” guidance is effective at Westinghouse Designed PWR units as of July 1, 2023 or prior to 55 calendar years of plant operation – whichever comes first.



It is recommended that prior to this date the impacted utilities perform a review of this guidance for potential implementation.



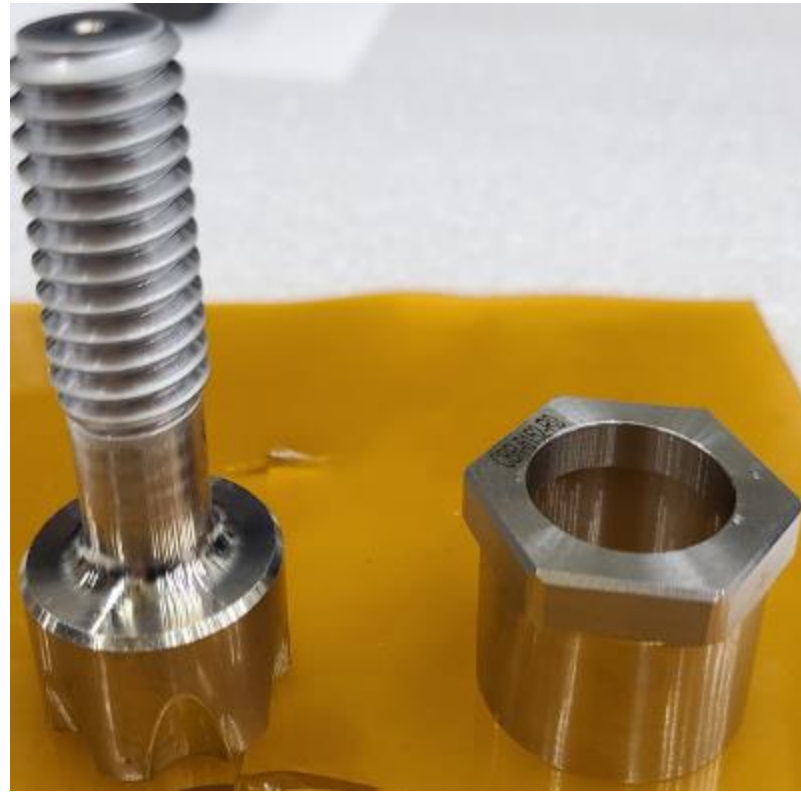
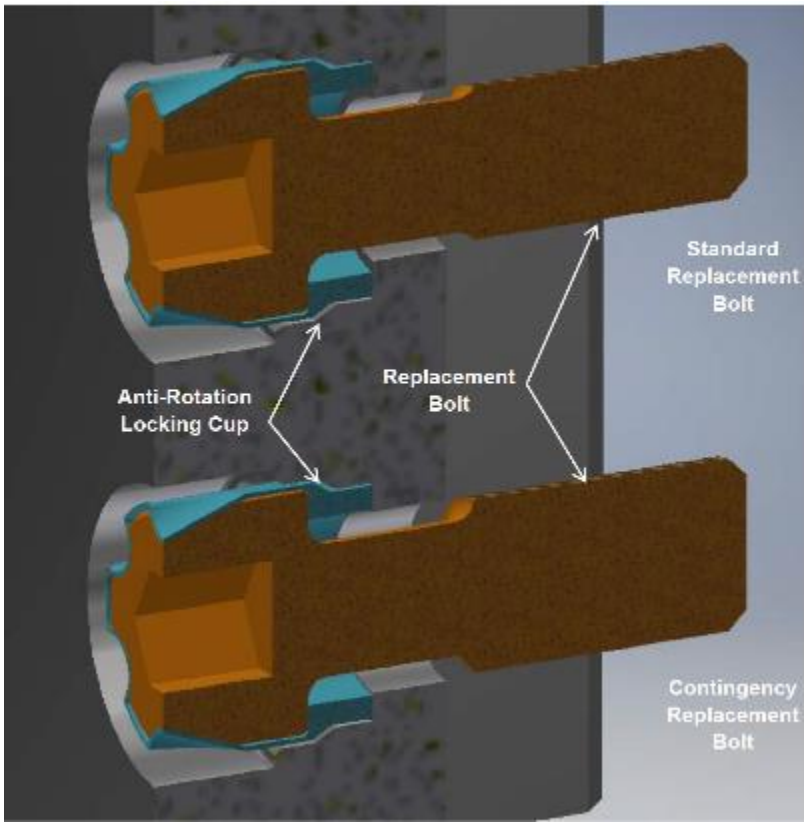
Three different approaches are provided for flexibility in how to address the underlying issue, taking any one of these approaches would be considered as satisfying the guidance.



New bolt hardware has been designed that is comprised of a cap screw and anti-rotation locking cup to replace the existing welded lock bar bolt system.

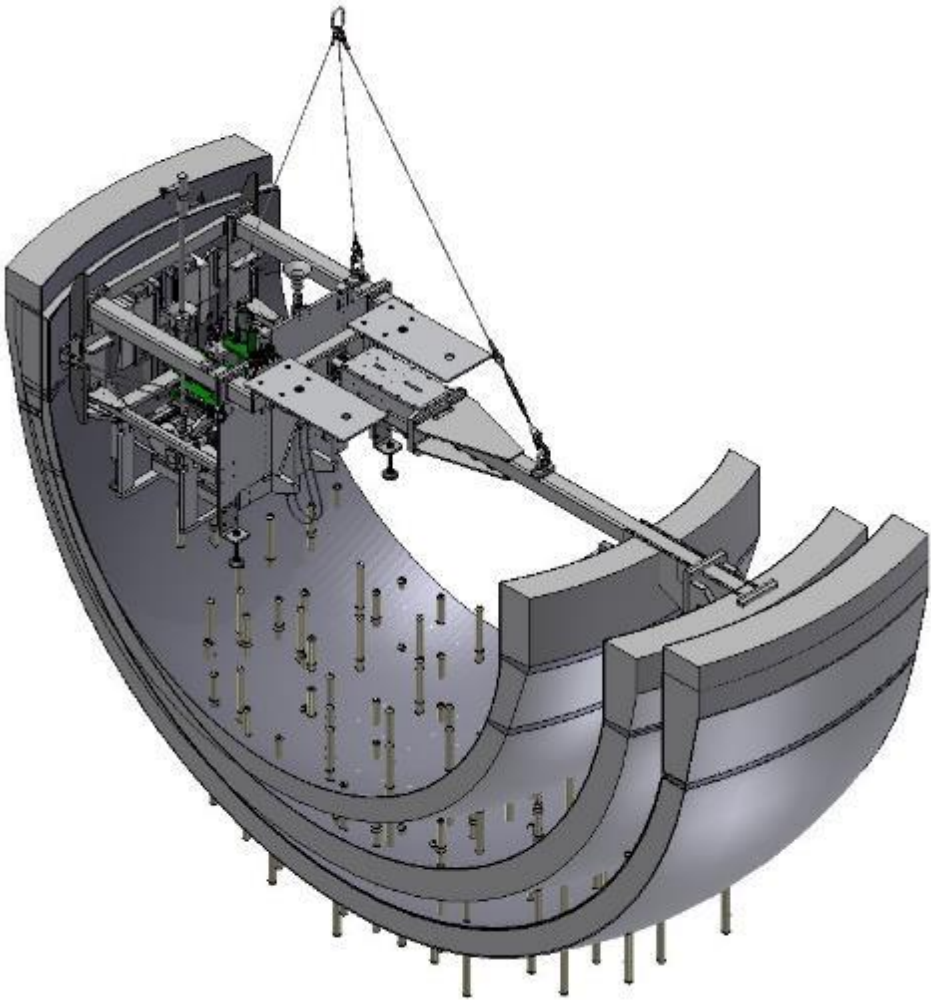
Per a Replacement Bolt Pattern Analysis (RBPA) it was determined that we need to replace 16 of the 32 bolts currently in place. If there is time, we will remove the additional 16 bolts.

