



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 28, 2020

MEMORANDUM TO: Kerri A. Kavanagh, Chief
Quality Assurance and Vendor Inspection Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

FROM: Dong H. Park, Reactor Operations Engineer /**RA**/
Quality Assurance and Vendor Inspection Branch
Division of Reactor Oversight
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE NUCLEAR REGULATORY COMMISSION
WORKSHOP ON VENDOR OVERSIGHT

From June 23 to June 25, 2020, the Office of Nuclear Reactor Regulation (NRR), Division of Reactor Oversight (DRO), hosted the Nuclear Regulatory Commission (NRC) Workshop on Vendor Oversight. Due to concerns regarding COVID-19 and the importance of social distancing, the NRC held its Seventh Workshop on Vendor Oversight virtually. In order to maximize public participation, the workshop was offered over the course of three days. The NRC Workshop on Vendor Oversight began with opening remarks by Ms. Kerri Kavanagh including a keynote address by the NRR Office Director, Mr. Ho Nieh, as well as presentations by members of the NRC staff, Mr. Greg Galletti, Mr. Paul Prescott, Mr. Aaron Armstrong, Ms. Diane Sieracki, and Mr. Yamir Castillo-Diaz. Presentations were also given by Ms. Jenny Margaros from the Department of Homeland Security, Mr. Stuart Allen from the Office for Nuclear Regulation, United Kingdom, and nuclear vendors to include Mr. Randall Kurtz from Sargent & Lundy, Mr. Tracy Bolt from Paragon Energy Solutions, Mr. Marc Tannenbaum from Electric Power Research Institute (EPRI), Mr. John Simmons from Luminant, Mr. Joshua Grimm from NuSource, and Mr. Jay Gardiner from Curtiss Wright Electro-Mechanical Division (EMD).

The Workshop on Vendor Oversight included presentations on such issues as oversight of the supply chain under exigent conditions, industry guidance for commercial-grade dedication (CGD), Title 10 of the Code of Federal Regulations (10 CFR) Part 21 requirements and new guidance, Safety Culture and the Safety Conscious Work Environment (SCWE), critical manufacturing sector and qualifying a supplier using ASME Section III. The audience included approximately 500 attendees representing companies and organizations from 15 countries including vendors, industry groups, government regulatory agencies, and both foreign and domestic utilities.

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A list of registered attendees is provided in Enclosure 1. The list of speakers is provided in Enclosure 2. All presentations are available in the NRC's Agencywide Documents Access and Management System (ADAMS) at accession number ML20192A057. The presentations are also available on the NRC public website at <http://www.nrc.gov/reactors/new-reactors/oversight/quality-assurance/vendor-oversight.html>.

Day 1: June 23, 2020

Ms. Kerri Kavanagh, Chief, Quality Assurance and Vendor Inspection Branch (IQVB), gave opening remarks, and introduced the keynote speaker, Mr. Ho Nieh, Director, Office of Nuclear Reactor Regulation (NRR). Ms. Kavanagh welcomed the attendees to the 2020 NRC Workshop on Vendor Oversight and provided remarks about the new pandemic environment with the licensee's oversight of vendors and the NRC's inspection of vendors. A WebEx session incorporating the telephone bridge-line was used for participation of all attendees.

Mr. Ho K. Nieh, Director of NRR, provided the keynote speech "Vendor Oversight Workshop Opening Address" (ADAMS Accession No. ML20175A650) to the attendees about the NRC's transformation initiative and the merger of the Office of New Reactors and NRR. He provided remarks regarding the state of the operating fleet to information about new and advanced reactors. He discussed the US nuclear power plant license expiration dates and the key considerations for long term operation being safety, reliability and economics. He illustrated that extending technology availability is only possible if you have control over your supply chain. Mr. Nieh provided an overview of important activities in NRR, including the Vogtle Units 3 & 4 AP1000 construction project and the NuScale design certification. His discussion included a look at the new reality for vendor oversight. He encouraged vendor workshop discussions and urged vendors to embrace the overall shared goal of nuclear safety and security.

