#### Minneapolis July 8 –11, 2024

# Sunday, July 7th

4:00 PM-

**Pre-Registration** - Evening at Hotel

6:00 PM	Fie-Registration - Evening at notet					
Monday, July 8 <sup>th</sup>						
7:00 - 12:00	Registration -					
7:00 - 8:00	Breakfast -					
8:00 - 8:30	Combined CBMUG and ERIG Session Opening Welcome Comments Kickoff, Introductions & Safety Message - Ed Hudson, David King,					
8:30 - 10:00	Charlie Chapman					
	EPRI Antitrust Guidelines - Ed Hudson					
40.00	CBMUG and ERIG Keynote Speaker - Scott Sharp - Xcel Energy					
10:00 - 10:30	Morning Break -					
	Around the Room - Introductions					
10:30 - 12:00	Update to group on presentation given to NPC on CBM resources reductions. Add slide on poll results from last year Dave King					
	Combined CBMUG and ERIG - Open Panel Discussion					
	Discussion on state of the industry and Equipment Reliability					
12:00 - 1:00	Lun	ch -				
1:00 - 1:30	Track 1: Condition Based Maintenance User Group (CBMUG) -					
	EPRI U	pdates:				
	Torsional Vibration Project	MLAVA Project				
	CBM Stories	Main Reactor Pump Monitoring Guide				
	Lube App	New Lube Notes - Overview with more info in Lube session				
	Wiki Updates	Optical Laser Displacement Sensor				
	Assessment Updates	3D Scanning - call for participants				
1:30 - 2:30	Machine Alignment Workshop - Eric	Fritz - Adam Lunt l&E Technologies				
2:30 - 3:00	Afternoo					
3:00 - 5:00	Machine Alignment Workshop continued - Eric Fritz - Adam Lunt  Will go over  -Types of misalignment -What causes misalignment -How misalignment affects reliability/vibration -How to detect misalignment -How to remedy  After lunch hands on: -How to use alignment system to find and correct soft foot -How to measure and record thermal growth and dynamic movement -How to measure and fix misalignment					
5:00	Adjo	ourn				

### Minneapolis July 8 –11, 2024

Tuesday, July 9th

	CBMUG - Combined Session			
7:00 - 8:00	Breakfast			
8:00 - 8:15	Track 1: Kick-Off and Safety Message - CBMUG Chair			
8:15 - 9:15	RDI - Motion Capture Camera Info and Update - Erika Collins			
9:15 - 10:00	Equipment Anomaly Detection - Austin Crook - Curtis Wright			
10:00 - 10:30	Morning Break			
10:30 -11:15	Building a CBM Subject Matter Expert, a personal history - Ed Hudson			
11:15 - 11:55	A new CBM Tech - learnings the first year - Maya Hooks			
11:55 - Noon	Call for nominations - Vice Chair			
12:00 - 1:00	Lunch/Vendor Expo -			

	Tuesday 9 <sup>th</sup> - Afternoon - Vibration Technology Forum (VTF)			
	CBMUG Vibration Technology Forum			
1:00 - 1:30	Opening Remarks, Antitrust Guidelines, Around the Room - VTF Chair			
1:30 - 2:00	Workshop: Presentation 1: Troubleshooting Kickoff Presentation – EPRI - Matt Hinman			
2:00 - 3:00	Presentation 2: Initial Vibration Assessment - George D'Entremont			
3:00 - 3:30	Afternoon Break/Vendor Expo -			
3:30 - 4:00	Presentation 3: Troubleshooting - Step Changes - Sam Bertram			
3:30 - 4:45	Workshop Roundtable: – Troubleshooting			
	Meredith Neal			
	George D'Entremont			
	Jim Owens			
4:45 - 5:00	Wrap-up - EPRI - Matt Hinman			
5:00	Adjourn			
5:30 - 7:00	Vendor Expo and Reception			