A contingency bolt that is 5/8ths of an inch larger was also designed.



Replacement Bolt Design

Docking Station



EDM Linear Cutting Head



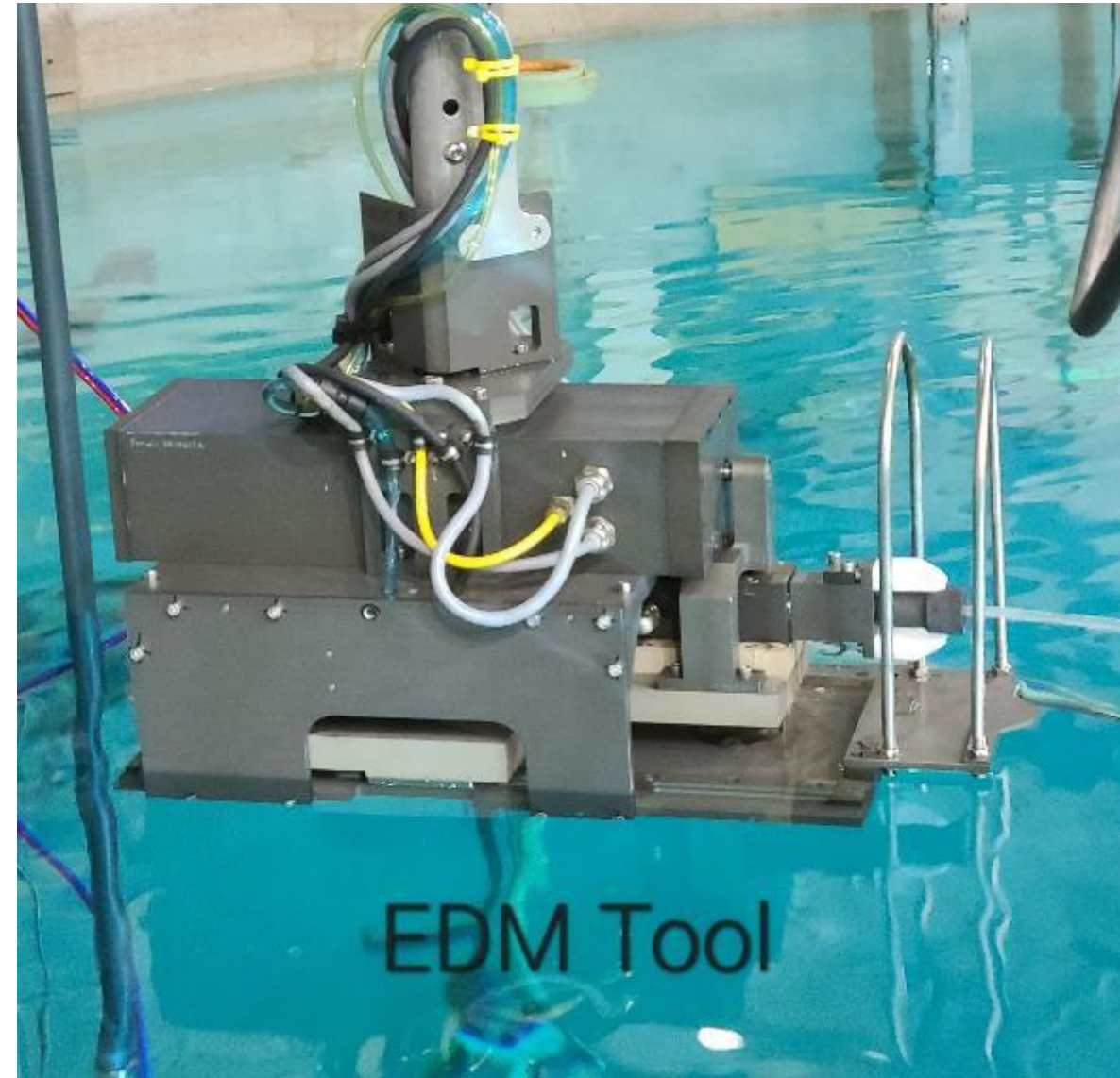
The Electrical Discharge Machining (EDM) tool provides a means to machining various geometries in support of the clevis bolt repair process.

Standard Uses:

- Cut #1 – Lock bar severing
- Cuts #2 & #3 – Hex counterbore roughing with gimbal, PI design requires an additional extra roughing burn
- Cut #4 – Hex counterbore finishing, with gimbal

Contingency EDM uses:

- Bolt head removal, when the bolt cannot be un-torqued
- 5/16th inch internal hex, if there is a broken head or for bolt shank removal
- Shank coring, to remove bolt shank and original threads
- Oversize bolt diameter, for roughing and finishing cuts
- Oversize bolt hex counterbore, no gimbal





Bolt Replacement Process

1. The Alignment camera is used to align the main docking station platform to the specific clevis bolt to start work.
2. Sever the lock bar weld using EDM tool
3. Remove existing bolt
4. EDM the clevis insert to accept the replacement bolt and locking cup.
5. Verify existing threads are acceptable
6. Clean threads with the tap tool (contingency)
7. Install alignment mandrel using existing bolt threads
8. EDM Counterbore to final size and shape
9. Clean out hole with water jet and vacuum
10. Perform Visual Inspection to ensure no anomalies that could prevent hardware installation.
11. Install replacement bolt and locking cup
12. Perform final bolt torque and crimping of the locking cup.



Radiological Considerations

Dose rates are expected to be 2 – 6 mr/hr on the Manipulator crane and Aux Bridge.

DC Cook replaced their Lower Radial Support Structure bolts 10 years ago, and documented a survey of the individual bolts with a range of 249 mr/hr / 8 mr/hr to 624 mr/hr / 11 mr/hr.

We will perform dose rates surveys of equipment underwater and at a foot above to verify that we do not remove any unwanted high dose rate material from the reactor cavity.

We will maintain control over the contamination, especially discrete radioactive particles that may be brought into work areas.