Mr. Greg Galletti, Senior Reactor Operations Engineer, IQVB, and Mr. Paul Prescott, Senior Reactor Operations Engineer, IQVB, delivered the presentation "Oversight of the Supply Chain Under Exigent Conditions: Supplier Audits/Surveys and Remote Source Verification" (ADAMS Accession No. ML20170A613). Mr. Galletti focused his presentation on Supplier Audits and Surveys. NRC licensees have historically performed supplier audits/surveys on a triennial basis as a method to meet certain requirements of Appendix B to 10 CFR Part 50 activities. Typically, a 90-day grace period is allowed for unforeseen administrative issues. Mr. Galletti discussed "Exigent" conditions during pandemic circumstances that may prevent NRC licensees and suppliers from performing scheduled supplier audits/surveys within the triennial period plus the 90-day grace period. He updated attendees on IQVB's efforts to update NRC-approved Licensee Quality Assurance Program Descriptions (QAPD) and NRC-accepted Supplier QA programs to address the current grace period limitations related to supplier audits/surveys resulting from "Exigent" conditions. Mr. Prescott focused his presentation on Remote Source Verification and the EPRI led effort with industry stakeholders to develop guidance for conducting remote source verification. He discussed NRC's review of Technical Report, "Remote Source Verification During a Pandemic or Similar State of Emergency: Screening Criteria and Process Guidance" (EPRI 3002019436) and a secondary path to expedite the industry's use of this alternative by approval of Columbia Generating Station's proposed change to its Operational Quality Assurance Program Description (ADAMS Accession No. ML20139A225).

Mr. Stuart Allen, Office for Nuclear Regulation, United Kingdom, Vendor Inspection Cooperation Working Group (VICWG) Chair, delivered the presentation "Regulation of the Civil Nuclear Industry Supply Chain & International Cooperation through the Multinational Design Evaluation

Program (MDEP) VICWG” (ADAMS Accession No. ML20170A612). Mr. Allen provide a background of the VICWG which was approved by the MDEP policy group in March 2008. He discussed the benefits and challenges of multinational inspections and incorporating lessons from the Coronavirus pandemic.

Randall Kurtz, Vice President & QA Director, Sargent & Lundy, delivered a presentation on "NRC Inspection vs NUPIC Audit: Comparing Preparation, Performance, and Post-Inspection/Audit Activities from a Vendor's Perspective" (ADAMS Accession No. ML20170A608). Mr. Kurtz provided information on the differences between NRC Inspections and NUPIC Audits through the preparation, performance and post-inspection/audit phases.

Ms. Kavanagh provided the day's closing remarks and opened the floor for questions to be answered by the presenters. She thanked all the attendees on a successful day 1 of the workshop.

Day 2: June 24, 2020

Ms. Kavanagh welcomed the attendees to day 2 of the 2020 NRC Vendor Workshop and introduced the next presenter.

Ms. Diane Sieracki, Senior Safety Culture Program Manager, Concerns Resolution Branch, Office of Enforcement, delivered the presentation on "The Nuclear Regulatory Commission's Approach to Safety Culture and the Safety Conscious Work Environment" (ADAMS Accession No. ML20170A610). The presentation provided a discussion of safety culture and SCWE. Ms. Sieracki mentioned the existence of the Safety Culture Educational Resource Workbook and the NRC public website. She reminded everyone that NRC's Safety Culture Policy Statement states safety culture expectation, not a regulatory requirement. She covered past safety culture issues and on-going international safety culture activities.

Mr. Prescott and Mr. Aaron Armstrong, Reactor Operations Engineer, IQVB, delivered the presentation "Part 21: Requirements & New Guidance (RG 1.234 & NEI 14-09) and Applying Appendix B & Part 21 - Augmented Quality Along with Risk and Procurement Requirements" (ADAMS Accession No. ML20170B278). Mr. Prescott covered Part 21 requirements and new guidance in RG 1.234 and NEI 14-09. He discussed that the development of NEI 14-09, "Guidelines for Implementation of 10 CFR Part 21 Reporting of Defects and Noncompliance," Revision 1, dated February 2016 (ADAMS Accession No. ML14085A084) and Regulatory Guide (RG) 1.234, "Evaluating Deviations and Reporting Defects and Noncompliance Under 10 CFR Part 21, Revision 0, dated April 2018 (ADAMS Accession No. ML17338A072) was the result of collaborative efforts. Mr. Armstrong focused on applying Appendix B & Part 21 under augmented quality, along with risk and procurement requirements. He covered definitions and terms in 10 CFR 50.69 and the Federal Register (FR), including alternative treatment requirements for Risk-Informed Safety Class (RISC) categories.

Mr. Tracy Bolt, Chief Nuclear Officer, Paragon Energy Solutions, delivered the presentation "Commercial Grade Dedication: How to Implement the New EPRI Guidance RG 1.164 & EPRI 3002002982" (ADAMS Accession No. ML20170A604). Mr. Bolt's presentations discussed how to implement the new EPRI guidance (Revision 1 to EPRI NP-5652 and TR-102260) on CGD and provided examples of how and when to implement the guidance for CGD on an item or service. He discussed how EPRI guidance is a comprehensive collection of industry information covering dedication. Utilizing the guidance provides consistency in the format and provide the users with a better understanding of how dedication is performed. Using the new industry

guidance with RG 1.164, provides the best chance of obtaining an acceptance of a new dedication plan from the customer. He recommended that the format in the guidance provides most comprehensive way to document the engineering evaluations and judgement that is the primary part of dedication.

