

POOLED INVENTORY MANAGEMENT



Program
Report
2023



POOLED INVENTORY MANAGEMENT

On the Cover: A Safety-Related Emergency Diesel, manufactured by EMD, is being extracted from the closed Fort Calhoun Station. Project management was performed by the PIM organization, with equipment access and movement by Barnhart Crane and Rigging. The EMD engine was purchased by PEICo as the replacement for the PIM engine that was withdrawn from the PIM inventory by Nine Mile Point 2 (NMP2) due to the catastrophic failure of NMP2's Emergency Diesel.

The PIM engine was installed, tested, and placed in service at NMP2 15 days after the NMP2 failure event, with a cost savings to NMP2 of approximately \$18,000,000.

Once extracted, the Fort Calhoun diesel was sent to the OEM for full refurbishment and placed into the PIM inventory to ensure an EMD emergency diesel is ready for withdrawal should any Participant on this Equipment Committee (EC) incur a similar challenge.

In addition to this EMD engine, its sister engine, along with both generators, exciters, and various other components were purchased, ECs formed, and placed into the PIM Program. See page 49 for more details regarding the NMP2 withdrawal.

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Executive Summary

Since 1980 the Pooled Inventory Management (PIM) program has been serving the U.S. nuclear industry by ensuring that critical plant equipment is available and ready for plant installation. PIM provides a means for sites to jointly share the costs to procure, maintain, and store critical plant components. All commercial U.S. Nuclear licensees are “Participants” in the PIM program. Representatives from each company provide the governance and oversight of the PIM program through the PIM Steering and Management Committees, and various subcommittees.

The industry has over \$247 million (current value) of critical plant components in PIM. A few equipment examples follow:

- Motors - RHR, Core Spray, and Reactor Recirculation
- Diesel Generators - Fairbanks Morse and EMD
- Pumps - HPCI, RCIC and TDAFDW
- Control Rod Drives
- Safety-Related Cable (various sizes)
- Final production runs of Safety-Related Switches

PIM provides solutions for addressing equipment long lead-times, obsolescence, and manufacturing special/final runs. A key attribute of the program is that only those sites that need a specific component share the cost of procuring, maintaining, and storing that component. Many critical plant components can be cost prohibitive for a single utility to purchase. Pooling resources (i.e., cost sharing) with other sites reduces each individual site’s costs significantly, thereby making equipment available that would not be otherwise. Another PIM benefit is that the equipment held by PIM is not considered site inventory, thereby reducing each site’s inventory and associated costs (e.g., maintenance, insurance, taxes, and space).

We at PIM understand the urgency of outage response and that every minute is critical. Typical delivery time of equipment to the requesting site is less than 24 hours (distance dependent) with site delivery usually occurring long before the failed equipment is removed from the plant. In many instances, the plant’s failed equipment is sold back into the PIM program where it is refurbished, placed back into storage, and maintained ready for a future withdrawal should a need arise.

PIM is here to assist you and your site with inventory reduction initiatives. If your site is storing long lead-time spares that have a low probability of failure, these could be placed in the PIM program and the costs shared with other sites. In this instance, the site sells its equipment into the PIM program but still retains a share of the equipment. This allows the site to recover equipment costs, or some portion thereof, yet still have

access to the equipment should it be needed. This approach removes the equipment from the site's inventory, and alleviates the associated costs mentioned previously.

With an increasing number of sites applying for power updates, and subsequent license renewals, sites are realizing the need for critical plant equipment that was not previously contemplated. PIM is here to assist in identifying other plants that may have the same need and are interested in jointly sharing the costs to procure, store, and maintain the equipment in the program.

Our team of experienced engineers works with various industry groups (e.g., PWROG, BWROG, EPRI, RAPID) to provide solutions for obtaining plant equipment needed for special testing, as well as long lead-time components needed as contingencies for special inspections. A few examples include the following:

- HPCI electronic governor control testing and qualification at Dresser Rand
- Terry Turbine Expanded Operating Band testing (Post Fukushima) at Texas A&M – BWROG, PWROG, EPRI, DOE, and IAE (Japan)

PIM provides a NUPIC audited 10 CFR 50 Appendix B Program for safety-related equipment. Participants may also place irradiated equipment (low level) in the PIM program through a Radioactive Material License issued by the State of Alabama (NRC agreement state).

PIM storage facility operations are managed by experienced nuclear professionals with years of nuclear site warehouse management and maintenance experience. Storage facility operations are in Memphis, TN and Phoenix, AZ with ANSI Level A, B, C, and D availability. With lift capabilities up to 1,250-tons, and barge and railroad access, no equipment is too large (or too small).

Additionally, PIM manages the two National SAFER Response Centers (NSRCs) for the entire U.S. Nuclear fleet. The NSRCs contain over \$72 million of offsite emergency response equipment (FLEX Phase III) deployable to any site within 24 hours.

A Storage and Maintenance Services (SMS) Program is also available for sites requiring additional storage space for their plant equipment for both short-term and long-term needs. The site maintains its ownership of the equipment while in storage in SMS.

Our staff of experienced engineers and maintenance personnel are here to assist you in ensuring critical plant equipment is on hand to keep your site up and running 24/7.

A Message from David

2024 marks the 10-year anniversary of the Strategic Alliance for Flexible Emergency Response (SAFER) program and the establishment of the two (2) National SAFER Response Centers (NSRCs). The SAFER Program meets the requirements of NEI 12-06 and the NRC Order EA-12-049 (10CFR 50.155). SAFER's mission is to maintain and deploy the FLEX Phase III off-site emergency response equipment to any U.S. nuclear site experiencing a Beyond Design Basis External Event (BDBEE) within 24 hours upon notification.

2024 also marks the forty-fourth year of the Pooled Inventory Management (PIM) program serving the U.S. nuclear fleet by ensuring critical plant equipment is readily available at a moment's notice.

Looking back, 2023 was not a year without challenges and a few noteworthy ones include:

- EPA Rule 40 CFR Part 751 concerning Decabromodiphenyl Ether (DecaBDE), a fire retardant used in electrical shielding and plastics, was released in January. The new Rule makes it unlawful to ship any item (equipment) which contains this compound. The Program Manager Organization (PMO), a.k.a., PIM, performed an investigation of all equipment in the PIM and SAFER Programs which included equipment design reviews, OEM engagement, and independent laboratory testing/analysis. Ultimately, it was determined that no equipment in the PIM/SAFER Programs contained DecaBDE.
- Additionally, the PMO performed an extensive investigation of the two (2) 1 Mw 4160V turbine generator (TG) engine failure events that occurred at the Susquehanna (May 2021) and Perry (November 2022) stations. The investigation included an engineering analysis of the data from both events, working

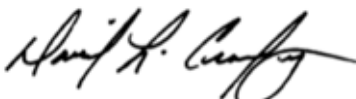
with Perry's site representative (SAFER Steering Committee Chairman) and the OEM. Turbine response tests were also performed on two (2) SAFER TGs (480V and 4160V) at the Memphis facility. Ultimately, overspeed setpoints were lowered and the maximum fuel delivery was limited on all thirty (30) of the SAFER TGs at the NSRCs.

- Another challenge was an unexpected State of Tennessee Sales Tax Audit. Although a tax exemption is held with Tennessee, the state asserted that certain activities performed by suppliers through the PMO were not exempt from sales taxes. Initially, it was estimated that over \$487,000 was owed from the past six (6) years in back taxes, interest, and penalties. However, after several months of negotiations, the PMO negotiated this initial amount down to \$45,000 for the 6-year period. Going forward it is estimated that this tax will be \$6,000 per year.

We continued our commitment to controlling PIM program costs in 2023 by implementing two (2) key costs saving initiatives. First, a new vendor for remote monitoring of PIM/SAFER equipment (batteries and humidity) was selected. Moving to the new vendor for these services resulted in a cost savings of \$109,000 per year going forward. Next, due to the rising costs of insurance, the PMO bid out the insurance brokerage services for the PIM program. A new broker was selected who assisted in finding a new underwriter for the equipment and program insurance. This resulted in a cost savings of over \$180,000 per year for the 2024 annual insurance premiums.

Looking forward, the future continues to look bright for nuclear generation with two (2) new AP-1000 reactors now online at plant Vogtle, sites pursuing subsequent license renewals and power uprates, closed plants coming back on-line, and the exciting new technology of small modular reactors.

As always, the staff here at PIM is here to assist you and your site to ensure plant critical components are readily available not only for the existing nuclear fleet, but the new nuclear designs as well. We look forward to working alongside each of you in 2024 to further ensure that every U.S. nuclear site continues to operate safely and reliably and that plant critical components are readily available when challenges arise.



Sr. PMO Manager

PIM Program History

POOLED INVENTORY MANAGEMENT (PIM) provides a mechanism for nuclear utilities to jointly procure and store critical plant parts/equipment. The PIM program operates under Pooled Equipment Inventory Company (PEICo) which holds title to the equipment. PEICo is a membership corporation with no owners, registered in the state of Delaware with a President, who is also PEICo's legal counsel.

PEICo and the PIM Program was officially formed in 1980, by eight (8) utilities owning Boiling Water Reactors (BWRs) and the original charter allowed only BWRs to participate. General Electric was contracted by the utilities to act in a combined role as both the Program Manager and the Primary Equipment supplier.

In 1984, the PIM Program was expanded to include Pressurized Water Reactors (PWRs) which increased the Participants to thirty (30) utilities and sixty (60) reactor units. Due to confidentiality and other concerns, this change made it necessary for PIM's Program Management function to be performed by an impartial party and Southern Company was selected as the Program Manager. Southern Nuclear Services, LLC (SNS), functions as the Program Manager Organization (PMO) and manages the PIM inventory valued at over \$247 million with all U.S. nuclear licensees being members (94 reactors).

In January 1985, Engineering and Procurement Services contracts were executed with General Electric and the three primary PWR suppliers – Babcock & Wilcox, Westinghouse, and Combustion Engineering. Southern Company assumed sole responsibilities for Program Management.

In 2011, Storage and Maintenance Services, LLC (SMS) was formed at the request of the PIM Management Committee to expand the PIM Program. The SMS Program provides for all energy companies (fossil, gas, hydro, solar, wind, nuclear, etc.) to have the ability to store equipment at the storage locations while still retaining title to their equipment. The first equipment for storage and maintenance services was received later that year.

In 2012, the Strategic Alliance for FLEX Emergency Response (SAFER) Program was formed (as part of the PIM Program). As a result of the Fukushima Daiichi nuclear accident on March 11, 2011, the NRC issued NRC Order EA-12-049 to strengthen Station Blackout Capabilities and to maintain or restore key safety functions for core cooling, containment integrity, and spent fuel pool cooling for Beyond Design Basis External Events (BDBEEs).

The industry selected the PEICo alliance (i.e., PIM and Framatome [f.k.a. AREVA]), a.k.a. SAFER, to provide the FLEX Phase III offsite emergency response for the U.S. nuclear fleet.

The SAFER offsite emergency response strategy consists of deploying emergency equipment from one (1) of two (2) National SAFER Response Centers by a combination of truck, fixed wing (wide body jets), and helicopters.

The SAFER Program was officially endorsed by the NRC in September 2014.

In 2018, the PIM program expanded to include Loaned Equipment and Rotating Spares. The rotating spares process allows for Equipment Committees (ECs) to be established where plant equipment is rotated with PIM equipment and the loaned equipment process allows for ECs to be established for equipment that is only needed temporarily by a Participant (e.g., outage equipment/tools which are not an integral part of a plant operating system).

In 2021, the Alabama Department of Public Health granted PEICo a Radioactive Materials license. This license allows PEICo to hold title to irradiated equipment removed from a site, thereby allowing Participants to form rotating spare ECs for radioactive equipment. The license also allows for utilities to store irradiated equipment in the Storage and Maintenance Services program.

Since its inception PIM has maintained outstanding quality with a world-class, NUPIC-audited nuclear quality assurance program; strong technical leadership on equipment issues; innovative maintenance and storage programs; and sound fiscal processes and planning. Additional PIM achievements include, but are not limited to:

- Saving participants millions of dollars whenever Participants are able to replace a failed item of equipment with an item stored in PIM.
- Procuring and maintaining a \$247 million inventory of spare equipment – most of which is unavailable from other sources on short notice.
- Delivering most items withdrawn from PIM inventory to a Participant's plant site within twenty-four (24) hours' notification.



Program Overview



The Pooled Inventory Management (PIM) Program provides a mechanism for nuclear generating sites to jointly procure, store, and maintain both safety and non-safety related plant equipment thereby minimizing costs for each site. Many of these components are expensive, long lead time critical plant components. Access to the pooled equipment allows Participants to hold smaller inventories thereby reducing their procurement and maintenance costs without increasing the risks associated with equipment failure.

Governance of the Program is performed by the industry Participants through various committees. These committees provide overall direction to the PMO for program operation.