Post Job Info

Dose Performance		
	Dose (rem)	Time (hours)
Projected (Original)	5000 <i>mr</i>	3,428 <i>man-hr</i>
Projected (Revised)	8,300 <i>mr</i>	7,500 <i>man-hr</i>
Actual	6,463 <i>mr</i>	9,177 <i>man-hr</i>
% of Projection Used	77%	122%

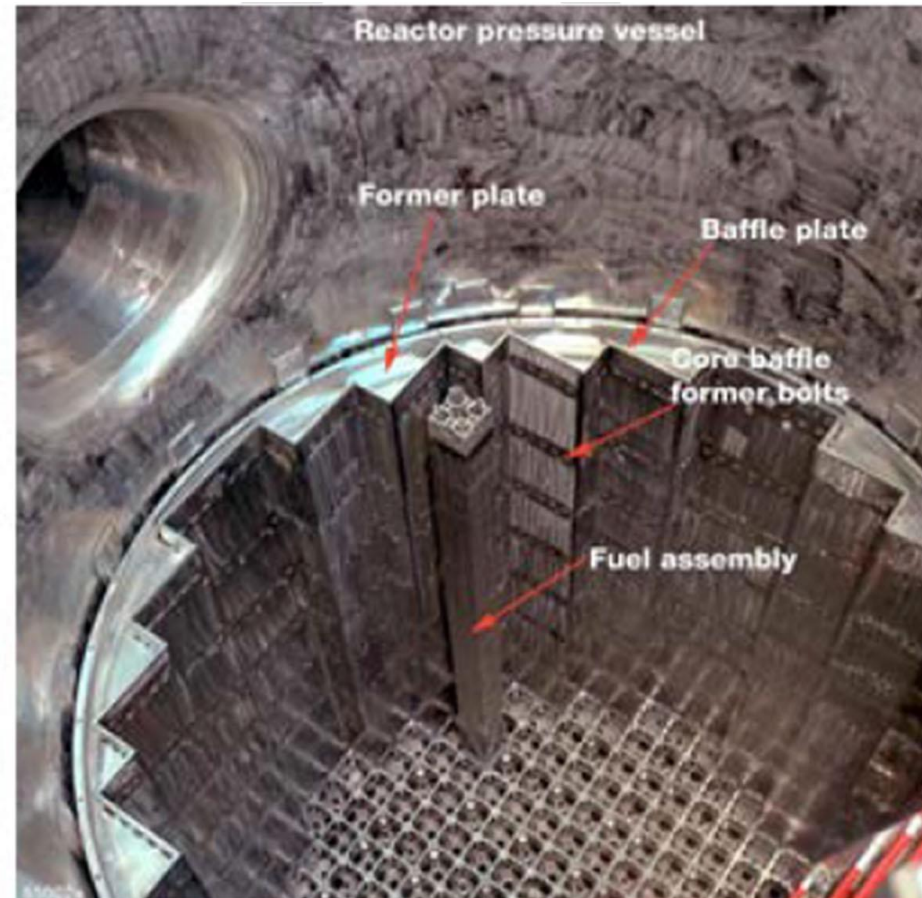
Other Data (as applicable)	
Total (RCA Entries)	3,310
Effective Dose Rate	0.70 <i>mr/man-hr</i>
Maximum Dose Rate	170 <i>mr/hr</i>
Personnel Contaminations	14
Respirators Used (Y/N)	N



Baffle Bolt Replacement Project

The Former Plates are bolted to the Core Barrel

The Baffle Plates are bolted to the Former Plates



During 2R33,
we replaced
299 Baffle Bolts



Mannheim Tool – Carriage and Mast

- The Mast consists of: a metal I-beam, the drive mechanism to move and operate the tool, and the carriage.
- The Carriage is what the Baffle Bolt Tooling is attached to.

Mast



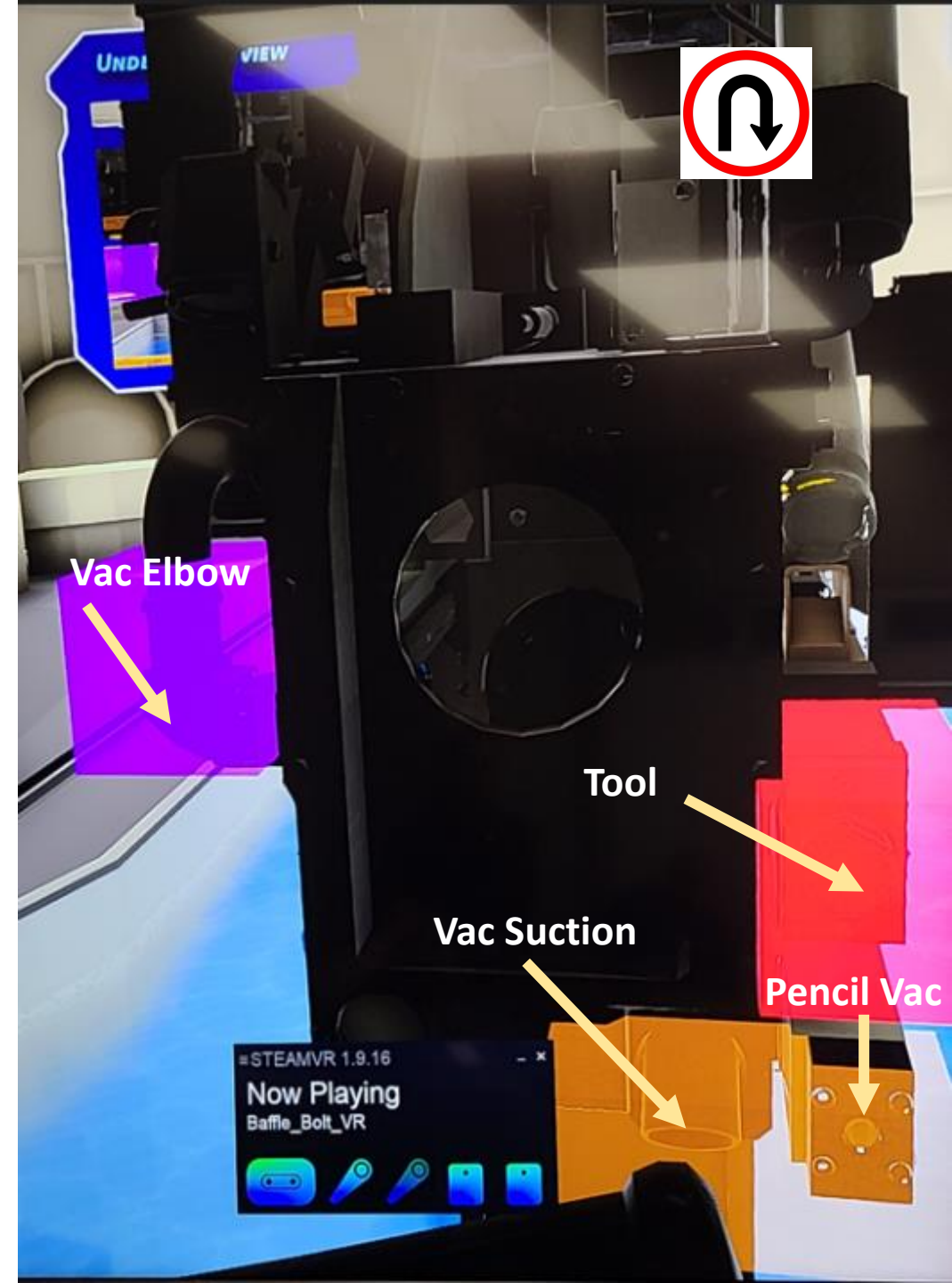
Mannheim Tool – Survey Points

Vac Elbow – on side of the carriage, natural location for fragments to get caught

Tool – This is where the End Effectors will be installed/changed out. Potential for there to be small fragments, especially from milling (FS-3) and counterbore cutting tool (FS-1).

Vac Suction – Primary source of suction, this will capture the most of the foreign material generated during the project.

Pencil Vac – vacuum suction can be diverted to pencil vac which will telescope out of the housing, into the hole to remove debris





Mechanical Work Bridge (MWB)



The Mast will be mounted on the Mechanical Work Bridge



Radiological Considerations

Dose rates taken on the core barrel at other plants, in the areas of the baffle bolts, have been measured to exceed 100,000 Rem/hr.