Mr. Marc Tannenbaum, EPRI, and Mr. John Simmons, Luminant Power delivered the presentation "Controlling a Commercial Item Under a Quality Assurance Program Complying with 10 CFR 50, Appendix B" (ADAMS Accession No. ML20170A609). The presentation discussed CGD as an alternative acceptance method and why CGD was developed. CGD was briefly discussed to highlight how a commercial item controlled by Appendix B to 10 CFR Part 50 was the original option to producing a basic component without dedication. The presentation used a taper pin and a ball valve as examples for developing acceptance measures to meet design requirements using Appendix B to 10 CFR Part 50.

Ms. Kavanagh provided the day's closing remarks and opened the floor for questions to be answered by the panelists. She thanked all the attendees on a successful day 2 of the workshop.

Day 3: June 25, 2020

Ms. Kavanagh welcomed the attendees to the final day of the 2020 NRC Vendor Workshop and introduced the next presenter.

Ms. Jenny Margaros, Chief of the Critical Manufacturing Section, Cybersecurity and Infrastructure Security Agency (CISA), Department of Homeland Security, delivered the presentation "Critical Manufacturing Sector - Specific Agency - Overview, Resources, and Activities" (ADAMS Accession No. ML20170A605). Ms. Margaros provided the general focus of the Critical Manufacturing Sector and a general overview of its core components. She emphasized the importance of the critical manufacturing sector partnership with the Government Coordinating Council and the Sector Coordinating Council. She also covered available resources, as well as annual national-level events that are available to the supply chain.

Mr. Yamir Diaz-Castillo, Reactor Operations Engineer, IQVB, delivered the presentation "Procurement and Auditing Requirements: Compliance with Appendix B to 10 CFR Part 50 and 10 CFR Part 21 When Procuring ASME Section III Components" (ADAMS Accession No. ML20170A614). Mr. Diaz-Castillo covered the background and regulations behind procuring ASME Section III components while complying to Appendix B to 10 CFR Part 50 and 10 CFR Part 21 while discussing procurement and auditing requirements. He mentioned NRC's recognition of ASME's accreditation program documented in Information Notice (IN) 86-21, and a discussion of NRC regulation included Criterion IV, "Procurement Document Control," of Appendix B to 10 CFR Part 50 and Criterion VII, "Control of Purchased Material, Equipment, and Services," of Appendix B to 10 CFR Part 50. He emphasized that both 10 CFR Part 21 and Appendix B to 10 CFR Part 50 need to be specified when procuring from domestic or international suppliers who are supplying basic components.

Mr. Joshua Grimm, Quality Assurance Manager, NuSource, delivered the presentation "Commercial Grade Dedication and Utilization of Unqualified Source Material" (ADAMS Accession No. ML20170A607). Mr. Grimm discussed the topic by comparing commercial grade dedication versus utilization of unqualified source material. He covered definitions from 2019 Edition of ASME Section III, NCA-9200 and 10 CFR Part 21 to include difference between

material, source material, qualified source material, and unqualified source material. The presentation included an example where utilization of unqualified source material was performed but resulted in an item that is not safety-related when a Material Organization did not accept the reporting requirements in 10 CFR Part 21. Mr. Grimm conclusion included the fact vendors may have an ASME Section III quality program (NCA-4000), but that this does not automatically mean the vendor is a safety-related supplier in the U.S. nuclear industry.

Mr. Jay Gardiner, Senior QA Manager, Curtiss Wright Electro-Mechanical Division (EMD) delivered the presentation "How to Qualify a Supplier using ASME Section III" (ADAMS Accession No. ML20170A611). Mr. Gardiner started with definition from ASME Subsection NCA-9100 and explained the difference between a qualified and a certified Material Organization. He discussed the difference between a survey and an audit with respect to initial qualification and requalification. The discussion delved into responsibility for supplier audit frequency to be conducted at least triennially and to conduct an annual audit or an annual performance assessment between triennial audits. Mr. Gardiner focused on requirements in ASME Code, Section III, Subsection NCA covering areas of qualification and performance assessments. He concluded with other considerations that apply to the nuclear power facility in the United States which included NRC regulations from Appendix B to 10 CFR Part 50 and 10 CFR Part 21.

Ms. Kavanagh provided closing remarks and opened the floor for questions to be answered by the panelists. Several questions were received and answered during this session.