The PIM Management Committee (MC) is made up of representatives from each participating utility. The MC approves all major decisions and policies relating to the overall program. The PIM Steering Committee is a subset of the MC Representatives empowered to implement policy decisions and to provide management oversight of the PIM program.

The PIM Financial Subcommittee (FS) is made up of MC Representatives who oversee and monitor the PMO's financial management of the Program. The FS also ensures annual financial audits are performed.

Equipment Committees (ECs) are formed for each item of equipment being considered and placed into the Program. Each EC is comprised of only those Participants who have interest in the equipment being considered. EC members provide overall direction regarding specifications, procurement, maintenance, and storage for each equipment item. Interchangeability studies are performed prior to procurement and ensure the equipment item will perform in the Participant's operating unit. Engineering & Procurement Services (EPS) contracts are in place with Babcock & Wilcox, Combustion Engineering, Framatome, GE-Hitachi Nuclear Energy Americas LLC, and Westinghouse to assist with equipment technical (interchangeability) studies and any design changes that may be needed.

Additionally, any Program Participant may elect to join any EC, provided they can use the equipment in their unit. All PIM equipment is maintained in a ready-to-install condition (with a few EC approved exceptions) under a comprehensive maintenance and inspection program. Currently, there are 202 ECs in the Program. Most items can be delivered to a plant site within twenty-four (24) hours of notification.

All equipment is stored in the PIM Storage Facilities, which are leased by SNS from Barnhart Crane and Rigging Company (BCR). The Storage Facilities are located in Phoenix, AZ and Memphis, TN. While both Storage Facilities are readily accessible to air and truck transportation, the Memphis warehouse also has access to rail and barge transportation. The Memphis Storage Facility provides 202,000 sq. ft. of Level A, Level B, Level C and Level D Storage, including the ability to handle heavy and/or oversized equipment. The Phoenix Storage Facility provides 66,381 sq. ft. of Level B and Level D storage. Additionally, both the Memphis and Phoenix locations are home to the U.S. nuclear industry's National SAFER Response Centers.



2023 KEY ACCOMPLISHMENTS

- Four (4) equipment withdrawals
- Evaluated Impact of EPA Ruling on DecaBDE with no issues
- Annual Financial Audit resulting in no Findings
- Change in remote monitoring system vendor resulting in \$109,000 per year cost savings going forward
- Full Scope (PIM, SAFER, & SMS) QA Audit resulting in no Findings
- Selected new Insurance Brokerage Services resulting in \$180,000 cost avoidance for 2024
- Finalized SAFER trailer purchases (February)
- SAFER Actions in response to Perry TG Failure
 - » Investigated TG engine responses from the Susquehanna and Perry TG failures
 - » Validated new overspeed setting and time delays on TGs
 - » Adjusted mechanical governor on TGs
 - » Performed ETAP test
- Implemented Electronic Checking (ACH)
- First piece of equipment received under the Radioactive Material Program
- Tennessee Tax Decision on labor
- Completed 3-Yr Performance Testing on SAFER equipment
- Spring (April) / Fall (October) SAFER EC Meetings
- Completed Internal Limited Scope Audit of PIM Consumables
- PIM Steering Committee Meeting (January)
- PIM Management Committee Meeting (June)
- Supported fourteen (14) NSRC Tours for the Industry and NRC Staff

Benefits of Program

The PIM Program provides Participants the ability to share in the costs of procurement, maintenance, and storage of critical plant equipment that may not otherwise be purchased by an individual site due to the capital investment required.

Most of the equipment in PIM is long-lead time plant critical components. However, the Program does contain manufacturer special or final runs, safety-related medium voltage cable, rotating spares, and loaned equipment. Other key benefits include:

Approved 10CFR50 Appendix B QA Program

PEICo maintains a nuclear QA program, audited by Nuclear Procurement Issues Corporation (NUPIC), which allows the PIM program to purchase, store, maintain, and ship nuclear safety-related equipment.

Long Lead Time Reduction

Most of the equipment in the program requires more than 1 - 3 years to manufacture and deliver. PEICo, however, has already purchased hundreds of nuclear plant components, which are currently organized into ~ 202 Equipment Committees.

Investment Cost Sharing

The cost of maintaining the large PEICo inventory is shared by 39 nuclear entities owning or operating a total of 94 nuclear units.

Reduced Utility Inventory

The Program also supports site inventory reduction initiatives by providing for sites to sell their infrequently used critical plant components into PIM and yet still have access to these components should they be needed. This approach allows for the site to share the costs with other sites which also need the same equipment. Not only does the site receive payment for selling their equipment (usually the fair market value) but the associated costs of maintenance and storage are shared, the site's storage space is reduced, and the inventory carrying cost is removed. The site maintains an active share of the equipment as a member of the newly formed EC thereby ensuring their sites future access to the equipment should they have need for it.

NEIL Insurance Credits

Nuclear Electric Insurance Limited (NEIL), the insurer for the entire nuclear industry, recognizes that accessibility to critical nuclear components allows a utility to quickly respond to equipment failures and reduces the risk of extended plant outages.

Therefore, NEIL awards insurance premium credits to utilities for participation in the PIM program.

Radioactive Equipment Program

PEICo maintains a Radioactive Material license issued by the State of Alabama's Department of Public Health which allows PEICo to hold title to irradiated equipment removed from a site, thereby allowing Participants to form equipment committees for this equipment.

Supports Obsolescence, Critical Spares, License Renewal, and SMR Initiatives

Operational plants will continue to experience obsolescence, implement "critical spares" programs, and receive pressure to reduce inventory. The PIM Program has been designed to accommodate these issues and future expansion to support license renewal or new construction of small modular reactors within the U.S.



Equipment Committee Formation

The PIM program provides sites an avenue to jointly share in the costs of procuring, storing, and maintaining critical plant equipment. The program ensures availability of expensive, long lead time, critical parts/equipment that may not otherwise be purchased by a single site due to affordability or manufacturing time. No plant component is too large or too small. PIM equipment components range from turbine driven pumps to Square D switches. The Equipment Committees (ECs) are the foundation of the PIM program and where EC Members work together to determine the storage and maintenance requirements, as well as other decisions for maintaining the EC's equipment.

An EC is formed around a common need, fit, and goal for a contingent, emergent equipment replacement strategy. ECs are also formed to procure manufacturer special or final runs, rotating spares, loaned equipment, and obsolete items. Additionally, the Program supports inventory reduction initiatives where sites can sell their respective inventory equipment to PEICo and allows other Participants to share in the costs of the storage and maintenance, yet still have access to the equipment, when needed. Also, the site's inventory, associated taxes, and storage space needed is reduced. Please contact the Program Manager Organization (PMO) for assistance in forming ECs. Once notified, the PMO uses Interchangeability studies to determine equipment fit at other sites and thus potential membership in the EC. Two (2) or more Participants are required for each EC that is formed.

Once the EC Members are identified, the PMO convenes a meeting to identify potential equipment suppliers, establish the technical requirements (procurement specification when needed), and ultimately issue a Request for Bid (RFB). Once the suppliers' respective bids are received back to the PMO, purchase evaluations are performed and presented to the EC Members. The EC Members then select a supplier and the PMO develops a PEICo purchase order to procure the equipment. The PMO performs any required surveillances during manufacture of the item. The equipment is placed into storage once received. The EC members also determine the maintenance required and periodicity, rules for replacement of the equipment when withdrawn for use at a members site (restocking), and the withdrawal criteria.

Predetermined rules for equipment withdrawal are established by the EC Members when setting up the EC. The criteria are typically based around equipment failures that have consequences such as:

- Shut down or plant derate
- Unable to return to operation after outage
- Scheduled replacement (Rotating Spares committees)

There are also ECs in the Program that are established with rules that have a lower threshold and can be withdrawn "upon demand."

Please contact Diane Coffin, PIM Program Manager, should you have an interest in forming an EC for a needed critical plant component at your site. Once notified, the PMO will work to find other sites who have similar equipment to determine interchangeability with your site's equipment and start the process of reaching out to these potential sites to form an EC and purchase the equipment. The PMO performs many investigations for sites throughout the year.

Withdrawing Equipment

When an EC member withdraws the equipment, the equipment title, held by PEICo, is transferred to the withdrawing EC member once it arrives at the destination.

Withdrawn equipment is typically delivered within twenty-four (24) to thirty-six (36) hours and dependent on plant distance from the storage facility. Typically, the equipment must be installed by the EC Member within fifteen (15) days.

A "Special Withdrawal Agreement" is required to allow a non-EC member to immediately withdraw the equipment for an emergent site need, or a member who needs the equipment but does not meet the withdrawal criteria set forth in the EC rules. This process requires unanimous EC Members' consent.

Joining an existing EC

Sites may join any existing EC if their station has interchangeability with the equipment. If this occurs, existing members will receive a credit since the inventory price per share would be reduced by the addition of new EC members. Please contact Diane Coffin should you have an interest in joining an existing EC. Once notified, the PMO will work to ensure that the equipment identified is interchangeable with your site before moving forward.

Typical Costs for Forming an EC

Typical costs when forming an EC include the completion of an initial and/or detailed interchangeability study, and the PMO hours to support EC meetings, technical specification development (if needed), RFB, purchase order, the equipment purchase costs, and the maintenance and storage costs. These expenses are equally shared by the members of the EC for that equipment.

Example: EC Formation Costs for the Purchase of Safety-Related equipment from the closed Duane Arnold Station's inventory (~\$12,000)

Typical costs to form an EC average \$9,000 - \$12,000 and include Engineering, Quality Assurance, and Purchase Order Development costs as noted below:

- EC Meetings for equipment bid development, bid negotiations and acceptance, and development of EC rules
- Development, review, and EC approval of purchase order
- QA review of supplier and supporting records

Radioactive Equipment Program

PEICo holds a Radioactive Materials license granted by the Alabama Department of Public Health. The License allows PEICo to hold title to irradiated equipment removed from a site, thereby allowing Participants to form ECs for radioactive equipment.

Storage of radioactive equipment/components is contracted by PEICo to a supplier and the equipment is stored at the supplier's facility with all the necessary Radiation Protection (RP) controls and monitoring. The contracted scope includes emergent access and equipment maintenance in accordance with PIM procedures. Currently, this program supports the PIM rotating spares ECs.

The Alabama Department of Public Health Office of Radiation Control last inspected the program in December of 2021. The inspection concluded that the program is

compliant with Chapter 420-3-26, Radiation Control, Alabama Administrative Code and PEICo's license. An inspection by Alabama Department of Public Health Office of Radiation Control is expected in 2024.



There were personnel changes in the Radiation Safety Officer and Radioactive Equipment Program Manager roles in 2023 due to retirements within the PMO. A materials analyst and a project engineer, from the PMO, had both received RSO certification in 2023 as part of succession planning for these roles.

◀ Reactor Recirc Pump Motor received from Hatch 2 site as replacement for PIM motor withdrawn from Rotating Spare EC. This is the first piece of equipment in the Radioactive Equipment Program.

PIM Cable Program

The PIM Cable Program also contains eight (8) ECs with ~125,000 linear feet (LF) of safety related medium voltage cable. See table for cable sizes and quantities on-hand. Should you have an interest in joining a Cable EC or if you have an interest in forming an EC for a Cable size not listed, please contact Diane Coffin (PIM Program Manager).



Safety Related/EQ 5 kV & 8 kV Cable

Size	On Hand (LF)	Reserve (LF)
2/0	15,076	13,000
3/0	11,530*	12,000
4/0	29,964^	32,000
250	20,441	14,000
350	10,888	7,200
500	13,094	10,500
750	29,010	25,000
3/C-250	5,370	1,452

* 470 LF Inventory shortage below reserve quantity was accepted by the EC

^ Purchase Order for Restock of 6000 LF in progress



SAFER Program



The Strategic Alliance for FLEX Emergency Response (SAFER) Program provides the U.S. industry's off-site emergency response for Beyond Design Basis External Events (BDBEE). Following the Fukushima Daichi event that occurred in Japan in 2011, the Nuclear Regulatory Commission (NRC) issued Emergency Action Order EA-12-049, "Order Modifying Licensees with Regard to Mitigation Strategies for Beyond-Design-Basis-External-Events (BDBEE)", to all U.S. nuclear licensees. The SAFER Program fulfills the requirements of the NRC Order by implementing the requirements of NEI 12-06, "Diverse and Flexible Coping Strategies (FLEX) Implementation Guide", for offsite resources. The NRC approved the SAFER Program and its implementation in September 2014. The SAFER Program provides the U.S. nuclear industry's offsite emergency response to ensure that any site experiencing a BDBEE will continue to maintain reactor core and spent fuel pool cooling.