There has been a history of issues with DRP's in and around the work areas, including most of the personnel contaminations associated with Baffle Bolt work.

Several items have been determined to have dose rates that will prohibit them from being removed from the Rx Cavity. These items will be placed in underwater debris canisters and moved to the SFP via the Fuel Transfer System.



Expected Radiological Conditions:

- Dose Rate on Bridge – 2 – 6 mr/hr
- Tooling prior to rinse or hydrolase – up to 10 Rem/hr
- Tooling when removed from the water – 40 – 800 mr/hr general area
- Tools will be rinsed or hydrolazed under water prior to being surveyed
- Tools will be placed in a bucket of water to be transferred from the bridge to the tool tent for final decon and maintenance.
- Surveys in and around the work area, lifejackets or waistbelts, and items removed from the water will be very important for a successful project.

Post Job Info



Dose Performance		
	Dose (rem)	Time (hours)
Projected (Original)	10.000	7,580
Projected (Revised)	17.500	15,778
Actual	16,364	18,186
% of Projection Used	93.5%	115%

Other Data (as applicable)	
Total (RCA Entries)	5,866
Effective Dose Rate	0.90 mr/m-hr
Maximum Dose Rate	846 mr/hr
Personnel Contaminations	18
Respirators Used (Y/N)	Y

RP ALARA Conference
ISI 10YR RV Inspection





RX 10 YEAR ISI AND CLEVIS BOLT REPLACEMENT

what it is and what to expect



OBJECTIVES

10 Year ISI

- Purpose
- Summary of Inspections
- Additional Inspections
- Inspection Process
- Lessons Learned

Clevis Bolt Replacement

- Purpose/Industry Guidance
- Replacement Process and Tooling
- Radiological Considerations
- Lessons Learned



10-YEAR ISI **Purpose**

- Periodic inspection of the Rx Vessel, Lower Internals, and Upper Internals to determine condition of bolts, welds, and wear components.
- Combination of visual and ultrasonic tests
- Owned by site engineering, but typically contracted out to a vendor
 - Infrequently performed
 - Specialized equipment
- Some inspection requirements within 10-Year ISI program have 20-year periodicity due to program revisions
 - Last inspection may be different from upcoming inspection



10-YEAR ISI **Inspections**

- Rx Vessel ISI
 - *VT exams via mini-sub*
 - *UT exams via robot*
 - VT of interior and exterior surface
 - VT of core support structure
 - UT of pressure retaining welds
 - UT of HL and CL nozzle welds
 - VT of interior welded attachments
 - VT of nozzle interior radius
 - VT of welded core support structure
 - includes components of Upper and Lower Internals



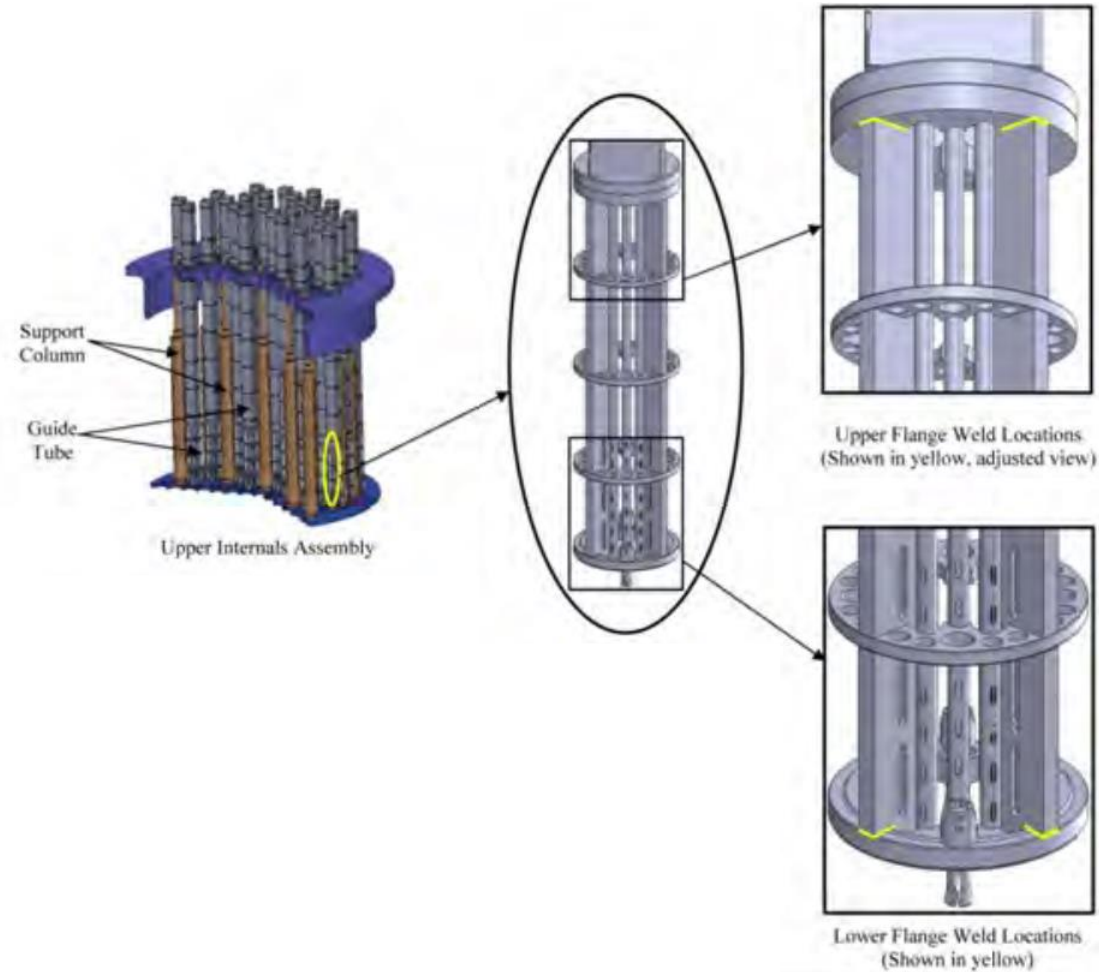
10-YEAR ISI **Additional Inspections – MRP 227 VT Exams**

- Guide Tube upper and lower flange welds
- Core Barrel upper and lower girth welds
- Core Barrel middle and lower axial welds
- Thermal Shield Support Block Bolts (top of core barrel)
- Core Barrel Thermal Shield Flexures (bottom of core barrel)
- Upper Internals core plate
- Clevis insert bolts
- Lower core plate fuel alignment pins
- Baffle assembly and baffle-edge bolts