### Minneapolis July 8 –11, 2024

Wednesday July 10th

7:00 - 8:00	Breakfast/Vendor Expo -				
	IRAF Breakout		VTF No Morning Session		Lubrication Forum Breakout
8:00-8:15	<b>Opening Remarks,</b> IRAF Chair			8:00-8:15	Opening Remarks, Lube Chair
8:15-8:45	1: Mechanical Applications of Thermography - Matt Blanchard			8:15-9:00	1: Lubrication Presentation - TBD - Sam Gill -Nawah  2: Presentation 2
8:45-9:45	2: Hydrogen Leaks: a Discussion - Frank Rihl, Steven Frank, Robert Winters, Sam Gil			9:00-10:00	Z. Fresentation Z
10:00-10:30			Morning Break/Vendor Expo -		
10:30-12:00	3: IR Windows, Cameras - Workshop - Tim Rohrer - Exiscan			10:30-11:15	3: Danger of incomplete info - Ricky Moore or Meredith Neal - TVA
				11:15-12:00	4: Compatibility Studies with Mobilgard 410 - Mark Lanius and LE Lubricants
12:00-1:00			Lunch/Vendor Expo		
	IRAF No Afternoon Session		VTF Breakout		Lubrication Breakout (continued)
		1:00 -1:15	Opening Remarks VTF Chair	1:00 -1:45	Trico - Sensei and Machine Vitals - Mike Gauthier
		1:15 - 2:15 2:15 - 3:00	4: Turbine Vibration - Mark Tarbet 5: How to Detect and	1:45-2:15	Rich Wurzbach - New instruments for oil and grease analysis
			Identify Rubs and Looseness - Steve Ciesla	2:15-3:00	ExxonMobil Update  J.Hannon, ExxonMobil
3:00 - 3:30			Afternoon Break/Vendor Expo	-	
		3:30-4:15	Piping Vibration Damping Mods - Jacob Loving	3:30-4:15 4:15-5:00	Chevron Updates Survey the Room - what EHC Fluid are
		4:15-5:00	EPRI/STRESS Update on Torsional project - George Szasz		you using? Meeting Wrap-Up Votes for Vice-Chair
5:00	Adjourn				
6:30 - 8:30	Executive Committee Dinner				

### Minneapolis July 8 –11, 2024

Thursday July 11th

7:00 - 8:00	Breakfast/Vendor Expo -				
	IRAF Breakout		VTF Breakout		Lube
8:00-8:15	Opening Remarks IRAF Chair	8:00-8:15	Opening Remarks, VTF Chair	8:00-8:45	
8:15-9:00	5: Finding Leaks with Ultrasonics in Containment - Frank Rihl	8:15-9:00	6: Cooling Tower Fan Upgrades - Jim Owens		
9:00-9:30	6: Case Histories - Snell Group, Roy Huff	9:00-9:45	7: Turbine Gap Voltage Increasing - Don Rhoda, Mandy Dunning.		
9:30-10:00	7: Power Intelligence - Robin Thompson	9:45-10:00	Discussion and Nominations for Vice-Chair		
10:00-10:30			Morning Break / Vendor Expo		
10:30-11:30	8: NFPA 70B Updates & Electrical Fault	10:30-11:00	8: VVA - EPRI Resources - Frank Rihl		
	Detection Utilizing Airborne Ultrasound	11:00-11:30	9: Cooling Tower Pump Vibration - Don Stewart		
	Adrian Messer - SDT Meeting Wrap-Up	11:30-12:00	Meeting Wrap-up Votes for Vice Chair		
11:30-12:00	Votes for Vice Chair		votes for vice chair		
12:00-1:00	Lunch/Vendor Expo				
			Main CBMUG ned CBMUG and ERIG		
1:00-2:00	Doble Presentation - Dr. Tony McGrail				
2:00 - 2:30	Afternoon Break/Vendor Expo				
2:30-3:00	Breakout Reports from Forum Chairs and EPRI Leads Meeting Wrap-up (Pros/Cons) Vote for Vice-Chair				
4:15 - 5:00	Open Floor - Comments Discussion of next meeting location				
5:00	Adjourn				