Two National SAFER Response Centers (NSRCs) provide over \$72 million (current value) of emergency response equipment for deployment within 24 hours of notification. The NSRCs are located in Memphis, TN and Phoenix, AZ, respectively. Each NSRC provides equipment to support 4 reactors or 2 sites. The Program also includes the logistics, transportation contracts (fixed wing, ground, and helicopter), and personnel for deployment and operation of the equipment. Further, the SAFER Program is NRC-inspected to ensure continued compliance.

Key Program activities in 2023 included the PMO's investigation into the recorded data for understanding the causes of Perry's FLEX Phase II Turbine Generator (TG) failure in November 2022, along with analyzing the data from Susquehanna's FLEX Phase II TG failure on May 24, 2021. The investigation revealed that engine responses leading up to the failures were very similar and the results were shared with the industry and the OEM. The OEM made recommendations for lowering TG overspeed trip setpoints to prevent engines from reaching critical speeds and entering runaway conditions. These setpoints were implemented on both 480V and 4160V TGs. The PMO conducted a total of 136 SAFER TG runs at the NSRCs during the combined months February, March, and May 2023 to implement the OEM's recommendations. Following the implementation the new overspeed setpoints and the regulation of the mechanical overspeed governors, testing of the 4160V TG was performed to obtain generator response data for updating the Electrical Transient and Analysis Program (ETAP) calculation. Results from the revised ETAP revealed that the SAFER TGs continue to meet 4160V acceptance criteria at the lowered overspeed set points. The PMO was contacted by the NRC regarding the Perry event and the SAFER actions taken.



Other accomplishments in 2023 include:

- Renewal of the 5-yr Memorandum of Agreement (MOA) between the Nuclear Regulatory Commission (NRC) and the Department of Defense (DoD) for DoD helicopter support.
- SAFER meeting with the NRC, DoD, and NEI to review DoD helicopter support during a deployment and walkdown of response equipment at the Phoenix NSRC.
- Investigated EPA Rule 40 CFR Part 751, Decabromodiphenyl Ether (DecaBDE), on all SAFER equipment with no issues.
- Conducted fourteen (14) NSRC Tours with three (3) of the tours involving members from the NRC.
- Federal Express Corporation performed the annual Loadmaster Review of support cribbing for ground and air transportation at the Memphis NSRC with no modifications to cribbing required.
- Performed annual Framatome technician training at the Memphis NSRC the week of July 10, 2023.
- Conducted the annual SAFER Equipment survey with no changes required.
- Performed eight (8) SAFER Tabletop deployment exercises and included Framatome, Federal Express, and Croman Helicopters.
- Purchased the remaining twenty-eight (28) over-road equipment trailers.
- TG borescope inspections were completed by Mint Turbines.
- Performed 3-Yr Performance Testing on all SAFER Turbine Generators, SAFER Hale Pumps, and Vogtle 3&4 FLEX Phase III Equipment.

Storage and Maintenance Operations

There are 202 Equipment Committees (ECs) that require preventive maintenance (PM) activities at the Memphis and the Phoenix storage facilities. Associated with these ECs are 2,456 active PMs.

Preventative Maintenance Breakdown

Schedule	Number of PMs
Monthly	29
Quarterly	237
Semi-Annual	130
Annual	1,293
2-Year	146
3-Year	500
5-Year	35
6-Year	18
10-Year	46
12-Year	8
20-Year	14

1,678 – SAFER equipment PMs

778 – Traditional PIM equipment PMs

Additionally, the staff's time was consumed in the performance of the three (3) year performance testing of certain SAFER equipment. Over sixty-seven (67) performance tests were performed, utilizing calibrated instruments, to ensure that the SAFER equipment continues to meet the required technical requirements.

In 2023, PIM maintenance activities requiring special arrangements and vendor support/oversight included annual maintenance of the PAS-1 Casks, two (2) year maintenance of the EMD diesel engines, and three (3) year performance testing of the SAFER Turbine Generators. The bulk of the activities performed by the storage facilities' staff are preventative and corrective maintenance work orders with 2,106 being completed in 2023.

During the year, a significant amount of time and resources were spent by the storage facilities' staff investigating the Perry turbine generator failure. This included the testing and setting of the overspeed trip setpoints/limits on all thirty (30) SAFER Turbine Generators (TGs). Over one hundred thirty-six (136) TG tests/operational runs were performed to further ensure the safe operation of the SAFER TGs.



WAREHOUSE KEY ACCOMPLISHMENTS

- Four (4) Equipment withdrawals with average delivery time of 6 hrs. and 44 minutes
- One hundred and forty-two (142) material receipt inspections
- Completed 2,106 Work Orders
 - 1,119 PM WOs
 - 423 CM WOs
 - 564 humidity WOs
- PASS Casks Annual maintenance (3 Casks) performed
- Performed 3-YR Performance Test on SAFER equipment requiring 30-minute operational runs each
 - 30 Turbine Generator
 - 10 Mobile Boration Systems
 - 27 pumps
- EMD Diesel Engines (3 Engines) 2-YR maintenance performed
- Changed remote monitoring system vendor along with all associated hardware and software (Memphis & Phoenix)
- SAFER investigation in response to Perry TG Failure
 - Performed over 136 TG runs to implement OEM recommendations of lowering overspeed settings and time delays
 - Set mechanical governor on TGs
 - Performed ETAP test
- Full Scope (PIM, SAFER, & SMS) QA Audit (Memphis & Phoenix)
- Annual Financial Audit walkdown of inventory (Memphis & Phoenix)
- Annual Insurance Inspection of facilities and equipment inventory (Memphis & Phoenix)
- Annual SAFER Technician Equipment Training (Duration 1 week in Memphis)
- FedEx Load Master Annual Inspection of SAFER Equipment in Memphis
- Performed borescope inspections on all thirty (30) TGs
- Replaced main fuel rails on four (4) TGs
- Fourteen (14) NSRC tours for industry and NRC

MEMPHIS - 1701 Dunn Ave., Building 925C, Memphis, TN 38106

- 50,000 Square Feet Level A Storage
- 112,000 Square Feet Level B Storage
- 40,000 Square Feet Level C Storage
- Outside storage space available



PHOENIX - 8100 West Buckeye Road, Phoenix, AZ 85043

- 66,381 Square Feet Level B Storage
- Outside storage space available



Quality Assurance

The Pooled Inventory Management Company (PIM) Organization maintains an effective quality assurance (QA) Program that meets the requirements of 10CFR50, Appendix B. It is detailed in the Pooled Equipment Inventory Company (PEICo) Quality Assurance Manual and implemented through the PIM procedures and processes. The PEICo QA Manual (Version 10, July 2022) is available on the NUPIC website. The QA program is applied to the PIM Program, the SMS Program, and certain elements of the SAFER Program.

NUPIC audits the PMO and its implementation of the PEICo QA program on a 3-year cycle at all locations (Birmingham, Memphis, and Phoenix) for the PIM, SMS, and SAFER Programs. The last NUPIC audit (6 auditors and 1 Technical Specialist) of the PIM/SMS Program was performed in March of 2022 with one (1) finding and no deficiencies, and ultimately concluded that "PEICo's Quality Assurance Program is effectively implemented." Additionally, a NUPIC audit (5 auditors and 1 Technical Specialist) of the SAFER Program was performed in May of 2022 in Birmingham, AL and at the Memphis, TN and Phoenix, AZ National SAFER Response Centers (NSRCs). The results were no findings and no deficiencies. The NUPIC team concluded that "The SAFER Program was determined to be well conceived, well implemented, and well maintained."

The most recent NRC Vendor Inspection of the SAFER Program was completed in September 2022 at the Memphis, TN NSRC utilizing NRC Inspection procedure 43006. The NRC inspection team consisted of two (2) inspectors with the NRC Branch Chief of QA and Vendor Inspection and the NRC Director, Division of Reactor Oversight, participating in the inspection as well. This NRC inspection was also supported by the SAFER Equipment Committee Chairman and Framatome representatives. The inspection focused on the SAFER actions taken as a result of the Susquehanna turbine generator failure event in May of 2021 and resulted in no findings. The NRC inspection team found the implementation of [PEICo/PIM] QA Program met the applicable technical and regulatory requirements imposed on PIM by customers (NRC licensees).

Additionally, the PIM QA Manager and the PMO Senior Manager conducted a limited scope audit on the Consumables in April 2023 which resulted in one (1) finding and two (2) Corrective Action Reports.



Finally, the annual full scope (PIM/SAFER/SMS) internal audit was conducted in September 2023 by Kinetics (Independent Contractor). The audit was conducted at the Birmingham corporate office, and the Memphis and Phoenix warehouse operations. The results were no findings with one (1) recommendation.

The QA and Licensing Subcommittee Chairman, Zack Betsill (Southern Nuclear Operating Company, LLC), provided his annual assessment at the Management Committee meeting in June 2023. His report concluded that the PIM/SAFER organization continues to effectively implement the provisions of the PEICo QA Manual, 10CFR50 Appendix B, and ASME/NQA-1 (1994), and conforms to the guidance under NEI 12-06.

PIM Participants

Management Committee Representatives and Units

Alabama Power Company, Georgia Power Company

Lynn Murray

Mgr, Nuclear Inventory

Farley 1 & 2

Hatch 1 & 2

Vogtle 1 & 2

Vogtle 3 & 4

American Electric Power Company

Twila Sine (Janeway)

Materials Manager

D. C. Cook 1 & 2

Arizona Public Service Company

Chad Wolf

Supply Chain Manager / Department Leader

Palo Verde 1, 2 & 3

Carolina Power & Light Company, Duke Energy Carolinas, LLC

Rick Simmons

Site Supply Chain Manager

Brunswick 1 & 2

Robinson 2

Shearon Harris 1

Catawba 1 & 2

McGuire 1 & 2

Oconee 1, 2 & 3

Constellation Energy Generation

John Makar

Senior Supply Operations Specialist

Braidwood 1 & 2

Byron 1 & 2

Calvert Cliffs 1 & 2

Clinton 1

Dresden 2 & 3

FitzPatrick 1

LaSalle 1 & 2

Limerick 1 & 2

Nine Mile Point 1 & 2

Peach Bottom 2 & 3

Quad Cities 1 & 2

R. E. Ginna 1

Dominion Energy Nuclear Connecticut, Inc., Dominion Energy South Carolina, Inc., Virginia Electric and Power Company

James Collins

MGR Nuclear Fleet Emergency Preparedness

Millstone 2 & 3

V. C. Summer 1

North Anna 1 & 2

Surry 1 & 2

DTE Electric

Aaron Swanson

Lead Procurement Engineering

Enrico Fermi 2

Energy Harbor Nuclear Corp

Tracy St. Clair

Corporate Area Manager Fukushima & Fire Protection

Beaver Valley 1 & 2

Davis-Besse 1

Perry 1

Energy Northwest

Jeremy Hauger

Vice President, Engineering

Columbia 2

Entergy Operations, Inc.

Scott Rowe

RBS Supply Chain Manager

Arkansas Nuclear One 1 & 2

Grand Gulf 1

River Bend 1

Waterford 3

Luminant Generation Company, LLC

Christopher Miller

Supply Chain Director (Nuclear)
Comanche Peak 1 & 2

Nebraska Public Power District

Marshall Van Winkle

Production Manager
Cooper 1

**NextEra Energy Point Beach, LLC, Florida
Power and Light Company, NextEra Energy
Seabrook, LLC**

Angela Wilson

Manager - Inventory Services & SPOC
Point Beach 1 & 2
St. Lucie 1 & 2
Turkey Point 3 & 4
Seabrook 1

Pacific Gas and Electric Company

Melanie Spencer

Manager, DCPD Supply Chain
Diablo Canyon 1 & 2

PSEG Nuclear LLC

Nara Campbell

Procurement Operation Manager
Hope Creek 1
Salem 1 & 2

STP Nuclear Operating Company

Darell Montgomery

Manager, Contracts and Supply Chain
South Texas Project 1 & 2

Susquehanna Nuclear LLC

Darin Hock

Sourcing Specialist - Nuclear Sourcing
Susquehanna 1 & 2

Tennessee Valley Authority

Richard (Ricky) Curtis

Nuclear Site Material Manager, Browns Ferry
Browns Ferry 1, 2 & 3
Sequoyah 1 & 2
Watts Bar 1 & 2

Union Electric Company dba Ameren

Missouri

Carissa Richardson

Supervising Engineer
Callaway 1

Wolf Creek Nuclear Operating Corporation

Joshua Bousum

Manager - Emergency Planning
Wolf Creek 1

Xcel Energy, Inc.

Casey Rossetter

Sr. Material Supply Strategist
Monticello 1
Prairie Island 1 & 2

NOTE: The company name indicated on the Participation Contract is reflected above unless revised in accordance with PRP 18.0.