10-YEAR ISI Additional Inspections – MRP 227

- Upper and Lower Flange Welds

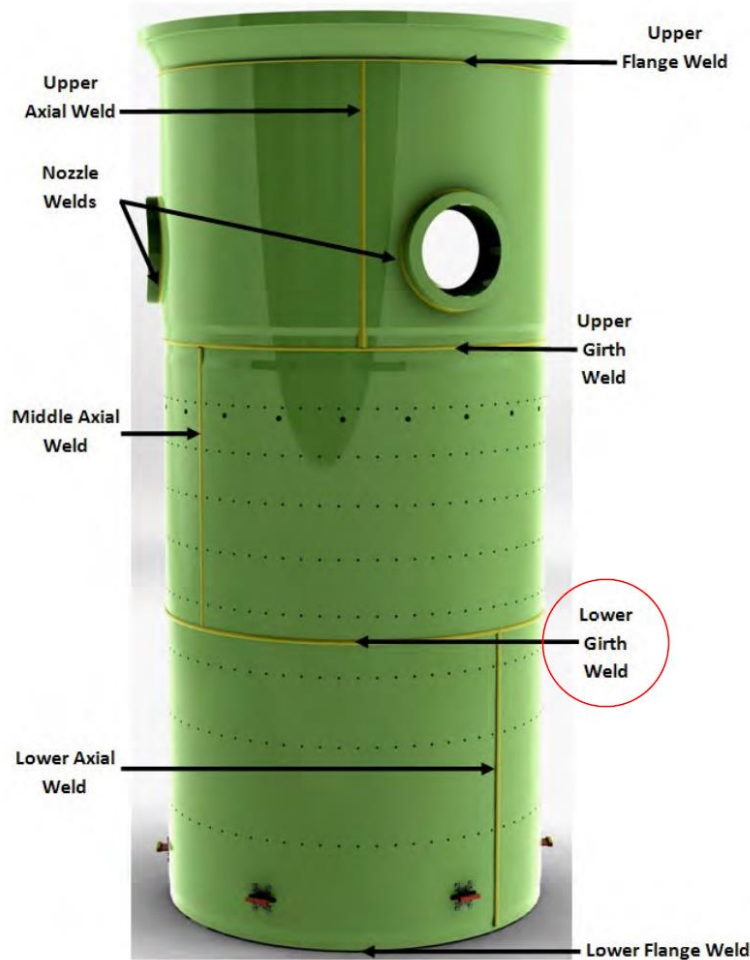




10-YEAR ISI

Additional Inspections – MRP 227

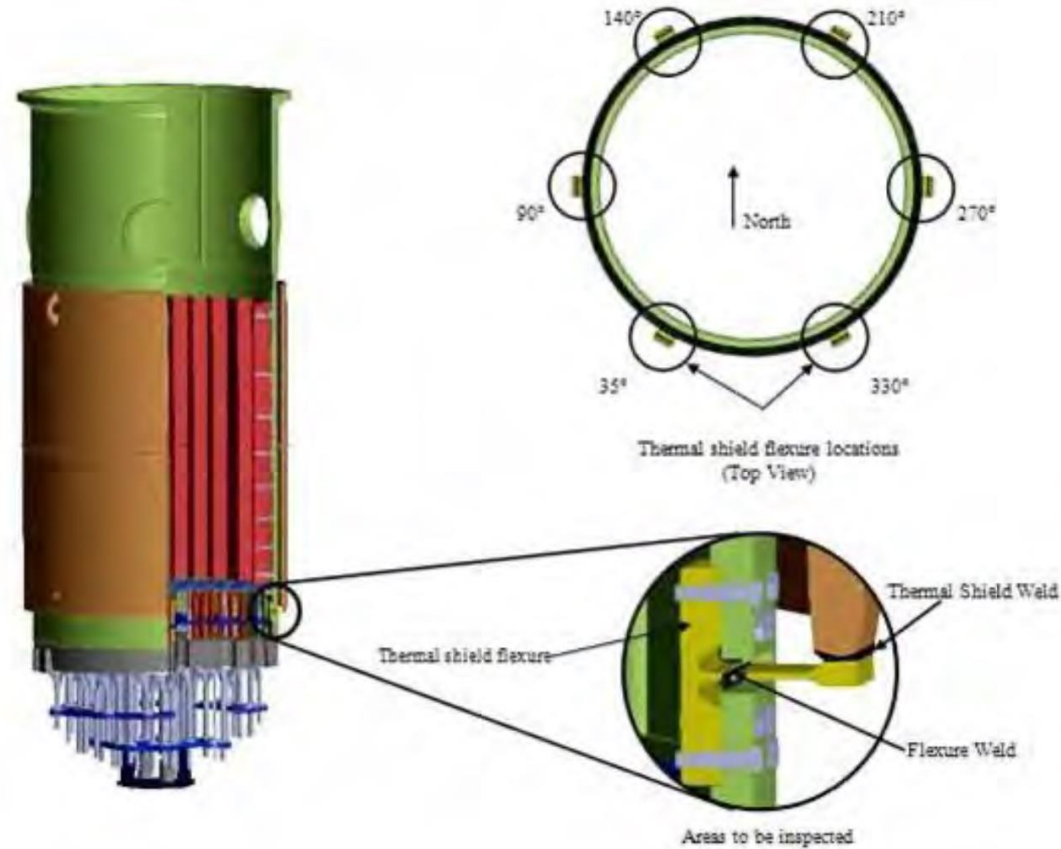
- Core Barrel upper and lower girth welds
- Core Barrel middle and lower axial welds





10-YEAR ISI Additional Inspections – MRP 227

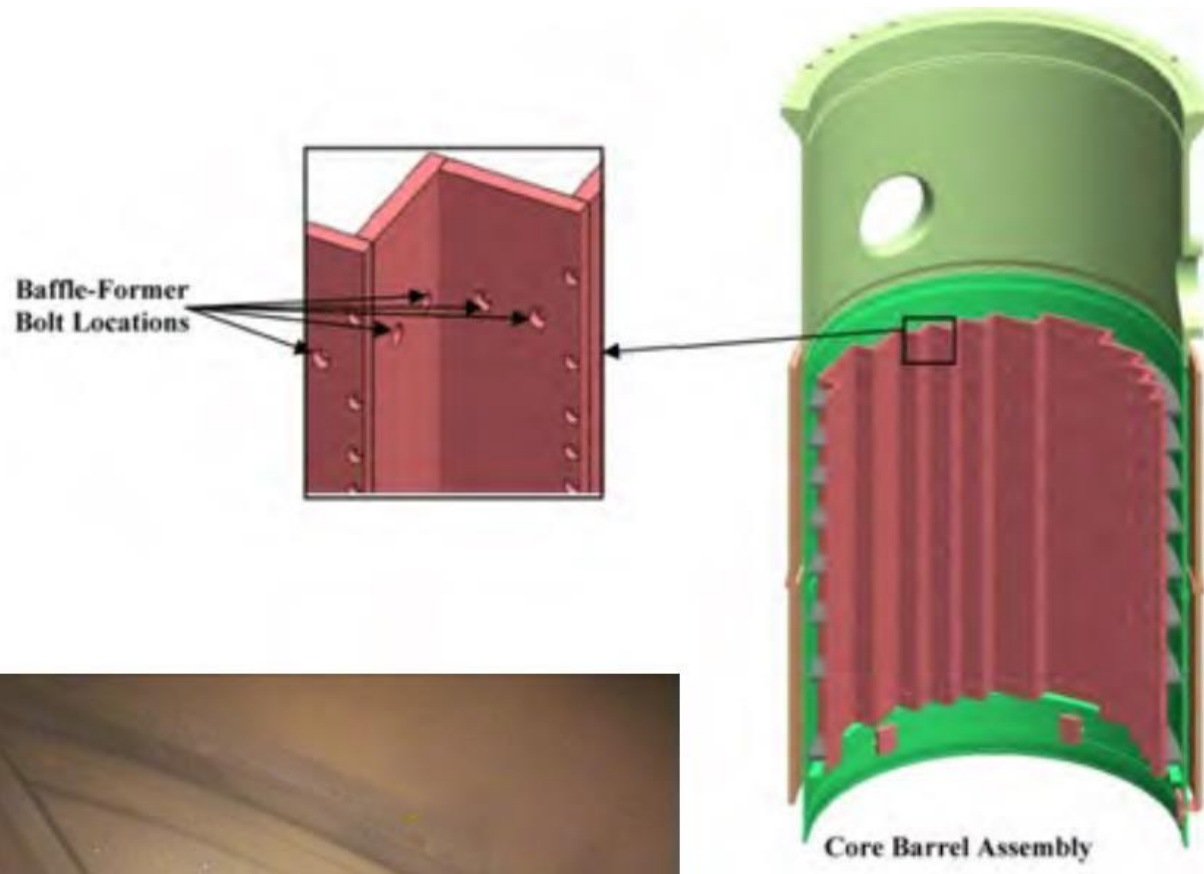
- Thermal Shield Support Block Bolts (top of core barrel)
- Core Barrel Thermal Shield Flexures (bottom of core barrel)