Summary and Conclusions

Answers to questions led to discussion after each session throughout the workshop. Currently, the NRC staff is not planning to provide additional written responses to these answered questions on the public website. Interested parties who would like further clarification on any of the topics discussed during the workshop are encouraged to utilize the Frequently Asked Questions section of the NRC public website.

To enhance the next vendor workshop, the NRC solicited suggestions and feedback from the attendees. The consensus was that the attendees appreciated the NRC being proactive in explaining its regulations and expectations for nuclear vendors. In addition, the attendees expressed interest in the NRC's continued conduct of similar outreach activities and suggested that the NRC continue to conduct a virtual workshop in the years between in-person workshops. The Quality Assurance and Vendor Inspection Branch has set up a working group to explore options in conducting virtual workshops.

In summary, the workshop brought together regulated utilities, government agencies, nuclear vendors, and other interested stakeholders to discuss such issues as oversight of the supply chain under exigent conditions, industry guidance for CGD, 10 CFR Part 21 requirements and new guidance, Safety Culture and the SCWE, critical manufacturing sector and qualifying a supplier using ASME Section III.

Enclosures:

1. List of Attendees
2. List of Speakers

SUBJECT: SUMMARY OF THE NUCLEAR REGULATORY COMMISSION WORKSHOP ON
VENDOR OVERSIGHT Dated: July 28, 2020

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*via e-mail

NRR-106

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DATE	07/21/20	07/13/20	07/21/20	07/28/20

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NRC Workshop on Vendor Oversight
June 23-25, 2020

Registered Attendee List

First Name	Last Name	Affiliation
Tyler	Aber	Westinghouse Electric Company
Gilbert	Acosta	Ultra Electronics Energy
Daniel	Adams	APS
Jasper	Adams	Duke Energy
Alfredo	Aguillon	AMETEK IS BU
Yalcin	Akman	Canadian Nuclear Laboratories
Fahad	Al Qasim	Emirates Nuclear Energy Corporation
Hussain	AlJaberi	Nawah Energy
Stuart	Allen	Office of Nuclear Regulation
Carmen	Alonso	GEH
Easa	Alshehhi	NAWAH Energy
Ankur	Amin	Emirates Nuclear Energy Corporation
Aaron	Armstrong	US NRC
Brett	Arnett	Emerson
Amy	Aughtman	Southern Nuclear Operating Co.
William	Avery	Energy Harbor Nuclear
Roland	Backhaus	Morgan, Lewis & Bockius, LLP
Scott	Baker	Curtiss-Wright Scientech
Alex	Ball	Pennatronics Corp.
Veronica	Ballew	Nuclear Waste Partnership
Faith	Banks	NextEra Energy
Allan	Barker	US NRC
Orie	Barnes	Transco Products Inc
Richard	Barrow	Aecon-Wachs
Rebecca	Baumgartner	Lincoln Structural Solutions
Jerry	Beasley	OPPD
Mohamed	Belal	UNICOM GULF GENERAL TRADING L.L.C
Archie	Bell	Otek Corporation
Dennis	Bence	APS
Gary	Benda	AVANTech
Sarah	Berardini	Archon Engineering
Roland	Bergeron	Southern Nuclear
Sham	Beri	Portland General Electric
Scott	Berman	Ultra Electronics, Energy
Scott	Berman	Ultra Electronics
Luis	Betancourt	US NRC
Alnoor	Bhaloo	Nawah Energy Company
Bobby	Bicknell	New Mexico Environment Department

Sarah	Billau	DTE
Kyle	Blan	Crane Nuclear, Inc.
Peter	Blattner	KTA-Tator, Inc.
Tracy	Bolt	Paragon
Brad	Boothe	Acuity Quality Assurance
Scott	Borland	General Public
Jim	Borst	Specialty Product Technologies - Namco Controls
Spencer	Bowen	Integrated Power Services
Andrea	Boynton	Duke Energy
Steven	Braun	BNL Industries, Inc.
Juan Luis	Bravo Morales	Tecnatom
Jason	Breen	Georgia Power
David	Breneman	Dominion Energy
Josh	Brewer	Turner Industries Group, LLC
Caleb	Brewer	Turner Industries Group, LLC
Eugene	Brezhniev	RPC Radics LLC
Thomas	Bright	Day & Zimmermann
Linda Chase	Brissey	PCI Energy Services, LLC
Lisa	Brown	Exelon Generation
Jason	Brown	Automatic Valve Corp.
Clayton	Brown	Curtiss-Wright
Lisa	Brown	Exelon
Darrin	Brown	Curtiss Wright Nuclear Division
Kevin	Buckley	Exelon
Rich	Buechler	Southern Nuclear Operating Co.
Paul	Burgess	ValvTechnologies, Inc
Douglas	Burget	Westinghouse Electric Company
Allyson	Byk	ASME
Michael	Carter	Evergy
Robert	Carvel	APS
Leslie	Casey	Jensen Hughes, Inc
Leslie	Casey	Jensen Hughes, Inc
Teresa	Casner	Tennessee Valley Authority
Terry	Casteel	Toshiba Energy Systems & Solutions Corporation
Jorge	Castillo	Turner Industries Group, LLC
Glenn	Catalano	Turner Industries Group, LLC
Sunny	Catalano	Turner Industries Group, LLC
Patrick	Center	Ruhrpumpen, Inc.
Rick	Chester	Nuclear Procurement Solutions
Jeff	Chivers	Emerson - Rosemount Nuclear
Dibu	Chowdhury	HydroAire Service Inc.
Sorin	Ciobanu	Framatome Canada Ltd.
Alison	Clark	Emerson
Steven	Cline	Burns & McDonnell
Jacob	Clos	Fisher Controls International, LLC