Storage and Maintenance Services

PIM also provides a Storage and Maintenance Services (SMS) Program for sites needing additional storage space for their equipment for both short-term and long-term needs. Unlike the PIM program where equipment is shared with other nuclear sites, the site maintains its ownership of the equipment while in storage in SMS. The program is established for nuclear and non-nuclear equipment (e.g., fossil, hydro, solar, transmission/ distribution). An audited 10 CFR 50 Appendix B QA program is available for safety-related components.

With locations in Memphis and Phoenix, SMS offers 200,000 sq. ft. of space to meet any storage and maintenance need. Options include ANSI-Level A (Indoor-Heated/Cooled), ANSI-Level B (Indoor- Heated) and ANSI-Level C (Indoor-Unheated) and ANSI-Level D (Outdoor-Covered).

SMS also provides experienced maintenance personnel to ensure site-directed maintenance is performed; thereby, relieving the plant maintenance department's additional workload. All maintenance activities are performed to high standards utilizing the same personnel, procedures, and processes as the PIM Program.

Sites regularly use the SMS program when challenged for storage space, equipment is purchased in advance of planned installation dates, postponement of projects, and/or site cranes sizes are limited to unload/store large heavy loads. With a 1,250-ton lift capacity, SMS is capable of meeting site storage needs, regardless of size or weight. Shipping of the equipment to your site is typically within 24 hours of notification.

SMS is a cost-effective solution dedicated to helping sites reduce their in-house equipment inventory and overhead costs by providing high-quality storage, maintenance, and shipping options.



EXAMPLES OF SMS PROJECTS

- Generator (Nuclear)
- Reactor Internals (Nuclear)
- 96" Butterfly Valves (Nuclear)
- Exciter (Nuclear)
- Emergency Diesel Generator Cranes (Nuclear)
- VFD Transformer (Nuclear)
- Stator Bars (Nuclear)
- Steam Generator Blowdown Heat Ex (Nuclear)
- Bellows (Nuclear)
- Expansion Joints (Nuclear)
- Circulating Water Valves (Nuclear)
- Potheads (Nuclear)
- I-Seal and Ring Assembly (Nuclear)
- Boiler tubers (Fossil)
- Gas Turbine Parts (Combined Cycle)
- Upper Rear Water Wall Outlet Headers (Fossil)
- Flux Thimbles (Nuclear)
- Vogtle Units 3&4 SAFER Equipment (Nuclear)
- Condensate Pump (Nuclear)
- Turbine Rotor (Combined Cycle)
- ID Fan Motors (Fossil – 80,000 LB)
- Stator Bar Kit (Nuclear)



PIM 2024 Goals

I. Safety

Nuclear Safety

Support nuclear safety across the U.S. industry through the provision of pooled inventory used in maintenance of station equipment. In addition, support nuclear safety through the maintenance of an off-site response capability to the industry during a beyond design basis event, as required by 10 CFR 50.155. Conduct all activities in a manner that encourages individuals to raise safety issues without fear of retaliation.

Metrics:

- Ensure no audit, inspection or assessment results that indicate the inability to provide critical parts for repairing or replacing EC member Equipment
- Meet required delivery time for FLEX Phase 3 Equipment
- Return required FLEX Phase 3 Equipment to Ready within required time requirements (*i.e.*, 3 years) when withdrawn
- Maintain required FLEX Phase 3 Equipment available and restore degraded Equipment within 90 days.
- Successfully complete FLEX Phase 3 demonstrations and drills

Personal Safety

Recognize and aggressively maintain that all accidents are preventable. Conduct all activities in a manner to

prevent personal (workplace and work related) injury.

Metrics:

- Zero Lost Time injuries / illnesses
- Zero OSHA recordable injuries / illnesses
- Zero unplanned radiological exposure or personnel contamination events
- Less than five (5) Near Misses
- Rigging Program:
 - Zero dropped loads
 - Less than three (3) rigging program non-compliances
 - Maintain qualifications for all rigging personnel

Environmental Safety

Be stewards of the environment and good corporate citizens of our communities.

Metrics:

- No releases to the environment
- No reportable spills to the State

Security

Protect our facilities to ensure the safety of our people and availability of our Equipment and material.

Metrics:

- 98% Security Alarm System availability
- No theft of Equipment and material
- No security threats to personnel
- Cyber security defenses effectively implemented

II. Costs

GE-Hitachi and Westinghouse: Operate within the approved RMS budgets while supporting PIM's needs and goals.

PMO: Continue to explore opportunities for program cost reduction.

Metrics:

- Identify three (3) Cost Savings and/or Cost Avoidance initiatives annually
- Provide advanced notice to MC Representatives for out-of-the-ordinary costs
- Ensure no financial audit findings
- Perform timely payment of PIM invoices by Participants

III. Service Levels

Participants, EPS Contractors, and PMO:

Maximize the efficiency and value of PIM by identifying, on an ongoing basis, opportunities to form new Equipment Committees.

PMO: Continue to explore opportunities for increased service.

Metrics:

- Form new ECs for Loaned equipment and Rotating Spares
- Investigate purchasing plant equipment from closing plants to form new ECs
- Investigate purchasing FLEX Phase II equipment from closing plants to form new ECs for Loaned Equipment or Rotating Spares

IV. Quality

PMO: Ensure an effective implementation of the PEICo Quality Assurance (QA) Program. Continue implementation of strong Foreign Material Exclusion (FME) controls and housekeeping techniques.

Metrics:

- Perform maintenance to a high standard of quality

- Ensure no returned equipment due to non-compliance with PIM criteria
- Implement an effective Corrective Action Program
- Achieve satisfactory evaluation and promptly resolve findings from internal QA audits
- Achieve satisfactory evaluation and promptly resolve findings from NUPIC audits

V. Readiness

Participants, PMO, and EPS Contractors:

Continue to maintain Equipment in a "service ready" condition, available for withdrawal. Promptly resolve any questions related to equipment acceptability. Implement PIM's shelf life replacement policy and communicate policy exceptions to Participants.

Metrics:

- Perform maintenance on schedule
- Identify future shelf life issues and initiate actions such that replacements will be available upon expiration date
- Implement timely and effective resolution of Nonconformance Reports (NCRs)
- Conduct a self-assessment to identify future improvements in Readiness

VI. Asset Protection

Participants and PMO: Monitor Participation Contract and PIM Rules and Procedures changes to assure that withdrawals of Inventory Equipment continue to effectively support the original underlying risk protection purpose of PIM (*i.e.*, check and adjust, as needed).

Metrics:

- Ensure consistent implementation of the withdrawal criteria defined in Participation Contract Article III.D.
- Issue approved changes to Appendix J of the Participation Contract in a timely manner

PIM Equipment in Storage (as of 12/31/2023)

