

Ex-Plant Materials Harvesting Workshop

March 7-8, 2017
USNRC HQ
Rockville, MD, USA

Meeting Logistics

- Workshop will be held at NRC's Three White Flint North building
 - Directly adjacent to the White Flint Metro station
 - Nearest hotel within walking distance: Bethesda North Marriott Hotel & Conference Center
- Workshop is a non-public meeting to encourage open discussion
 - Presentations and meeting summary will be distributed among meeting participants only
- GoToMeeting webinar will be available to support additional attendees
 - Webinar attendees will be primarily observers
 - Limited opportunities for webinar attendee participation in discussion if time allows
 - Discussion will be recorded through GoToMeeting software to aid capturing discussion in meeting summary

Meeting Logistics

- Presenters, please keep presentations brief and within the allotted time on the agenda
 - Please limit questions following presentations to specific, clarification-type questions
- For broader discussion questions, please save and raise during discussion towards end of each session
- All presentations and meeting summary will be available on Google Drive:
<https://drive.google.com/drive/folders/0B5DWMLch5YSXcnpZZ0JOS055QUU?usp=sharing>

Approach

- Domestic and international researchers, industry, regulators, and decommissioning companies' discuss benefits and challenges with ex-plant harvesting
 - Encourage sharing of lessons learned as well as areas of common interest
- Workshop consists of topical sessions with short presentations and significant time for open discussion
 - Goal is to maximize engagement among meeting participants
- Scope includes any materials aging issue that could benefit from harvesting, including metals, cables, and concrete

Expected Outcome

- Participants become better informed and aware of the benefits and challenges associated with ex-plant harvesting
- Discussions help identify areas of common interest for harvesting to address technical data needs
- Presentations and discussions provide the starting point for a “database” of harvested materials and future harvesting opportunities
- Contacts are made among research organizations to allow for further discussion of specific harvesting projects
- Workshop summary documenting discussion will be distributed among participants

Ex-Plant Materials Harvesting Workshop Agenda

Tuesday, March 7

Session	Time	Organization	Speaker	Presentation Title
Intro	8:00	NRC	Michael Weber	Welcome and Introduction to Workshop
			Robert Tregoning	
1	8:15 – 8:45	DOE	Rich Reister	DOE Perspectives on Material Harvesting
		EPRI	Sherry Bernhoft	EPRI Perspective on Harvesting Projects
		NRC	Robert Tregoning	NRC Perspective on Motivation for Harvesting
		GRS	Uwe Jendrich	Role of GRS in Decommissioning and LTO
		CRIEPI	Taku Arai	CRIEPI Motivations for Harvested Material
	8:45 – 9:45	DISCUSSION		
9:45-10:00		BREAK		
2	10:00 – 10:20	PNNL (for NRC)	Pradeep Ramuhalli	Data Needs Best Addressed By Harvesting
	10:20 – 10:30	NRC	Matthew Hiser	High-Priority Data Needs for Harvesting
	10:30 – 10:55	DOE	Keith Leonard	LWRS Program Perspective on the Technical Needs for Harvesting
	10:55 – 11:20	SCK-CEN	Rachid Chaouadi	Review of past RPV sampling test programs and perspective for long term operation
	11:20 – 11:45	Westinghouse	Arzu Alpan	Importance of Harvesting to Evaluate Radiation Effects on Concrete Properties
	11:45 – 12:30	DISCUSSION		
12:30 – 2:00		LUNCH		
3	2:00 – 2:10	NRC	Matthew Hiser	Sources of Materials: Past NRC Harvesting and U.S. Decommissioning Plants
	2:10 – 2:35	EPRI	Al Ahluwalia	Harvesting Plans for Materials Aging Degradation Research in Korea and Sweden
	2:35 – 2:50	DOE/ORNL	Tom Rosseel	Materials Harvested by the LWRS Program
	2:50 – 3:00	DOE/INL	John Jackson	NSUF Material Sample Library
	3:00 – 3:15	Energy Solutions	Gerry van Noordennen	Zion Material Harvesting Program
	3:15 – 3:30	Westinghouse	Arzu Alpan	Potential Harvesting of Concrete from Mihama Unit 1
	3:30 – 3:45	BREAK		
	3:45 – 4:00	GRS	Uwe Jendrich	Plants in Decommissioning in Germany
	4:00 – 4:15	CNSC	Daniel Tello	Evaluating Structures, Systems & Components from Decommissioned/Decommissioning Nuclear Facilities in Canada
	4:15 – 5:00	DISCUSSION		

Wednesday, March 8

Session	Time	Organization	Speaker	Presentation Title
4	8:00 – 8:30	EPRI	Jean Smith	Lessons Learned: Harvesting and Shipping of Zorita Materials
	8:30 – 9:00	DOE	Tom Rosseel	LWRS Program: Harvesting Lessons Learned
	9:00 – 9:30	NRC	Matthew Hiser	NRC Perspective on Harvesting Experience and Lessons Learned
	9:30 – 10:00	CRIEPI	Taku Arai	CRIEPI Research Activities with Harvested Materials
	10:00 – 10:15	BREAK		
	10:15 - 10:45	Energy Solutions	Gerry van Noordennen	Zion Harvesting Experience and Lessons Learned
	10:45 - 11:15	Dominion	Bill Zipp	Kewaunee Insights on Material Harvesting
	11:15 – 12:00	DISCUSSION		
12:00 – 1:30		LUNCH		
5	1:30 – 1:45	PNNL (for NRC)	Pradeep Ramuhalli	Technical Information Needed for Informed Harvesting Decisions
	1:45 – 2:30	DISCUSSION		
	2:30 – 3:00	Action Items and Next Steps		
	3:00 – 4:00	EPRI	Sherry Bernhoft	Closing Thoughts
		DOE	Rich Reister	
		NRC	Robert Tregoning	
ALL				

Session Expectations

- Session 1 Motivation for Harvesting
 - Perspective from panel participants on their organizations' interest in and motivation for harvesting
 - Brief (5-10 minute) presentation from each panel member followed by general discussion

Session Expectations

- Session 2 Technical Data Needs for Harvesting
 - Presenters share high-priority data needs that may be best addressed by harvesting
 - Where does harvesting hold particular value compared to other sources of technical data
 - 15-20 minute presentations followed by open discussion of technical data needs for harvesting

Session Expectations

- Session 3 Sources of Materials
 - Information on previously harvested materials and future harvesting opportunities
 - Materials located at research and vendor facilities
 - Decommissioning plants that may allow for future harvesting
 - Short 5-10 minute presentations followed by open discussion
 - Starting point for potential database of previously harvested materials and future harvesting opportunities

Session Expectations

- Session 4 Harvesting Experience: Lessons Learned and Practical Aspects
 - Improving future efforts with lessons learned from past programs
 - Pitfalls to avoid and strategies to improve likelihood of success
 - Practical perspective from non-researchers on how harvesting interfaces with the decommissioning process
 - International decommissioning and harvesting experience
 - 20-30 minute presentations followed by open discussion

Session Expectations

- Session 5 Future Harvesting Program Planning
 - Technical and logistical information needed when planning a specific harvesting program
 - Perspective from panel participants on the workshop
 - Next steps and actions from workshop
 - Potential areas of common interest for future harvesting programs
 - Brief (5-10 minute) presentation from each panel member followed by general discussion