10-YEAR ISI Additional Inspections – MRP 227

- Baffle assembly and baffle-edge bolts

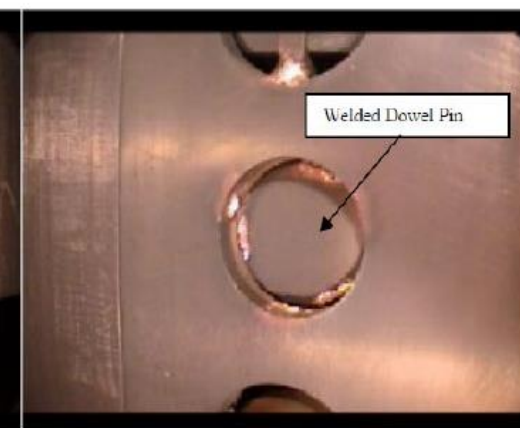
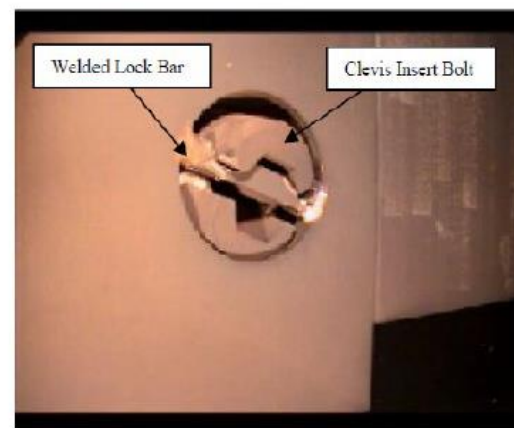
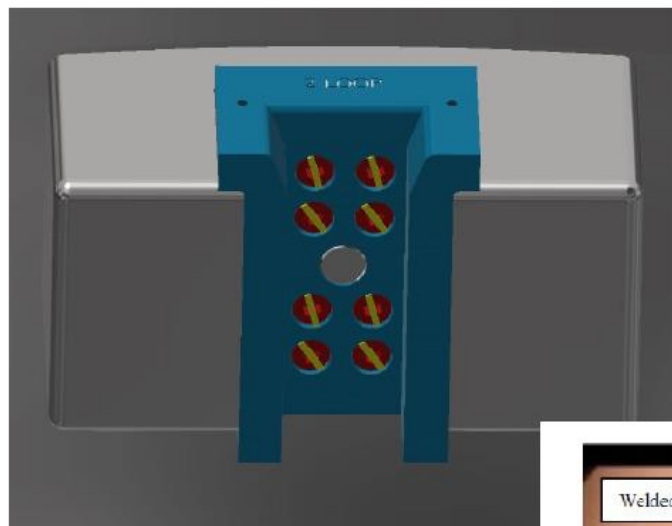
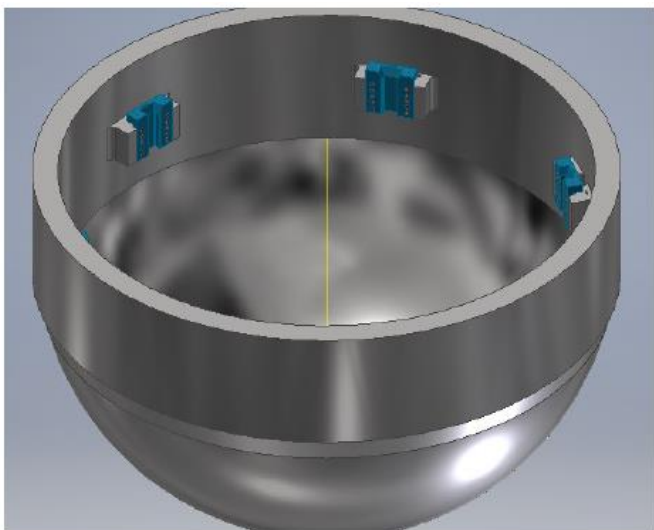




10-YEAR ISI

Additional Inspections – Clevis Bolt UT Exams

- UT Clevis Insert bolts and dowel pin
 - 6 equally spaced supports around the Rx Vessel just above the lower dome
 - Supports/aligns the lower core barrel





10-YEAR ISI **Inspection Process**

- Rx Vessel inspections performed using Refueling Bridge
- Upper/Lower Internals inspections performed in Equipment Pit using temporary Aux Bridge
- Laydown area established near Rx Cavity for tool and end-effector changes
- Shielding on floor of Aux Bridge
 - Reduced dose rates to 5 mrem/hr (vs unshielded 10-20 mrem/hr)
- RVISI inspections with robot/mini-sub deployed into Rx Cavity water, inspections performed remotely
- Most MRP-227 inspections performed with long-handled tools from Aux Bridge
- Clevis Bolts inspections with long-handled tool to deploy UT probe



10-YEAR ISI **Radiological Considerations**

- Mini-sub inspections of suspended Core Barrel
- Dislodging radioactive material from Rx surfaces
- Removing tools/robots from Rx Cavity water
- Changing robot tools that have been in contact with Rx surfaces
 - 2,000,000 dpm/100cm² prior to decon
- RCA hour management above the Rx Cavity