Lonnie	Cochran	Curtiss Wright- LMT Nuclear Division
David	Colegrove	Reuter-Stokes, LLC
William	Coll	Energy Harbor Nuclear
Thomas	Collins	Cives Steel
Kaegy	Combs	TEAM
Brian	Condon	Transco Products Inc
Brooke	Conrad	Worthington Industries
Ron	Cook	Emerson
Steven	Cook	Sulzer Pumps
Doug	Corbett	Idaho Laboratories Corporation
Mark	Coren	Duke Energy
Chris	Covan	Curtiss-Wright
Christopher	Cruz	GE Hitachi Nuclear Energy
Lewis	Csedrik	Morgan, Lewis & Bockius, LLP
Vaughn	Curcio	Holtec International
Timothy	Czuba	Entergy
Donald	Dalton	Orano Federal Services
Ken	Dean	Brafe Engineering Ltd.
Bob	Decker	Weldstar Company
Dominic	Dedolph	Fairbanks Morse, LLC
Paul	Deeds	PCI Energy Services, LLC
Jeff	Deeds	EnergySolutions
Ed	Deeny	Laboratory Testing Inc.
Jeffrey	DeFebo	PSEG Nuclear, LLC
John	DeKleine	Axion Technical Services, LLC
Rene	Delaney	Nuclear Quality Oversight
Sandra	Delvin	Happy Associates, LLC
John	Detandt	James C. White Company
Thomas	Devincentis	Archon Engineering
Victor	Diaz	New Mexico Environment Department
Yamir	Diaz-Castillo	US NRC
Marion	Dietrich	ILD, Inc.
Chris	Dimmich	Duke Energy
Michael	DiPronio	Emerson Automation
Melanie	Dirks	SOR Inc.
Sarah	DiTommaso	Westinghouse Electric Company
Robert	Dittmer	South Texas Project Nuclear Operating Company
George	Donaldson	Urenco USA
Joseph	Drago	WorkPlace Cornerstone
Michael	Dunkelberger	MPR
Lakeisha	Eaton	MPR
Shannon	Echols	Mackson Nuclear, LLC
Charles	Elias	Pennatronics Corp.
Gayle	Elliott	Framatome Inc.
Kevin	Ellison	Trust Manufacturing

Michelle	Eley	Flowserve
Jude	Elwood	MetalTek International
Judith	Elwood	MetalTek International
Joe	Emerson	Preferred Metal Technologies
Joe	Emerson	Preferred Metal Technologies
David	Engle	Exelon
Larry	Erin	Lockheed Martin
Loren	Ernst	Duke Energy
David	Ethington	NuScale Power
Jonathan	Faia	Laboratory Testing Inc.
Michelle	Felicetti	Clark Testing
Marc	Ferdas	US NRC
Steve	Ferrar	Curtiss-Wright
Keith	Floyd	Continental Field Systems, Inc.
Terence	Flynn	Teikoku USA
Dave	Foltz	Curtiss-Wright
Tim	Franchuk	Curtiss Wright
Tim	Frawley	STPNOC
William	Freebairn	S&P Global Platts
Jose	Freire	APS
Masashi	Fukusawa	IHI Corporation
Frank	Furfari	NOVA MACHINE PRODUCTS
Mike	Fussell	Pacific Gas & Electric
Brad	Gacke	Sacramento Municipal Utility District
Dan	Gallagher	Energy Harbor
Greg	Galletti	US NRC
Paul	Garcia	Framatome Inc.
Alfredo	Garcia	Sargent & Lundy
Jay	Gardiner	Curtiss-Wright EMD
Jim	Garrison	United Controls International
Joe	Ghiarda	Curtiss-Wright Nuclear Division - AP Services
Ghassan	Ghrear	Prysmian Group
Michael	Gilman	AECOM
Brad	Gladson	Sulzer
Thomas "Trey"	Glascocock	Turner Industries Group, LLC
James	Gleason	GLSEQ
Christopher	Gleason	GLSEQ LLC
Patrick	Gleason	GLSEQ, LLC
Eugene	Gleason	GLSEQ
Christina	Gonzalez	Carboline
Benjamin	Gordon	Ametek - SCI
Don	Graham	DP Engineering
Brad	Greene	NAC Intl
Roy	Gregan	NB Power - PLNGS