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
B13AB201A001	Forgings	Safe End Forgings (11)	Lenape Forge	137C7959P001	MEMPHIS
B13AB201B001	Sleeves	Thermal Sleeves (11)	Lenape Forge	18BP13AB201G001	MEMPHIS
B13AB201B002	Sleeves	Thermal Sleeves (11)	Lenape Forge	18BP13AB201G001	MEMPHIS
B13AB202A001	Castings	Fuel Support Castings (3) & Orifices (12)	General Electric	729E584P001 & 158B7934P1000	MEMPHIS
B13AB202B001	Castings	Fuel Support Castings (10)	General Electric	762E626P001	MEMPHIS
B13AB202C001	Orifice	Fuel Support Orifices (40)	General Electric	158B7934P1000	MEMPHIS
B13AB501B001	Bolt	Jet Pump Beam Bolt Assemblies, Type 2 (2)	General Electric	137C5238G002	MEMPHIS
B33AC203A001	Impeller	Recirc. Pump Rotating Element (1)	Byron Jackson	127697	MEMPHIS
B33AC301A002	Pump	Recirc. Pump Hydro Bearing & Misc. Parts (1)	Byron Jackson	18PB33AC301G001	MEMPHIS
B33AC301A003	Pump	Recirc. Pump Hydro Bearing (1)	Byron Jackson	18PB33AC301G001	MEMPHIS
B33AC501B001	Pump	Recirc. Pump Heat Exchanger & Pump Cover (1)	Byron Jackson		MEMPHIS
B33AC504A001	Pump	Recirc. Pump Heat Exchanger, Cover Assy (1)	Byron Jackson	YC605 & YF165	MEMPHIS
B33AC601A001	Pump	Recirc. Pump Driver Mount (1)	Esco Corp		MEMPHIS
B33AC601A001	Pump	Recirc. Pump Case (1)	General Electric		MEMPHIS
B33AG105B001	Coupling	Recirc. MG Set Couplings (6)	Kop-Flex		MEMPHIS
B33AG203A001	Exciter	Recirc. MG Set Exciter Field (1)	General Electric	5AR599A22	MEMPHIS
B33AG205A001	Generator	Recirc. MG Set Stator (1)	General Electric	5AR599A6	MEMPHIS
B33AG301A001	Drive	Recirc. MG Set Fluid Drive & Cover (1)	American Davidson		MEMPHIS
B33AG301A001	Motor	Recirc M/G Set Fluid Drive Motor (1)	Dyna Pure		MEMPHIS
B33AG302A001	Drive	Recirc. MG Set Fluid Drive Outer Casing (1)	American Davidson	78-DP-7298-1/2	MEMPHIS
B33AG302A001	Drive	Recirc. MG Set Fluid Drive Inner Casing (1)	American Davidson	78-DP-3488	MEMPHIS
B33AG302A001	Impeller	Recirc. MG Set Fluid Drive Output Rotating Assembly (2)	American Davidson	78-DS-7289-1/2	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
B33AG302A001	Impeller	Recirc. MG Set Fluid Drive Input Rotating Assembly (1)	American Davidson	427-5H-SP	MEMPHIS
B33AG302B001	Bearing	Recirc. MG Set Fluid Drive Journal Bearings (4)	American Davidson	79-PP-1787 & 1789	MEMPHIS
B33AG302C001	Coupling	Recirc. MG Set Couplings (8)	Kop-Flex		MEMPHIS
B33AG303A001	Drive	Recirc. MG Set Fluid Drive Impeller/Runner Pillow Block Assembly (1)	American Davidson	78SA-2868/9	MEMPHIS
B33AG303A001	Impeller	Recirc. MG Set Fluid Drive Input Rotating Assembly (1)	American Davidson	78DS-7304-1	MEMPHIS
B33AG303A001	Impeller	Recirc. MG Set Fluid Drive Output Rotating Assembly (1)	American Davidson	78DS-7306-1	MEMPHIS
B33AG303A001	Tube	Recirc. MG Set Fluid Drive Scoop Tube (1)	American Davidson	78-DP-4500-2	MEMPHIS
B33AG303A001	Tube	Recirc. MG Set Fluid Drive Scoop Tube Spacer Plate (1)	American Davidson	78-AP-7309-1	MEMPHIS
B33AG303A001	Bearing	Recirc. MG Set Fluid Drive Thrust Bearing (1)	American Davidson	78-SA-1748	MEMPHIS
B33AG303A001	Bearing	Recirc. MG Set Fluid Drive Journal Bearings (2)	American Davidson	78PP-2717/2718	MEMPHIS
B33AG303A002	Drive	Recirc. MG Set Fluid Drive Impeller/Runner Pillow Block Assembly (1)	American Davidson	78-SA-2868/9	MEMPHIS
B33AG303A002	Impeller	Recirc. MG Set Fluid Drive Output Rotating Assembly (1)	American Davidson	78-DS-7306-2	MEMPHIS
B33AG303A002	Impeller	Recirc. MG Set Fluid Drive Input Rotating Assembly (1)	American Davidson	78-DS-7304-2	MEMPHIS
B33AG303A002	Tube	Recirc. MG Set Fluid Drive Scoop Tube (1)	American Davidson	78-DP-4500-2	MEMPHIS
B33AG303A002	Tube	Recirc. MG Set Fluid Drive Scoop Tube Spacer Plate (1)	American Davidson	78-AP-7309-1	MEMPHIS
B33AG303A002	Bearing	Recirc. MG Set Fluid Drive Journal Bearings (1)	American Davidson	78-PP-2717/2718	MEMPHIS
B33AG303A002	Bearing	Recirc. MG Set Fluid Drive Thrust Bearing (1)	American Davidson	78-SA-1748	MEMPHIS
B33AG305A001	Drive	Recirc. MG Set Fluid Drive (1)	Howden Sirocco	78-497-5H-SPS-37	MEMPHIS
B33BM105A001	Motor	Recirc. MG Set Motor (1)	Reliance	Type: P, Frame: 600	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
B33BM105A001	Motor	Recirc. MG Set Motor Pedestal Mtg. Block Assembly (1)	Reliance		MEMPHIS
B33BM105A001	Motor	Recirc. MG Set Motor Rotor (1)	Reliance		MEMPHIS
BOP101SFPLISA001	Instrumentation System -- Spent Fuel Pool	Guided Wave Radar Spent Pool Fuel (SPF) Level Instrumentation System	Curtiss Wright	OPTIFLEX 2200 FN	MEMPHIS
BP0AADRST001A001	Actuator	Aux. Feedwater Governor Actuator (1)	Woodward	9903-472, Type: PGPL	MEMPHIS
BP0AADRST001A001	Turbine	Aux. Feedwater Turbine (1)	Dresser Rand	Type: ZS-4N	MEMPHIS
C11AC102D001	Pump	CRD Pump Casing and Pump Parts (1)	Flowserve	2 WT 810	MEMPHIS
C11AC102D001	Impeller	CRD Pump Rotating Element (1)	Flowserve	2 WT 810	MEMPHIS
C11AC202A001	Gear	CRD Pump Gear Box (1)	Lufkin	NF807C	MEMPHIS
C11AC202A002	Gear	CRD Pump Gear Box (1)	Lufkin	NF807C	MEMPHIS
C11AM102A001	Motor	CRD Pump Motor (1)	General Electric	5K818840C23	MEMPHIS
C11AM102B001	Motor	CRD Pump Motor (1)	Reliance	Type: PB, Frame: 105EA5008Z	MEMPHIS
C41AC101A001	Pump	SBLC Pump (1)	Union	TD-60	MEMPHIS
C41AC101A001	Motor	SBLC Pump Motor (1)	General Electric	5K324AK2120	MEMPHIS
C41AC101A001	Gear	SBLC Pump Gear Box (1)	Union		MEMPHIS
C41AC101B001	Pump	SBLC Pump (1)	Union	TD-60	MEMPHIS
C41AC101B001	Motor	SBLC Pump Motor (1)	General Electric	5K326XAM228V	MEMPHIS
C41AC101B001	Gear	SBLC Pump Gear Box (1)	Union		MEMPHIS
C41AC101B002	Pump	SBLC Pump (1)	Union	TD-60	MEMPHIS
C41AC101B002	Motor	SBLC Pump Motor (1)	General Electric	5K326XAM228V	MEMPHIS
C41AC101B002	Gear	SBLC Pump Gear Box (1)	Union		MEMPHIS
C41AC102C001	Pump	SBLC Pump (1)	Union	TD-60	MEMPHIS
C51AK301A001	TIP	TIP Proximity Modification Kit (1)	General Electric	RS-E2-0090	MEMPHIS
C51AK301A001	TIP	TIP Purge Air Control (1)	General Electric	137D7372G003	MEMPHIS
C51AK301A001	TIP	TIP Indexer Mechanism (1)	General Electric / Reuter Stokes	137D7353G003	MEMPHIS
C51AM301A001	Tube	SRM/IRM Drive Parts: Drive Tube (1)	General Electric		MEMPHIS
C51AM301A001	Tube	SRM/IRM Drive Parts: Shuttle Tube (1)	General Electric		MEMPHIS
C51AM301A001	Motor	SRM/IRM Drive Parts: Motor Module (1)	General Electric	135B9892G001	MEMPHIS
C51AM301A001	Gear	SRM/IRM Drive Parts: Gear Box (1)	General Electric		MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
C51AM301A001	Drive	SRM/IRM Drive Parts: Detector Drive (1)	General Electric		MEMPHIS
C51AM302A001	TIP	TIP Drive Mechanism (1)	General Electric	945E573G006	MEMPHIS
C71AG101A001	Motor	RPS MG Set Motor (1)	William Horlick	L254750000	MEMPHIS
C71AG101A001	Generator	RPS MG Set Generator (1)	William Horlick	L254750000	MEMPHIS
C71AG101A001	Generator	RPS MG Set (1)	William Horlick	60FW-151	MEMPHIS
C71AG101C001	Motor	RPS MG Set Motor (1)	General Electric	55-10-3030	MEMPHIS
C71AG101C001	Generator	RPS MG Set Generator (1)	General Electric	55-10-3035	MEMPHIS
C71AG101C001	Exciter	RPS MG Set Exciter with shaft (1)	General Electric	18R2573G1	MEMPHIS
CE2203993039A002	Pump	Nash Condenser Vacuum Pump (1)	Nash	Test No. 91U1437	MEMPHIS
CE2203993039A003	Pump	Nash Condenser Pump Repair Kit and Bearings (1)	Nash		MEMPHIS
CE2203993039B001	Pump	Nash Condenser Vacuum Pump CL-20 (1)	Nash	Series CL-2003 Test No. BS16000361001	MEMPHIS
CE5716093038A001	Turbine	Aux. Feedwater Turbine (1)	Dresser Rand	U-25794	MEMPHIS
CE5716093038B001	Turbine	Aux. Feedwater Turbine (1)	Dresser Rand	U-25795	MEMPHIS
CE5716093038D002	Impeller	Aux. Feedwater Turbine Spare Rotating Assembly (1)	Dresser Rand	800675-701	MEMPHIS
CE5716093038E001	Valve	Aux. Feedwater Turbine Governor End Pedestal Assembly (1)	Dresser Rand	80004700	MEMPHIS
CE5716093038F001	Valve	Aux. Feedwater Turbine Governor End Pedestal Assembly (1)	Dresser Rand	113582A03	MEMPHIS
CE5716093038H001	Valve	Valve Governor with Spare Bonnet for Auxiliary Feedwater Turbine Model GS-2N (1)		801368-701	MEMPHIS
CE5716093038J001	Impeller	Spare Rotating Assembly GS-2N		For model U-25794 turbine	MEMPHIS
D24AE101A001	Cask	PASS CASK (1)	NUPAC	PAS-1	MEMPHIS
D24AE101A002	Cask	PASS CASK (1)	NUPAC	PAS-1	MEMPHIS
D24AE101A003	Cask	PASS CASK (1)	Federal Pacific	PAS-1	MEMPHIS
D24AE101C001	Cask	PASS Sample Cask (1)	NUPAC	FV-20-2000 R/8	MEMPHIS
E12AC102B001	Impeller	RHR Pump Rotating Element (1)	Sulzer Bingham	2255154	MEMPHIS
E12AC102B002	Impeller	RHR Pump Rotating Element (1)	Sulzer Bingham	2255154	MEMPHIS
E12AC103A001	Pump	RHR Pump Case (1)	Byron Jackson	Type: DVDS, Size: 16x20x23	MEMPHIS
E12AC103A001	Impeller	RHR Pump Rotating Element (1)	Byron Jackson	NY-0625-ERY	MEMPHIS
E12AC103B001	Impeller	RHR Pump Rotating Element (1)	Byron Jackson	NY-0625-FW	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
E12AM101A001	Motor	RHR Motor (1)	Reliance	Type: P Frame: VZ8040	MEMPHIS
E12AM104B001	Motor	RHR Motor (1)	General Electric	5K6339XC201A	MEMPHIS
E12AM104B002	Motor	RHR Motor (1)	General Electric	5K6339XC201A	MEMPHIS
E12AM104B003	Motor	RHR Motor (1)	General Electric	5K6339XC201A	MEMPHIS
E12AM104D001	Coupling	RHR Motor Coupling (2)	Byron Jackson / Sulzer Bingham		MEMPHIS
E12AM104D002	Coupling	RHR Motor Coupling (4)	Sulzer Bingham / Ingersoll Rand / Byron Jackson		MEMPHIS
E12AM104G001	Motor	RHR Pump Motor Adapter Plate & Hardware (1)	General Electric		MEMPHIS
E12AM105A002	Motor	RHR Motor (1)	General Electric	5K6339XC255A	MEMPHIS
E21AC101A001	Impeller	LPCS Pump Rotating Element (1)	Bingham Willamette	2213823	MEMPHIS
E21AC101B001	Pump	LPCS Pump Shaft (1)	Sulzer Bingham	E11161	MEMPHIS
E21AC101C001	Pump	LPCS Pump Shaft (1)	Sulzer Bingham	E10445	MEMPHIS
E21AC101D001	Pump	LPCS Pump Impeller (1)	Sulzer Bingham	D09949	MEMPHIS
E21AC101E001	Pump	LPCS Pump Impeller (1)	Sulzer Bingham	D09436	MEMPHIS
E21AC101F001	Pump	LPCS Pump Misc. Parts (1)	Sulzer Bingham		MEMPHIS
E21AC101F002	Pump	LPCS Pump Misc. Parts (1)	Sulzer Bingham		MEMPHIS
E21AC102A001	Pump	LPCS Pump Case (1)	Borg Warner		MEMPHIS
E21AC102A001	Impeller	LPCS Pump Rotating Element (1)	Byron Jackson		MEMPHIS
E21AC102B001	Impeller	LPCS Pump Rotating Element (1)	Byron Jackson	669886	MEMPHIS
E21AC105A001	Pump	LPCS Pump Case (1)	Byron Jackson	Type: DVDS, Size 10x12x14	MEMPHIS
E21AC105A001	Impeller	LPCS Pump Rotating Element (1)	Byron Jackson		MEMPHIS
E21AM101A004	Motor	LPCS Pump Motor (1)	Reliance	Type: P, Frame: VZ5830	MEMPHIS
E21AM102B002	Motor	LPCS Pump Motor (1)	Reliance	Type: P, Frame: VZ5840	MEMPHIS
E21AM102C001	Coupling	LCPS Pump Motor Coupling (1)	Byron Jackson		MEMPHIS
E21AM102C002	Coupling	LPCS Pump Motor Coupling (1)	Byron Jackson		MEMPHIS
E21AM102D003	Coupling	LPCS Pump Motor Coupling (1)	Sulzer Bingham	2213833	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
E21AM102D004	Coupling	LPCS Pump Motor Coupling (1)	Sulzer Bingham	2213833	MEMPHIS
E21AM102E001	Coupling	LPCS Pump Motor Coupling (1)	Sulzer Bingham	2213823	MEMPHIS
E21AM102E002	Coupling	LPCS Pump Motor Coupling (1)	Sulzer Bingham	2213823	MEMPHIS
E21AM104A002	Motor	Core Spray Pump Motor (1)	Reliance	Type: P, Frame: VZ6840	MEMPHIS
E21AM107A001	Motor	LPCS Pump Motor (1)	Reliance	Type: P, Frame: VZ63830S	MEMPHIS
E41AC101A001	Pump	HPCI Main Pump Case (1)	Byron Jackson	Type: DVMX Size: 10x12x15	MEMPHIS
E41AC101B001	Impeller	HPCI Main Pump Rotating Element (HC2) (1)	Byron Jackson		MEMPHIS
E41AC101D001	Impeller	HPCI Main Pump Rotating Element (Low Flow) (1)	Byron Jackson		MEMPHIS
E41AC101E001	Impeller	HPCI Main Pump Rotating Element (1)	Flowserve	10570522	MEMPHIS
E41AC201A001	Pump	HPCI Booster Pump Case (1)	Byron Jackson	Type: DVS Size: 12x14x23	MEMPHIS
E41AC201B001	Impeller	HPCI Booster Pump Rotating Element (1)	Byron Jackson		MEMPHIS
E41AC201C001	Impeller	HPCI Booster Pump Rotating Element (Hi Flow) (1)	Byron Jackson		MEMPHIS
E41AC201D001	Impeller	HPCI Booster Pump Rotating Element (Low Flow) (1)	Byron Jackson		MEMPHIS
E41AC301B001	Gear	HPCI Gear Box (1)	Westech Gear	4110	MEMPHIS
E41AC301C001	Gear	HPCI Gear Set (1)	Westech Gear	4110	MEMPHIS
E41AC301E001	Coupling	HPCI Turbine to Main HPCI Pump Coupling (1)	Kop-Flex	Type: FBPL Size: 4 1/2	MEMPHIS
E41AC301E001	Coupling	HPCI Booster Pump to Transfer Box Coupling (1)	Kop-Flex	Type FBLP Size 3 1/2	MEMPHIS
E41AT102A001	Turbine	HPCI Turbine (1)	Terry	Type: CCS	MEMPHIS
E41AT102A001	Turbine	HPCI Turbine Receiving Tank (1)	Nash	Size: S3550S15	MEMPHIS
E41AT102A001	Turbine	HPCI Turbine Barometric Condenser Tube (1)	United Tool		MEMPHIS
E41AT102A001	Pump	HPCI Turbine Main Oil Pump (1)	DeLaval "Imo"	A3-DBCX-187	MEMPHIS
E41AT102A001	Pump	HPCI Turbine Auxiliary Oil Pump & Base	Tuthill	5 CEN-CC	MEMPHIS
E41AT102A001	Pump	HPCI Turbine Condensate Pump (1)	Nash	Size: S 1- 1/4 C	MEMPHIS
E41AT102A001	Motor	HPCI Turbine Condensate Pump Motor (1)	Reliance	709252-GY	MEMPHIS
E41AT102A001	Motor	HPCI Turbine Auxiliary Oil Pump Motor (1)	General Electric	5CD164TA879A800	MEMPHIS
E41AT102A001	Pump	HPCI Turbine Vacuum Pump (1)	Nash	Size: MD-573	MEMPHIS
E41AT102A001	Motor	HPCI Turbine Vacuum Pump Motor (1)	Reliance	L264129TIEY	MEMPHIS
E41AT102A001	Governor Controls	Remote Servo (1)	Woodward	9903-060-RR	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