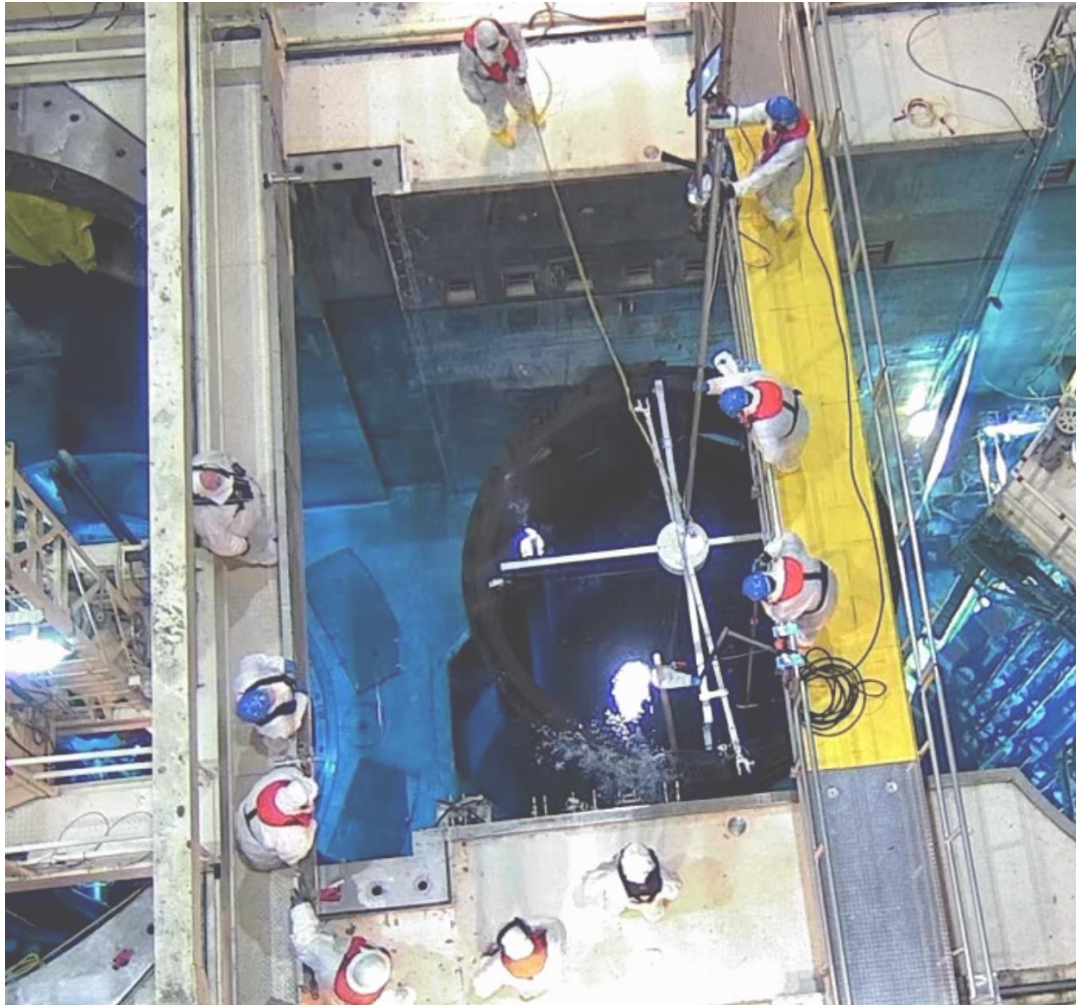
10-YEAR ISI

Lessons Learned

- Estimate: 1.300 REM / 843 Hours
- Actual: 3.189 REM / 2,539 Hours
- Significantly underestimated support personnel

Work Description	REM		Hours	
	Inspection	Support	Inspection	Support
10 Year Rx Vessel ISI – Visual and UT	1.079	0.889	768	961
MRP-227 Inspection	0.862	0.049	490	74
Clevis Bolt Inspection	0.095	0.215	46	200
Totals:	2.036	1.153	1,304	1,235

- Delayed planning input from vendor
- Clevis Bolt as-built discrepancies required troubleshooting and tool modification
- Software difficulties when changing tools
- Poor communication from work group to site (including ALARA) during challenges
- Bubbles from Tri-Nuke collected on cameras and inspection locations



RP ALARA Conference Meeting Critique





Optional

Name: R Miller

Utility: LGS - constellation



Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): N/A

Technical Content: Good → nothing too high level

Vendor Participation: Very good + informative

Meeting Format (Breakout Session vs. Presentation, etc.): Good

Facilities (Meeting Room, Hotel Facilities, Location, etc.): Cold → but really nice

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.):

Maybe more hands on stuff - show cases rather than programs

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association:

Would like to get more tidbits from the other sites

Other Comments: Very knowledgeable

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? Yes If not, why?

Return completed form to the Committee Secretary prior to the end of the meeting

EM
SM
RBB
JW



Optional

Name: David Hendricks

Utility: Dominion Energy
North Anna



Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): _____

Technical Content: Very good information having not been to a meeting before.
All levels of participation from technician to SR. Management but
conversations were maintained for all to understand.

Vendor Participation: Vendor participation was excellent with a lot of good
information. Some vendors absent at breaks for every interface time frame

Meeting Format (Breakout Session vs. Presentation, etc.): _____

Sufficient
Could build in a few more short 10min. breaks so information is not missed while absent
(Ex. restroom breaks)

Facilities (Meeting Room, Hotel Facilities, Location, etc.): _____

Satisfactory, very accommodating
Keys may not allow some attendance due to cost, but I loved it!
14degrees at home lol

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): _____

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: _____

We typically send one person every winter meeting - good benchmark
opportunity
Costs is probably determining factor

Other Comments: _____

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? _____ If not, why?

Typically only winter meeting - see above
I would love to attend summer meeting

Return completed form to the Committee Secretary prior to the end of the meeting

son Am
W
RSB



Optional

Name: Ryan Brown

Utility: Energy Harbor

HK
 JO
 AW
 PM
 JW

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): N/A

Technical Content: Lasalle presentation = A+

Vendor Participation: _____

Meeting Format (Breakout Session vs. Presentation, etc.): Consider getting vendor 5 min presentations earlier in week - easier to jump in after three presentations

Facilities (Meeting Room, Hotel Facilities, Location, etc.): Excellent food & facilities - Meeting room slightly cramped w/ large attendance

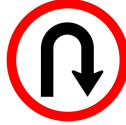
Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.):
- Engineering cooperation seems to be major challenge
- Success? Study presentation?

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association:
N/A

Other Comments: Publish rough timeline early to help w/ travel planning

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? Yes If not, why?

F san



Optional

Name: Jonah Morgan

Utility: STP

HZ
RW
FM
RJB

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): change to every meeting

Technical Content: Seen it look database presentation

Vendor Participation: good, maybe more vendors with actual power point part

Meeting Format (Breakout Session vs. Presentation, etc.): Good no issues; location in restaurant not ideal

Facilities (Meeting Room, Hotel Facilities, Location, etc.): Great as always might need larger room with so many people

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): EPRI RLS; Being involved in the RP/chemistry research

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: None

Other Comments: None

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? Yes If not, why?



Optional
 Name: ADAM CATRACCA
 Utility: BARAKAH



Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): N/A

Technical Content: OVERALL DISCUSSION WAS GOOD. IDEAS AND SOLUTIONS WERE USEFUL. VENDOR INTERACTION WAS EXTREMELY ON POINT.

Vendor Participation: THE CURRENT FORMAT IS GREAT BUT WE SHOULD VIDEO A PRESENTATION FROM EACH VENDOR AND POST A LINK ON RPALARA WEBSITE
 Meeting Format (Breakout Session vs. Presentation, etc.): _____

Facilities (Meeting Room, Hotel Facilities, Location, etc.): SUPERB!

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): TOPICS SHOULD BE GATHERED BASED ON FEEDBACK FROM MEMBERS (FELL OUT FORM A FEW MONTHS BEFORE MEETING) PRIORITIZE AND THEN GATHER TECHNICAL DOCUMENTS AND PERHAPS SME TO DISCUSS

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: THERE SHOULD BE A FINAL REPORT WITH PHOTOS OF PARTICIPANTS/VENDORS. ALL DOCS. RELATED TO DISCUSSIONS COMPILED.

Other Comments: QUESTIONNAIRE FORMS SHOULD BE ON A COUPLE OF IPADS SO THE CONTENT CAN BE EASILY MOVED INTO A FINAL REPORT

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? NO If not, why?
SEPTEMBER OUTAGE

Return completed form to the Committee Secretary prior to the end of the meeting

Handwritten initials and a circled 'P' in the bottom right corner.