Stanley	Griffin	GE-Hitachi Nuclear Energy
Joshua	Grimm	NuSource, LLC
Vincent	Grosso	MSTS
Faezeh	Haddad	TE-Connectivity
Jason	Haglund	Teledyne LeCroy Test Services
John	Hall	Ultra Electronics
Roy	Haller	Prysmian Group
Jessica	Hamill	TVA
Brian	Hamilton	General Public
Joyce	Hamman	Crane Nuclear, Inc.
Karen	Hammond	NextEra Energy
Dustin	Hansrote	SHINE Medical Technologies, Inc.
Christopher	Harper	Master Machine Inc.
Matthew	Harris	Curtiss Wright-NETCO
Joshua	Hart	Jensen Hughes, Inc.
Mark	Harvey	Framatome
Debbie	Haslam	Red Wolf Associates
Gina	Haub	STPNOC
Jermaine	Heath	US NRC
Michael	Hedden	Dominion Energy
Brian	Hendel	Energy Northwest
Gerri	Hercik	American Electric Power
Salvador	Hernandez	Hydroinc
James	Hesch	New Mexico Environment Department
Thomas	Hipschman	US NRC
Greg	Hodel	Curtiss-Wright
Catherine	Hoeger	Emerson Automation Solution
Christina	Holsomback	Emerson
Tracy	Honeycutt	Southern Nuclear Company
Matthew	Hoobler	Mirion Technologies
Thomas	Horan	Hilti, Inc.
Adrienne	Hudson	TVA
Kendal	Hudson	Engine Systems, Inc.
Thomas	Huerter	SHINE Medical Technologies
Randy	Hugenroth	OPPD
Steven	Hughes	Sulzer Pumps (US) Inc.
Amie	Humphrey Facendola	Alden Research Laboratory
Dan	Hunt	Curtiss Wright Nuclear -Scientech
Brook	Hunter	Master Builders Solution / BASF
Michael	Huss	SHINE Medical Technologies, Inc.
Chris	Isert	AAF International
Richard	Ivey	NWP
Fawaz	Jabali	General Atomics Electromagnetic Systems Group
Jose Carlos	Jadraque	Tecnatom

Michael	Janus	Stone & Webster L.L.C
Michael	Jasurda	Arizona Public Service
Jacob	Jenek	NPPD/CNS
Dongseop	Jeon	IAEA
Darion	Jeralds	GE - Hitachi
Rajan	John	Exelon
Scott	Jones	Fisher Nuclear Control Valves
James	Jones	Entergy
Duska	Jovicic	NEK
Justin	Justin	NEI
Jeffrey	Kaar	Pacific Gas & Electric
Ron	Kaer	Day & Zimmermann
Stephen	Katsouros	NEIL Services
Kerri	Kavanagh	US NRC
Sharon	Kawahara	IMI CCI
Jim	Keck	TECO-Westinghouse Motor Co
Andrea	Keim	US NRC
Stacy	Keipper	James C. White Company
Rachel	Kelley Czuba	Sonic Systems International, Inc
Nick	Kerr	Engine Systems, Inc.
David	Key	Hexagon
John	Kickhofel	Apollo Plus GmbH
Caleb	Killian	Diversified Metal Products, Inc.
Jeongsun	Kim	Doosan Heavy Industries & Construction
Roman	Kmicikewycz	Major Tool & Machine, Inc.
Walter	Knox	CMC
Yutaka	Kodama	Doosan Heavy Industries & Construction
Paul	Kovach	NUCON International, Inc.
Terry	Krause	Burns & McDonnell
Lillian	Kruzsely	The Senate
Florian	Kuchera	Curtiss-Wright EST Group
Ryota	Kudo	Toshiba Energy Systems & Solutions Corporation
Christopher	Kulwicki	Kinetix Quality Services, LLC
Martin	Kurr	Fairbanks Morse, LLC
Randall	Kurtz	Sargent & Lundy
Albert	Lafleur	NextEra Energy
Richard	Lamboi	Texas Department of State Health Services
Dennis	Langston	WCNOC
Olivier	Lareynie	US NRC
John	Larson	Nebraska Public Power District
Cynthia	Larson	American Electric Power
Joseph	Laryea	SGS North America, Inc.
Lenny	Laskowski	Structural Integrity Associates, Inc
Jamey	Laughlin	Framatome Inc.
Yiu	Law	US NRC