E41AT102A001	Actuator	EGR Hydraulic Actuator (1)	Woodward	9903-099-RR	MEMPHIS
E41AT102A001	Governor Controls	RGSC Box (1)	Woodward	9903-091-RR	MEMPHIS
E41AT102A001	Governor Controls	Resistor Box (1)	Woodward	9903-020-RR	MEMPHIS
E41AT102A001	Governor Controls	EGM Control Box (1)	Woodward	9903-109-RR	MEMPHIS
E41AT102A001	Valve	Stop Valve with Hydraulic Cylinder (1)	Schutte & Koerting	Type: M70-00697-V Size: 10"	MEMPHIS
E41AT102B001	Turbine	HPCI Turbine (1)	Terry	Type: CCSN	MEMPHIS
E41AT102B001	Pump	HPCI Turbine Main Oil Pump (1)	DeLaval "Imo"	G3-DBCX-187	MEMPHIS
E41AT102B001	Governor	Remote Servo (1)	Woodward	9903-060	MEMPHIS
E41AT102H001	Oil Cooler	HPCI Turbine Oil Cooler (1)	American Standard	C210	MEMPHIS
E41AT102H001	Turbine	HPCI Turbine Oil Relay Assembly (1)	Terry		MEMPHIS
E41AT102H001	Turbine	HPCI Turbine Bearing Pedestal (1)	Terry		MEMPHIS
E41AT102H001	Turbine	HPCI Turbine Hydraulic Trip Assembly (1)	Terry		MEMPHIS
E41AT102H001	Valve	HPCI Turbine Stop Valve with Hydraulic Cylinder (1)	Schutte & Koerting	M69-0114V	MEMPHIS
E41AT102H001	Pump	HPCI Turbine Main Oil Pump (Shaft Driven) (1)	DeLaval "Imo"	A3-DBCX-187	MEMPHIS
E41AT102H001	Pump	HPCI Turbine Auxiliary Oil Pump (1)	Tuthill	5CEN	MEMPHIS
E41AT102H001	Motor	HPCI Turbine Auxiliary Oil Pump Motor (1)	General Electric	5CD164WA00A801	MEMPHIS
E41AT102K001	Fastener	HPCI Turbine Casing Horizontal Flange Nuts (15)	Dresser Rand		MEMPHIS
E41AT102M001 (forming)	Impeller	HPCI Turbine Rotating Element & Misc. Parts (1)	Dresser Rand	Frame: CCS	MEMPHIS
E51AC101A001	Pump	RCIC Pump (1)	Bingham Willamette	Type: CP Size: 6x6x10.5	MEMPHIS
E51AC102A001	Pump	RCIC Pump (1)	Bingham Willamette	Type: MSD Size: 6x6x10.5	MEMPHIS
E51AC103C001	Impeller	RCIC Pump Rotating Element (1)	Sulzer Bingham	Type: MSD Size: 4x6x9B	MEMPHIS
E51AC103D001	Impeller	RCIC Pump Rotating Element (1)	Sulzer Bingham	Type: MSD Size: 4x6x9B	MEMPHIS
E51AC103E001	Pump	RCIC Pump Casing (1)	Bingham Willamette	Type: MSD Size: 4x6x9B	MEMPHIS
E51AC103F001	Pump	RCIC Pump Parts including Mechanical Seal (1)	Sulzer Pumps/ Durametall	1662994	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
E51AT101A003	Actuator	RCIC Turbine Limitorque Operator (1)	Limitorque	Type: SMB-000	MEMPHIS
E51AT101A003	Valve	RCIC Turbine Trip & Throttle Valve (1)	Schutte & Koerting	Size: 3 X 4	MEMPHIS
E51AT101A003	Valve	RCIC Turbine Governor Valve (1)	Woodward		MEMPHIS
E51AT101A003	Turbine	RCIC Turbine Gland Seal Condenser Tank (1)	Nash		MEMPHIS
E51AT101A003	Oil Cooler	RCIC Turbine Oil Cooler (1)	Dresser Rand	Type: MHT-4-S (2 ½)-CB (Equivalent to Size:4-Y-42)	MEMPHIS
E51AT101A003	Pump	RCIC Turbine Vacuum Pump (1)	Nash	Size: MD-671	MEMPHIS
E51AT101A003	Motor	RCIC Turbine Vacuum Pump Motor (1)	Reliance	Frame 215AY, Form T	MEMPHIS
E51AT101A003	Pump	RCIC Turbine Condensate Pump (1)	Nash	Size: 1-1/4 C, S235CS17	MEMPHIS
E51AT101A003	Motor	RCIC Turbine Condensate Pump Motor (1)	Reliance	Type: TR, Frame 1610 ATC	MEMPHIS
E51AT101A003	Motor	RCIC Turbine Limitorque Motor (1)	Peerless Electric	Frame D56AA	MEMPHIS
E51AT101A003	Turbine	RCIC Turbine	Terry	Type: GS-2	MEMPHIS
E51AT101A003	Governor Controls	Remote Servo (1)	Woodward	9903-033-RR	MEMPHIS
E51AT101A003	Actuator	EGR Hydraulic Actuator (1)	Woodward	A9903-207	MEMPHIS
E51AT101A003	Governor Controls	RGSC Box (1)	Woodward	A8270-957-RR	MEMPHIS
E51AT101A003	Governor Controls	Resistor Box (1)	Woodward	9903-020	MEMPHIS
E51AT101A003	Governor Controls	EGM Control Box (1)	Woodward	9903-188-RR	MEMPHIS
E51AT101B001	Valve	RCIC Turbine Governor Valve (1)	Terry	77336D	MEMPHIS
E51AT101B001	Actuator	RCIC Turbine Limitorque Operator (1)	Limitorque	SMB-000	MEMPHIS
E51AT101B001	Valve	RCIC Turbine Trip & Throttle Valve (1)	Schutte & Koerting	Size: 3"	MEMPHIS
E51AT101B001	Turbine	RCIC Turbine Barometric Condenser Pipe (1)	United Tool		MEMPHIS
E51AT101B001	Turbine	RCIC Turbine Burgess Flow Assembly (1)	Burgess Ind.	51-177-0-10	MEMPHIS
E51AT101B001	Turbine	RCIC Turbine (1)	Terry	Type: GS-1	MEMPHIS
E51AT101B001	Pump	RCIC Turbine Main Oil Pump (Shaft Driven) (1)	Tuthill	ORFD-A-1	MEMPHIS
E51AT101B001	Motor	RCIC Turbine Limitorque 2 ft-lb Motor (1)	Peerless Electric	173-18-007-0	MEMPHIS
E51AT101B001	Governor Controls	Remote Servo (1)	Woodward	9903-033-RR	MEMPHIS
E51AT101B001	Actuator	EGR Hydraulic Actuator (1)	Woodward	A9903-207	MEMPHIS
E51AT101B001	Governor Controls	RGSC Box (1)	Woodward	8270-848	MEMPHIS
E51AT101B001	Governor Controls	Resistor Box (1)	Woodward	9903-020-RR	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
E51AT101B001	Oil Cooler	RCIC Turbine Lube Oil Cooler (1)	Whitlock	Size: 4-Y-42	MEMPHIS
E51AT101E001	Pump	RCIC Condensate Pump (1)	Nash	Type: T, Size: 1-1/4 C	MEMPHIS
E51AT101E001	Motor	RCIC Condensate Pump Motor (1)	Reliance	Frame 1610	MEMPHIS
E51AT101G001	Valve	RCIC Turbine Governor Valve (Installed) (1)	Terry	R-339	MEMPHIS
E51AT101G001	Actuator	EGR Hydraulic Actuator (1)	Woodward	A9903-207	MEMPHIS
E51AT101G001	Governor Controls	Remote Servo (1)	Woodward	9903-033 (890043A06)	MEMPHIS
E51AT101G001	Governor Controls	RGSC Box (1)	Woodward	9903-091 (890005A02)	MEMPHIS
E51AT101G001	Governor Controls	Resistor Box (1)	Woodward	9903-020 (890059A01)	MEMPHIS
E51AT101G001	Governor Controls	EGM Control Box (1)	Woodward	9903-085	MEMPHIS
E51AT101G001	Valve	RCIC Turbine Governor Valve (Uninstalled) (1)	Terry	R-338	MEMPHIS
E51AT101G001	Turbine	RCIC Turbine (1)	Dresser Rand	Type: GS-1	MEMPHIS
E51AT101G001	Oil Cooler	RCIC Turbine Lube Oil Cooler (2)	General Electric / Portland Engineering		MEMPHIS
E51AT101M001	Actuator	RCIC Limitorque Operator (1)	Limitorque	SMB-000	MEMPHIS
E51AT101M001	Valve	RCIC Trip & Throttle Valve (1)	Gimpel	Size: 2 x 3	MEMPHIS
E51AT101M001	Motor	RCIC Limitorque Motor (1)	Peerless - Winsmith, Inc.	176-18-0066-0	MEMPHIS
E51AT101M001	Motor	RCIC Limitorque Motor (1)	Peerless - Winsmith, Inc.	176-18-0034-0	MEMPHIS
E51AT101N001	Actuator	RCIC Limitorque Operator (1)	Limitorque	SMB-000	MEMPHIS
E51AT101N001	Valve	RCIC Trip & Throttle Valve (1)	Schutte & Koerting (Ketema Corp)	Size: 3 x 4	MEMPHIS
E51AT101N001	Motor	RCIC Limitorque Motor (1)	Peerless - Winsmith, Inc.	176-18-0063-0	MEMPHIS
E51AT101Q001	Turbine	HPCI Turbine Barometric Condenser Tube (1)	United Tool	RD 2-1	MEMPHIS
E51AT101Q001	Turbine	HPCI Turbine Gland Seal Condenser Tank (1)	Nash		MEMPHIS
E51AT101Q001	Turbine	RCIC Turbine Barometric Condenser Tube (1)	United Tool	RD 2-1	MEMPHIS
E51AT101Q001	Turbine	RCIC Turbine Gland Seal Condenser Tank (1)	Nash		MEMPHIS
E51AT101Q001	Pump	HPCI Turbine Vacuum Pump (1)	Nash		MEMPHIS
E51AT101Q001	Pump	RCIC Turbine Condensate Pump (1)	Nash		MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
E51AT101Q001	Pump	RCIC Turbine Vacuum Pump (1)	Nash		MEMPHIS
E51AT101Q001	Motor	HPCI Turbine Vacuum Pump Motor (1)	General Electric	5CD14D03A900007	MEMPHIS
E51AT101Q001	Motor	HPCI Turbine Condensate Pump Motor (1)	General Electric	5CD14C02A900001-A	MEMPHIS
E51AT101Q001	Motor	RCIC Turbine Vacuum Pump Motor (1)	General Electric	5CD14E01A900007	MEMPHIS
E51AT101Q001	Motor	RCIC Turbine Condensate Pump Motor (1)	General Electric	5CD14C02A900001-A	MEMPHIS
ETEST101A001	Motor	Reliance Test Motor (1)	Reliance		MEMPHIS
F15AE101A001	Grapple	Single Line Fuel Grapple (1)	General Electric / Gould's Mfg.	769E521B001	MEMPHIS
G33AM102A001	Motor	RWCU Motor (1)	General Electric	5K509AN1058M	MEMPHIS
N32AG202A001	Generator	Generator Field Retaining Rings (2)	General Electric	314A3617P001	MEMPHIS
N32AG204A003	Generator	Generator Field Retaining Rings (2)	General Electric	313A7946P0001	MEMPHIS
N32AG204A003	Generator	Generator Field Insulation Kit & Misc. Parts (1)	General Electric		MEMPHIS
N32AG602A001	Generator	High Voltage Bushings (12)	General Electric / Westinghouse		MEMPHIS
N32AT102A001	Generator	Front Standard Shafts & Bearings (1)	General Electric		MEMPHIS
N32AT102A001	Generator	Front Standard Splined Coupling (1)	General Electric		MEMPHIS
N32AT102B001	Generator	Front Standard Shafts & Bearings (1)	General Electric		MEMPHIS
N32AT102C001	Generator	Front Standard Shafts & Bearings (1)	General Electric		MEMPHIS
N32AT103A001	Generator	Front Standard Shafts & Bearings (1)	General Electric		MEMPHIS
N32AT503A001	Generator	Turbine Control Rotor & Rotor Parts (1)	General Electric		MEMPHIS
N32AT551A001	Generator	Permanent Magnet Generator (1)	General Electric		MEMPHIS
N32AT602A001	Pump	Turbine Main Shaft Pump Impeller & Sealing Rings (1)	General Electric	0778E201G0004	MEMPHIS
N32AT603A001	Pump	Turbine Main Shaft Pump Impeller & Sealing Rings (1)	General Electric	0478D664G0016	MEMPHIS
NECBLMVA001M01	Cable	2/0 1/C Medium Voltage Cable 5kV/8kV	Okonite	1/C 2/0 AWG	MEMPHIS
NECBLMVA001M02	Cable	3/0 1/C Medium Voltage Cable 5kV/8kV	Okonite	1/C 3/0 AWG	MEMPHIS
NECBLMVA001M03	Cable	4/0 1/C Medium Voltage Cable 5kV/8kV	Okonite	1/C 4/0 AWG	MEMPHIS
NECBLMVA001M04	Cable	250 MCM Medium Voltage Cable 5kV/8kV	Okonite	1/C 250 kcmil	MEMPHIS
NECBLMVA001M05	Cable	350 MCM Medium Voltage Cable 5kV/8kV	Okonite	1/C 350 kcmil	MEMPHIS
NECBLMVA001M06	Cable	500 MCM Medium Voltage Cable 5kV/8kV	Okonite	1/C 500 kcmil	MEMPHIS
NECBLMVA001M07	Cable	750 MCM Medium Voltage Cable 5kV/8kV	Okonite	1/C 750 kcmil	MEMPHIS
NECBLMVA001M08	Cable	250 MCM Medium Voltage Cable 5kV/8kV	Okonite	3/C 250 kcmil	MEMPHIS
NEDGEMD101A001	Engine	EMD Diesel Engine and Parts 20 Cylinders (1)	EMD	20-645-E4	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
NEE51AT101Q1	Switches	RCIC Limit Switch, SPDT, 15A (125, 250 or 480 VAC) (3)	Microswitch	BZLN-2-LH	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Gland Coupling Cage Assembly, Falk Size 62A3AS (1)	Fairbanks Morse	309211	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine AFT Main Bearing Lube Oil Booster Kit (2)	Fairbanks Morse	16610950	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Manifold Extension, Flanged with Expansion Joint. Size: 5 5/8" OD x 110" L (3)	Fairbanks Morse	16300346	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Nozzle Injection Assembly (8)	Fairbanks Morse	16108608	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Exhaust Bellow, Flanged. Size: 4 3/16" ID x 5 5/8" OD x 3 5/8" L (7)	Fairbanks Morse	16205660	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Upper Oil Cover (1)	Fairbanks Morse	16400386	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Manifold Extension, Flanged with Expansion Joint. Size: 5 5/8" OD x 39 1/2" L (2)	Fairbanks Morse	16300352	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Manifold Extension, Flanged with Expansion Joint. Size 5 5/8" OD x 76" Long. (4)	Fairbanks Morse	16300347	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Nozzle Injection Assembly (9)	Fairbanks Morse	P12601021REP	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Pistons (10)	Fairbanks Morse	P010320	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Floating Pin with Encased Tube (4)	Fairbanks Morse	S102184	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Adapter Assembly (6)	Fairbanks Morse	P12604552	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Turbocharger (1)	Fairbanks Morse	P12605478REP	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Conduit Assembly for Thermocouple (2)	Fairbanks Morse	P12602539	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Opposed Piston Lube Oil Heat Exchanger Stationary Side End Bell (1)	Fairbanks Morse	4-300-15-215-005	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Opposed Piston Lube Oil Heat Exchanger Floating Side End Bell (1)	Fairbanks Morse	4-302-15-215-005	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Opposed Piston Jacket Water Heat Exchanger Stationary Side End Bell (1)	Fairbanks Morse	4-300-15-215-006	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Opposed Piston Jacket Water Heat Exchanger Floating Side End Bell (1)	Fairbanks Morse	4-302-15-215-006	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Innercooler Heat Exchanger Stationary Side End Bell (1)	Fairbanks Morse	4-300-17-215-005	MEMPHIS
NEFBMPTSA001	Engine	Emergency Power Diesel Engine Innercooler Heat Exchanger Floating Side End Bell (1)	Fairbanks Morse	4-302-17-215-005	MEMPHIS
NEHPCISWA001	Switches	Pressure Switches (18)	General Electric / Square D	25A5706P001 9012-GAW-1	MEMPHIS
NEHPCISWA001	Switches	Pressure Switches (20)	General Electric / Square D	25A5706P002 9012-GAW-4	MEMPHIS
NEHPCISWA001	Switches	Pressure Switches (19)	General Electric / Square D	25A5706P003 9012-GBW-1	MEMPHIS
NEHPCISWA001	Switches	Differential Pressure Switches (19)	General Electric / Square D	25A5706P004 9012-GGW-4	MEMPHIS
NEHPCISWA001	Switches	Temperature Switches (18)	General Electric / Square D	25A5706P005 9012-GYW-3	MEMPHIS
NEHPCISWA001	Switches	Temperature Switches (14)	General Electric / Square D	25A5706P006 9012-GXW-3	MEMPHIS
NEMORSFPLSPA001	SFPLI	Spent Fuel Pool Level Indication Parts	MOHR		MEMPHIS
NEP70AM101A001	Engine	Diesel Exhaust Manifold Assembly	Fairbanks Morse		MEMPHIS
NERRC101A001	Portable Emergency Lighting	Mobile Light Towers (15)	Powko Industries	RL4 equipped with Cold Weather Pkg	MEMPHIS