Optional

Name: Ray Lopez

Utility: Colbert Cliffs

HZ

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): _____

Technical Content: no changes

Vendor Participation: Incredible Vendor participation.

Meeting Format (Breakout Session vs. Presentation, etc.): No changes

Facilities (Meeting Room, Hotel Facilities, Location, etc.): Meeting room a little cold
Hotel - wonderful, facilities wonderful

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): Source term reduction

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association:

It's hard for Colbert to attend the winter meeting since the meeting is right on the heels of their outage. So based on what outage work is plan determines our attendance

Other Comments: _____

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? ME? If not, why?

Return completed form to the Committee Secretary prior to the end of the meeting

RJB
al
km
P
km



Optional

Name: Joe Coughlin

Utility: Braidwood

HZ
 R
 RW
 EM
 RSC
 or

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): N/A

Technical Content: good

Vendor Participation: great Attendance

Meeting Format (Breakout Session vs. Presentation, etc.): right on time

Facilities (Meeting Room, Hotel Facilities, Location, etc.): Needed more tables initially

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.):
Reminded INAD could not be in breakout discussions.

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association:

Other Comments: Bigger table name tags

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? yes If not, why?

Return completed form to the Committee Secretary prior to the end of the meeting

505
 (F)



Optional

Name: ADAM GILIAN

Utility: CALLAWAY

#0
PM
BOB

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): _____

Technical Content: Im TAKING SEVERAL ITEMS BACK WITH ME. PRESENTATION ON DATA IS A TOUGH SUBJECT BUT ENDED UP A LITTLE TOO IT BASED

Vendor Participation: GOOD INTERACTIONS WITH VENDORS

Meeting Format (Breakout Session vs. Presentation, etc.): CONFERENCE STRUCTURE IS GOOD.

Facilities (Meeting Room, Hotel Facilities, Location, etc.): NO ISSUES; LOCATION IS GOOD

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): _____

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: _____
NONE, FOR ME ATTENDANCE ONCE A YEAR IS JUSTIFIED

Other Comments: _____

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? NO If not, why?
BUDGET DOESNT SUPPORT 2x YEAR

Return completed form to the Committee Secretary prior to the end of the meeting

WW

[Handwritten signature]



Optional

Name: Felix Martinez

Utility: DCPP

#0
FM
RSP

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): N/A

Technical Content: CONTENT WAS PRESENTED VERY WELL.

Vendor Participation: VENDORS WERE VERY ENGAGING.

Meeting Format (Breakout Session vs. Presentation, etc.): NO ISSUES.

Facilities (Meeting Room, Hotel Facilities, Location, etc.): NO ISSUES

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): I LOVED THE LA SALLE LECTURE. WISH IT WAS AVAILABLE TO SHARE.

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: NO ADDITIONAL SUGGESTIONS. NOW THAT WE'RE RELICENSING, THE STATION WANTS BENCHMARKING.

Other Comments: NONE AT THIS TIME

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? Maybe If not, why? WE HAVE AN ISF KFSI CAMPAIGN IN 8/2024. WORKUP BEGINS MAY-JUNE 2024. ~~HERE~~ AFTER OUR RFD.

Return completed form to the Committee Secretary prior to the end of the meeting

KW
B
ES



Optional

Name: John Hertz

Utility: TVA - Sequoyah

Hertz
 B
 MW
 FM
 RSB

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): _____

Technical Content: useful

Vendor Participation: great! Graftel was never here it seemed

Meeting Format (Breakout Session vs. Presentation, etc.): need better presenters :)

Facilities (Meeting Room, Hotel Facilities, Location, etc.): great

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): _____
- Cobalt reduction programs

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: _____
- can NST get Microsoft here?

Other Comments: none

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? YES If not, why?

Return completed form to the Committee Secretary prior to the end of the meeting

SM
 P



Optional Name: Rhonda Bewley Utility: Wolf Creek

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MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only):

Technical Content: With technology ever changing, we may not be on the leading edge of the latest. And greatest that can be brought up in the meeting

Vendor Participation: Vendors were engaged and informative Great way to see new products

Meeting Format (Breakout Session vs. Presentation, etc.): The leads did a good job keeping everyone involved and conversation flowing. I really like the input from different people. Breakout sessions were kind of hard to hear

Facilities (Meeting Room, Hotel Facilities, Location, etc.): Location is fantastic Rooms and facilities were adequate comfortable, temp was good, food was good. display could have been bigger

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): Look planning we like the break out sessions

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: Ability to create contacts networking. I like what happened at this meeting

Other Comments: Very informative meeting great way to make contacts good way to network

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? Unknown If not, why? Budget and availability of time off or away from the plant

Return completed form to the Committee Secretary prior to the end of the meeting

Handwritten initials and marks on the right side of the page.

Handwritten initials at the bottom right corner.



Optional

Name: Scott Leach

Utility: Constellation

Handwritten notes:
 (circled) KW
 FM
 (circled) RW

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): N/A

Technical Content: Very good - Would like to see a INFO, NIS, ERS or NIS preso every meeting

Vendor Participation: Great turnout and support

Meeting Format (Breakout Session vs. Presentation, etc.): needed more time with vendors

Facilities (Meeting Room, Hotel Facilities, Location, etc.): Excellent

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): Vendors should be at table during vendor inter face session

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: _____

Other Comments: _____

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? Yes If not, why?

Return completed form to the Committee Secretary prior to the end of the meeting

Handwritten initials:
 (circled) E
 gk



Optional

Name: Doug VanHoorebeck

Utility: Dominion / Sully

Winter 2024 *** Key West, FL *** January 22-24, 2024

MEETING CRITIQUE

EM

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): _____

Technical Content: _____

Vendor Participation: Enthusiastic Support Great Team

Meeting Format (Breakout Session vs. Presentation, etc.): _____

No Issues

Facilities (Meeting Room, Hotel Facilities, Location, etc.): _____

Overall, Excellent. Conference Room was a little tight this time but it was a very big turn out

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.):

Source Term Reduction options. with proven results.

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: _____

Other Comments: _____

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? NO If not, why?

Staffing, Vacations, outage planning. But it sounds great.

Return completed form to the Committee Secretary prior to the end of the meeting

Handwritten initials: JH, JW, RSB



Optional

Name: _____

Utility: _____

pm

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MEETING CRITIQUE

The goal is to meet your expectations regarding this meeting. Please help us by providing your comments and suggestions regarding the following:

Plant Status Reports (summer meetings only): _____

Technical Content: Good

Vendor Participation: Good

Meeting Format (Breakout Session vs. Presentation, etc.): Good
need to be able to have shareable presentations

Facilities (Meeting Room, Hotel Facilities, Location, etc.): Good

Please list any topics you would like to see the Board address in the future. Also include specific recommendations relative to the suggested presentation format, where possible (e.g. breakout session, technology presentation, survey, etc.): evaluating dose estimates / dose estimate effectiveness

Please provide suggestions for Board activities or actions which would help justify your company's continued participation in the RP-ALARA Association: Dose savings and ROI / for implementation of activities

Other Comments: _____

Do you anticipate your plant being represented by you or another representative at the Summer 2024 Meeting in Portland, ME? YES If not, why?

Return completed form to the Committee Secretary prior to the end of the meeting

Handwritten signatures and initials: JWR, RSB, etc.