Susan	Leary	Pawling Engineered Products
Chris	Lee	Canadian Nuclear Laboratories
Jessica	Lemieux	EPRI
John	Lesh	Anvil International, LLC
Orie	Levy	ONDM - Operational Nuclear Defense Model
Ashton	Lewey	Tennessee Valley Authority
Tom	Lewnard	Prysmian Group
Wen	Li	Whiting Corp
Mike	Lim	Curtiss-Wright Nuclear Division, Scientech
Shawn	Line	Premier Technology, Inc.
George	Lipscomb	Goldwing Services
Chris	Lloyd	Orano Federal Services
Sarah	Lopas	US NRC
Maria Isabel	Lopez Cruzado	Tecnatom
Debra	Loudenslager	Duke Energy - Corporate
Lori	Lubic	Westinghouse Electric Company
Ken	Lucas	Canadian Nuclear Laboratories
Santiago	Lucas	Tecnatom
Andrew	Lukensmeyer	Emerson/Fisher Flow Controls
Stephanie	Lund	Ultra Electronics, Energy
Nikki	Mace	Sonic Systems International, Inc
Gerard	Machalick	Talen Energy
Paul	Macuiba	Exelon Generation
Zach	Mailahn	Emerson
Alka	Malur	HydroAire Service Inc.
Ignacio	Marcelles Ramirez	Tecnatom, s.a.
Jenny	Margaros	DHS/CISA/Stakeholder Engagement Division
Daniel	Martin Sanchez	Tecnatom
Juan	Martinez Robustillo	Tecnatom
Lisa	Matis	Tetra Tech
Michael	Mayer	RIZZO International
Herbert	Mayes	Entergy
Earl	Mayhorn	Ameren
Shannon	McArdle	NEIL Services
Rebecca	McClellan	Diversified Metal Products, Inc.
Mary	McCormick	Maryland Dept. of Environment
Michelle	McDonald	Emerson
Kailyn	McGillicuddy	General Public
Paul	McGinley	Morehouse Instrument Company
Brett	McGlone	Swagelok Company
Richard	McIntyre	None
James	McIntyre	Sargent & Lundy
Catherine	McKnight	Sargent & Lundy
Zenas	McLucas	ASME
Wilbert	Meadows	Flowserve-Raleigh

Lisa	Meagher	Prysmian Group General Cable
Denise	Meredith	Conco Services LLC
Nick	Merrigan	Curtiss-Wright
Brian	Mervak	Mervak Applied Nuclear Consulting, LLC
Ian	Mihalo	Pennatronics Corp.
Alex	Millar	Mirion Technologies (IST Canada) Inc
Chris	Miller	US NRC
Roger	Mills	PSEG Nuclear, LLC
Brenda	Mills	Entergy
Kenneth	Milton	NB Power Point Lepreau Nuclear Generating Station
Gary	Mingo	Southern Nuclear Company
Morris	Mitchell	Mitsubishi Heavy Industry
Gianfranco	Moi	Bechtel Power Corporation
Carolyn	Monaco	NuScale Power
Victor	Montalbano	Framatome
Daryl	Montie	Arsenal Consulting, Inc
Samuel	Moore	Joseph Oat Corporation
Norm	Moreau	Theseus Professional Services, LLC
Nuno	Moreira	SGS North America
Kevin	Morris	Ellis & Watts Global Industries, Inc.
Brenda	Morse	National Technical Systems
Tim	Moul	Ultra Electronics, Energy
Adam	Mrugacz	Sargent & Lundy
Thomas	Mudge	MQA Partners LLC
Jessica	Muench	General Cable/Prysmian Group
David	Murphy	RSCC Wire & Cable
Andrew	Nack	SNC Lavalin
Rebekah	Needham	Ametek Solidstate Controls
Glenn	Neises	Burns & McDonnell
David	Nenstiel	DuBose National Energy Services
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Ky	Nguyen	HydroAire Service Inc.
Bryan	Nichols	Tioga Pipe Inc.
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Sharon	Northcutt	Teledyne Brown Engineering
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Daniel	Ortiz	New Mexico Environment Department
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Stephen	Packard	Westinghouse Electric Company
Divya	Paidy	United Controls International