NERRC101A001	Portable Emergency Lighting	Mobile Light Towers (15)	Powko Industries	RL4 equipped with Cold Weather Pkg	PHOENIX
NERRC101A001	Pumps	High Pressure (HP) Injection Pumps (5)	CAT Pump	60AG6741	MEMPHIS
NERRC101A001	Pumps	High Pressure (HP) Injection Pumps (5)	CAT Pumps	60AG6741	PHOENIX
NERRC101A001	Trailers	HP Injection Pump Trailers (5)	Kaufman Trailers	FP-5-2-10F	MEMPHIS
NERRC101A001	Trailers	HP Injection Pump Trailers (5)	Kaufman Trailers	FP-5-2-10F	PHOENIX
NERRC101A001	Pumps	Low Pressure Medium Flow (LPMF) Pumps	Hale Pumps	HPI2500DIM-EC	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
NERRC101A001	Pumps	Low Pressure Medium Flow (LPMF) Pumps	Hale Pumps	HPI2500DIM-EC	PHOENIX
NERRC101A001	Trailers	LPMF Pump Trailers (5)	Kaufman Trailers	FP-5.2K-10SAF	MEMPHIS
NERRC101A001	Trailers	LPMF Pump Trailers (5)	Kaufman Trailers	FP-5.2K-10SAF	PHOENIX
NERRC101A001	Pumps	Low Pressure High Flow (LPHF) Pumps	Hale Pumps	IP5000DIM-EC	MEMPHIS
NERRC101A001	Pumps	Low Pressure High Flow (LPHF) Pumps	Hale Pumps	IP5000DIM-EC	PHOENIX
NERRC101A001	Trailers	LPHF Pump Trailers (5)	Kaufman Trailers	FP-5.2K-10SAF	MEMPHIS
NERRC101A001	Trailers	LPHF Pump Trailers (5)	Kaufman Trailers	FP-5.2K-10SAF	PHOENIX
NERRC101A001	Medium Voltage Diesel Generators	1 MW 4160 VAC Medium Voltage Diesel Generators (9)	Turbine Marine	4160V	MEMPHIS
NERRC101A001	Medium Voltage Diesel Generators	1 MW 4160 VAC Medium Voltage Diesel Generators (9)	Turbine Marine	4160V	PHOENIX
NERRC101A001	Fuel Storage Tanks	TransCube Fuel Storage Tanks (1,240 Gallon Capacity) (9)	Western International	50TCG	MEMPHIS
NERRC101A001	Fuel Storage Tanks	TransCube Fuel Storage Tanks (1,240 Gallon Capacity) (9)	Western International	50TCG	PHOENIX
NERRC101A001	Low Voltage Diesel Generators	1100 kW 480 VAC Low Voltage Diesel Generators (5)	Turbine Marine	480V	MEMPHIS
NERRC101A001	Low Voltage Diesel Generators	1100 kW 480 VAC Low Voltage Diesel Generators (5)	Turbine Marine	480V	PHOENIX
NERRC101A001	Fuel Storage Tanks	TransCube Fuel Storage Tanks (1,240 Gallon Capacity) (5)	Western International	50TCG	MEMPHIS
NERRC101A001	Fuel Storage Tanks	TransCube Fuel Storage Tanks (1,240 Gallon Capacity) (5)	Western International	50TCG	PHOENIX
NERRC101A001	Standard Cable and Electrical Connections	4160 V Standard Cable Reels and Electrical Connections (4)	Coalmont Electrical	4160VAC Cable Delivery Trailer	MEMPHIS
NERRC101A001	Standard Cable and Electrical Connections	480 V Standard Cable Reels and Electrical Connections (4)	Coalmont Electrical	480VAC Cable Delivery Trailer	MEMPHIS
NERRC101A001	Standard Cable and Electrical Connections	4160 V Standard Cable Reels and Electrical Connections (4)	Coalmont Electrical	4160VAC Cable Delivery Trailer	PHOENIX
NERRC101A001	Standard Cable and Electrical Connections	480 V Standard Cable and Electrical Connections (4)	Coalmont Electrical	480VAC Cable Delivery Trailer	PHOENIX
NERRC101A001	Pumps	Steam Generator Reactor Pressure Vessel Makeup (SG RX MU) Pumps	Hale Pumps	HPI500DI-EC	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
NERRC101A001	Pumps	Steam Generator Reactor Pressure Vessel Makeup (SG RX MU) Pumps	Hale Pumps	HPI500DI-EC	PHOENIX
NERRC101A001	Trailers	SG RX MU Pump Trailers (5)	Kaufman Trailers	FP-5.2K-10SAF	MEMPHIS
NERRC101A001	Trailers	SG RX MU Pump Trailers (5)	Kaufman Trailers	FP-5.2K-10SAF	PHOENIX
NERRC101A001	Air Lift Containers	Air Lift Fuel Containers - Regular Drum (3)	Interstate Products	RC-DDF-500G	MEMPHIS
NERRC101A001	Air Lift Containers	Air Lift Fuel Containers - Extreme Drum (2)	Interstate Products	RC-EDDF-500G	MEMPHIS
NERRC101A001	Air Lift Containers	Air Lift Fuel Containers - Regular Drum (3)	Interstate Products	RC-DDF-500G	PHOENIX
NERRC101A001	Air Lift Containers	Air Lift Fuel Containers - Extreme Drum (2)	Interstate Products	RC-EDDF-500G	PHOENIX
NERRC101A001	Fuel Storage Tanks	Fuel Transfer Tank (264 gallons) with AC & DC Pumps (5)	Western International	10TCG	MEMPHIS
NERRC101A001	Fuel Storage Tanks	Fuel Transfer Tank (264 gallons) with AC & DC Pumps (5)	Western International	10TCG	PHOENIX
NERRC101A001	Pumps	Fuel Transfer Pumps (5)	Dixson Pumps	02-2029-DEKH-GII	MEMPHIS
NERRC101A001	Pumps	Fuel Transfer Pumps (5)	Dixson Pumps	02-2029-DEKH-GII	PHOENIX
NERRC101A001	Load Distribution Centers	4160 VAC Load Distribution Centers (5) with Trailers	Coalmont Electrical	PEICO-4160V-LDCR	MEMPHIS
NERRC101A001	Load Distribution Centers	4160 VAC Load Distribution Centers (5) with Trailers	Coalmont Electrical	PEICO-4160V-LDCR	PHOENIX
NERRC101A001	Standard Hoses	Hose Deployment Modules (4 sets) consisting of (1) Large Module & (1) Small Module each	EJ Metals	2004-MD	MEMPHIS
NERRC101A001	Standard Hoses	Hose Deployment Modules (4 sets) consisting of (1) Large Module & (1) Small Module each	EJ Metals	2004-MD	PHOENIX
NERRC201A001	Mobile Boration Skids	Mobile Boration Units (Generator and Tank) (5)	Mesa Technologies	14RA725	MEMPHIS
NERRC201A001	Mobile Boration Skids	Mobile Boration Units (Generator and Tank) (5)	Mesa Technologies	14RA725	PHOENIX
NERRC401A001	Water Treatment System	Water Treatment System (2 each) consisting of (4) modules; Hydrocyclone Skid (1), Disk Filtration Skid (1) and Reverse Osmosis Skids (2)	RWL Water		MEMPHIS
NERRC401A001	Water Treatment System	Water Treatment System (2 each) consisting of (4) modules; Hydrocyclone Skid (1), Disk Filtration Skid (1) and Reverse Osmosis Skids (2)	RWL Water		PHOENIX
NERRC401A001	Generators	Water Treatment Generators (125 kW) (2)	Mesa Technologies	CAT Model D150-8	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
NERRC401A001	Generators	Water Treatment Generators (125 kW) (2)	Mesa Technologies	CAT Model D150-8	PHOENIX
NERRC401A001	Trailers	Water Treatment Trailers (8)	Econoline	BP0512FE	MEMPHIS
NERRC401A001	Trailers	Water Treatment Trailers (8)	Econoline	BP0512FE	PHOENIX
NERRC450A001	Water Storage	Non-Potable Pillow Style Water Bladders 20,000 Gallon Capacity (8)	Aire Industrial	952-200007	MEMPHIS
NERRC450A001	Water Storage	Non-Potable Pillow Style Water Bladders 20,000 Gallon Capacity (8)	Aire Industrial	952-200007	PHOENIX
NERRC501A001	Transformers	Step Up Transformers - 480 VAC to 600 VAC (4)	Federal Pacific	TX1375KVA	MEMPHIS
NERRC501A001	Transformers	Step Up Transformers - 480 VAC to 600 VAC (4)	Federal Pacific	TX1375KVA	PHOENIX
NERRC501A001	Trailers	Step Up Transformer Trailers (4)	Hurst	6C	MEMPHIS
NERRC501A001	Trailers	Step Up Transformer Trailers (4)	Hurst	6C	PHOENIX
NERRC501A001	Standard Cable and Electrical Connections	Cable Reels for 480 to 600 VAC Transformer (4)	Coalmont Electrical	480VAC Cable Delivery Trailer	MEMPHIS
NERRC501A001	Standard Cable and Electrical Connections	Cable Reels for 480 to 600 VAC Transformer (4)	Coalmont Electrical	480VAC Cable Delivery Trailer	PHOENIX
NERRC550A001	Standard Cable and Electrical Connections	Cable Reels for 4kV to 6.9kV Step Up Transformer (2)	Coalmont Electrical	4160VAC Cable Delivery Trailer	MEMPHIS
NERRC550A001	Standard Cable and Electrical Connections	Cable Reels for 4kV to 6.9kV Step Up Transformer (2)	Coalmont Electrical	4160VAC Cable Delivery Trailer	PHOENIX
NERRC601A001	Ventilation Fans	16" Ventilation Fans (5)	Euramco	ATEX EF1150XX	MEMPHIS
NERRC601A001	Ventilation Fans	16" Ventilation Fans (5)	Euramco	ATEX EF1150XX	PHOENIX
NERRC801A001	Air Compressors	Portable Air Compressors (5)	Sullivan-Palatek	DF375PDJAF	MEMPHIS
NERRC801A001	Air Compressors	Portable Air Compressors (5)	Sullivan-Palatek	DF375PDJAF	PHOENIX
NERRC1001A001	Pumps	Portable Submersible Pumps (2)	D&D Hydraulics	6HH X 400 with Model 400D Power Unit	MEMPHIS
NERRC1001A001	Pumps	Portable Submersible Pumps (2)	D&D Hydraulics	6HH X 400 with Model 400D Power Unit	PHOENIX
NERRC1101A001	Pumps	Suction Lift Booster Pumps (7)	Hale Pumps	HS5000DJ-ECL	MEMPHIS
NERRC1101A001	Pumps	Suction Lift Booster Pumps (7)	Hale Pumps	HS5000DJ-ECL	PHOENIX
NERRC1101A001	Trailers	Suction Lift Booster Pump Trailers (7)	Kaufman Trailers	FP-5.2K-10SAF	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
NERRC1101A001	Trailers	Suction Lift Booster Pump Trailers (7)	Kaufman Trailers	FP-5.2K-10SAF	PHOENIX
NERRC2001A001	Medium Voltage Diesel Generator	4160 VAC Medium Voltage Diesel Generator in excess of 2MW (1)	Turbine Marine	4160V	MEMPHIS
NERRC2001A001	Medium Voltage Diesel Generator	4160 VAC Medium Voltage Diesel Generator in excess of 2MW (1)	Turbine Marine	4160V	PHOENIX
NERRC2001A001	Standard Cable & Electrical Connections	Cable Reels for 4160 Generator (in excess of 2MW) (1)	Coalmont Electrical	4160VAC Cable Delivery Trailer	MEMPHIS
NERRC2001A001	Standard Cable & Electrical Connections	Cable Reels for 4160 Generator (in excess of 2MW) (1)	Coalmont Electrical	4160VAC Cable Delivery Trailer	PHOENIX
NERSB33AM107B001 (forming)	Motor	RHR Pump Motor Non-Emergency Rotating Spare			EMC
NERSE12AM104B001	Motor	RHR Motor Non-Emergency Rotating Spare	General Electric	5K6339XC90A	MEMPHIS
NERSE21AM101A003	Motor	Core Spray Pump Motor Non-Emergency Rotating Spare	Reliance	Type: P, Frame: VZ5830	MEMPHIS
NESFPLIPA001	SFPLI	Guided Wave Radar Spent Fuel Pool Level Indication Spare Parts	Westinghouse		MEMPHIS
NESRPTSA001	Recombiner	Hydrogen Recombiner Hydrogen Analyzer (1)	Rockwell	N139000115-0	MEMPHIS
NESRPTSA001	Recombiner	Hydrogen Recombiner Test Panel (1)	Rockwell	N139000297-06	MEMPHIS
NESRPTSA001	Recombiner	Hydrogen Recombiner (1)	Rockwell/PSI	N139000297-08	MEMPHIS
NESRPTSA001	Recombiner	Hydrogen Recombiner Control Cabinet (1)	Rockwell	N139000297-05	MEMPHIS
NESRPTSA001	Motor	Hydrogen Recombiner Motor (1)	Reliance	2YF882829A2 WF	MEMPHIS
NESRPTSA001	Motor	Hydrogen Recombiner Motor (1)	Reliance	N139000297-05.	MEMPHIS
NESRPTSA001	Recombiner	Hydrogen Recombiner (1)	Rockwell/PSI	N139000297-08	MEMPHIS
NESRPTSA001	Recombiner	Hydrogen Recombiner Hydrogen Analyzer (1)	Rockwell	N139000208-01	MEMPHIS
NESRPTSA001	Recombiner	Hydrogen Recombiner Control Cabinet (1)	Rockwell	N139000297-05	MEMPHIS
NESRPTSA001	Motor	Hydrogen Recombiner Motor (1)	Reliance	1YF882829A2 WF	MEMPHIS
NESRPTSA001	Motor	Hydrogen Recombiner Motor (1)	Reliance	2YF882829A1	MEMPHIS
NEWWE00RCPCP101A7	Pump	Reactor Coolant Pump Seal Housing (1)	Westinghouse	510F242G02	MEMPHIS
NEWWE00RCPCP101A7	Pump	Reactor Coolant Pump Upper Seal Housing (1)	Westinghouse	5054D59H01	MEMPHIS
NEWWE00RCPCP101A7	Pump	Reactor Coolant Pump Ring Clamp (1)	Westinghouse	910D669H01	MEMPHIS
NEWWE00RCPCP101A7	Pump	Reactor Coolant Pump Impeller (12)	Westinghouse	934D060G01	MEMPHIS
NEWWE00RCPCP101A7	Pump	Reactor Coolant Pump No. 1 Seal Housing (1)	Westinghouse	4D96702G01	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
NEWEO0RCPCPI01A7	Pump	Reactor Coolant Pump Rotor Assembly (1)	Westinghouse	2D74893G11	MEMPHIS
NEWEO0RCPCPI01A7	Pump	Reactor Coolant Pump Lower Seal Housing & Misc. Parts (1)	Westinghouse	933D313H03	MEMPHIS
P70AD101A001	Engine	Essential Power Diesel Engine (1)	EMD-GM	20-645-E4	MEMPHIS
P70AD101A001	Turbocharger	Essential Power Diesel Engine Turbocharger (1)	EMD-GM	9528867, Type: GM Electro Motive Roller Clutch	MEMPHIS
P70AD101A001	Actuator	Essential Power Diesel Engine Governor Actuator (1)	Woodward	9903-067, Type EGB-13C	MEMPHIS
P70AD101A001	Actuator	Essential Power Diesel Engine Governor Actuator (Installed - 1)	Woodward	9903-025, Type UG-8	MEMPHIS
P70AD101D001	Engine	Essential Power Diesel Engine (1)	EMD-GM	20-645-E4	MEMPHIS
P70AD101D001	Turbocharger	Essential Power Diesel Engine Turbocharger (1)	EMD-GM	9528867, Type: GM Electro Motive Roller Clutch	MEMPHIS
P70AD102A001	Engine	Emergency Power Diesel Engine (1)	Fairbanks Morse	38TD 8 1/8"	MEMPHIS
P70AD102A001	Actuator	Emergency Power Diesel Engine Governor Actuator (Installed - 1)	Woodward	9903-51, Type UG-8	MEMPHIS
P70AD102A001	Actuator	Emergency Power Diesel Engine Governor Actuator (1)	Woodward	9903-028, Type EGB-10C	MEMPHIS
P70AD102A001	Turbocharger	Emergency Power Diesel Engine Turbocharger (1)	Elliott	H584FPT	MEMPHIS
P70AG102A001	Generator	Essential Power Diesel Generator (1)	Baylor	B855A20C1-B	MEMPHIS
P70AG102B001	Generator	Essential Power Diesel Generator (1)	Baylor	B855A20C2-B	MEMPHIS
WE00CSAHRG01A001	Exchanger	Regenerative Heat Exchanger (1)	Westinghouse		MEMPHIS
WE00NIELDT01A001	Detector	Power Range Detectors (1)	Westinghouse	WL-24154	MEMPHIS
WE00NIELDT01A002	Detector	Power Range Detectors (1)	Westinghouse	WL-24154	MEMPHIS
WE00NIELDT01B001	Detector	Source/Intermediate Range Detectors (1)	Westinghouse	WL-24157	MEMPHIS
WE00NIELDT01B002	Detector	Source/Intermediate Range Detectors (1)	Westinghouse	WL-24157	MEMPHIS
WE00RCICIC01A001	Tube	Incore Flux Thimble Tubes (25)	Westinghouse	1462E54G01	MEMPHIS
WE00RCICIC01A002	Tube	Incore Flux Thimble Tubes (25)	Westinghouse	1462E54G01	MEMPHIS
WE00RCICIC01A003	Tube	Incore Flux Thimble Tubes (8)	Westinghouse	1462E54G01	MEMPHIS
WE00RCPCDM01A001	CRDM	CRDM Latch Assemblies (6)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01A002	CRDM	CRDM Latch Assemblies (2)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01A003	CRDM	CRDM Latch Assemblies (2)	Westinghouse	L106A	MEMPHIS