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Raju	Patel	US NRC
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Robert	Paton	Energy Steel
Cassandra	Patterson	Entergy
Leon	Payne	NB Power
Brock	Peltier	Holtec International
William	Peterson	BWXT NSG
Jimmy	Pettyjohn	SHINE Medical
Robert	Phillips	Westinghouse Electric Company
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Paul	Prescott	US NRC
Paul	Pridemore	Master Builders
Gina	Proctor	Prysmian Group General Cable
Greg	Przyjemski	Talen Energy
Edward	Pugh	Enercon Services, Inc.
Pekka	Pyy	IAEA
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Paul	Ragan	GE-Hitachi
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Richard	Rasmussen	RA Rasmussen, LLC
Sheila	Ray	US NRC
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Scott	Rennick	Curtiss Wright Steam and Air Solutions
Irene	Reyner	Ultra Electronics
Randy	Reynolds	Switchgear Solutions, Inc.
Tamer	Rezk	Bechtel Power Corporation
Doug	Rich	Engine Systems, Inc.
Fabiola	Rico	Kalsi Engineering, Inc.
Joe	Robbins	Consolidated Power Supply
Dan	Roberts	Engine Systems, Inc.
Jessi	Roberts	Electric Motor & Contracting
Guy	Robinson	Entergy Nuclear
James	Robinson	BWX Technologies
Josh	Rogers	Rotating Equipment Repair Inc
Timothy	Rollason-Reese	Westinghouse Electric Company
Victor	Romano	ABB EPDS Service

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William	Ross	EnerSys
Diona	Russell	DTE Energy Fermi 2 Nuclear Power Plant
Jaclyn	Russell	WM Symposia
Jason	Russell	Emerson Automation Solutions
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Ethan	Salsbury	AMETEK Solidstate Controls
Nicholas	Savvoir	US NRC
Guy	Scaggs	Emerson
Scott	Schannuth	Tennessee Valley Authority
Michelle	Schardt	DTE Energy Fermi 2 Nuclear Power Plant
Cameron	Schmidt	Premier Technology, Inc.
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Michael	Schuster	Orano Federal Services
Laura	Schwartz	International Technology and Trade Associates (ITTA), Inc.
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Russell	Simano	Flexitallic US
John	Simmons	Luminant
Roger	Sims	Jensen Hughes
Brian	Sink	Emerson Automation Solution
Joe	Sinodis	Red Wolf Associates
Jason	Sintic	Westinghouse Electric Company
Carlos	Sisco	Winston & Strawn LLP
Dennis	Snow	Xylem, Inc.
Mark	Soler	Holtec International
David	Soward	Xcel Energy
Michael	Spahn	MPR
Amy	St. john	Framatome
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Carol	Steptoe	Flexitallic US
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Mark	Svajger	Fluke Biomedical
Richard	Swanson	Luminant - Comanche Peak
Robert	Sweeney	ibeX - Energy Solutions
Anthony	Sykes	TECO-Westinghouse Motor Co
Les	Taggart	Paragon Energy Solutions
Jon	Talbot	Tennessee Valley Authority
Burt	Tanaka	FLUID COMPONENTS INTERNATIONAL LLC
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Paul	Thompson	Garlock
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Julie	Thompson	Sulzer Pumps
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Olimpio	Torres	Urenco USA
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Rachel	Vaucher	ASN
Doug	Vickery	DuBose National Energy Services
Robert	Villegas	EPRI
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Troy	Wacker	STPNOC
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MarieLuise	Ward	Kalsi Engineering inc
Chris	Warren	South Texas Project Nuclear Operating Company
Gene	Wasson	Wasson Quality Consulting, LLC
Ricky	Way	EPRI
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Michael	Wedemeyer	Fisher Controls International, LLC
Jason	Weekley	Turner Industries Group, LLC
Nathan	Weigle	BWXT NSG
Filomena	Weiner	Preferred Engineering

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Troy	Wetzel	American Crane & Equipment Corp
Bruce	Wheeler	Quality Management Services, LLC
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Carrie	Wilson	Duke Energy
Christa	Wood	Day & Zimmermann
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Yoshio	Yoshinaga	IHI Corporation
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Frank	Yurich	American Crane & Equipment Corporation
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Jill	Zenner	Sargent & Lundy
Deanna	Zhang	US NRC
Jun	Zhao	RITEPRO Corporation
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Dan	Zuelke	Emerson
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Aaron Armstrong	U.S. Nuclear Regulatory Commission
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Yamir Castillo-Diaz	U.S. Nuclear Regulatory Commission
Jenny Margaros	Department of Homeland Security
Stuart Allen	Office for Nuclear Regulation, United Kingdom
Randall Kurtz	Sargent & Lundy
Tracy Bolt	Paragon
Marc Tannenbaum	Electric Power Research Institute
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Joshua Grimm	NuSource
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