Equipment Committee	Equipment Type	Description (Quantity)	Manufacturer	Model Number or Part Number	Equipment Location
WE00RCPCDM01A004	CRDM	CRDM Latch Assemblies (6)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01A005	CRDM	CRDM Latch Assemblies (13)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01A006	CRDM	CRDM Latch Assemblies (2)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01A007	CRDM	CRDM Latch Assemblies (2)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01A008	CRDM	CRDM Latch Assemblies (20)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01B002	CRDM	CRDM Coil Stack Assemblies (2)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01B003	CRDM	CRDM Coil Stack Assemblies (4)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01B004	CRDM	CRDM Coil Stack Assemblies (8)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01B005	CRDM	CRDM Coil Stack Assemblies (16)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01B006	CRDM	CRDM Coil Stack Assemblies (22)	Westinghouse	L106A	MEMPHIS
WE00RCPCDM01D001	CRDM	CRDM Drive Rods (1)	Westinghouse	115E600-G01	MEMPHIS
WE00RCPCDM01D002	CRDM	CRDM Drive Rods (8)	Westinghouse	115E600-G01	MEMPHIS
WE00RCPCDM01D003	CRDM	CRDM Drive Rods (4)	Westinghouse	115E600-G01	MEMPHIS
WE00RCPCDM01D004	CRDM	CRDM Drive Rods (8)	Westinghouse	115E600-G01	MEMPHIS
WE00RCPCDM01D005	CRDM	CRDM Drive Rods (8)	Westinghouse	115E600-G01	MEMPHIS
WE00RCPCDM01D006	CRDM	CRDM Drive Rods (8)	Westinghouse	115E600-G01	MEMPHIS
WE00RCPCDM01D007	CRDM	CRDM Drive Rods (8)	Westinghouse	115E600-G01	MEMPHIS
WE00RCPCDM01D008	CRDM	CRDM Drive Rods (8)	Westinghouse	115E600-G01	MEMPHIS
WE00RCPCPI01A002	Bolt	Main Flange Bolts (24)	Westinghouse	913C495G04	MEMPHIS
WE00RCPCPR01A001	Heater	Pressurizer Immersion Heaters (78)	Westinghouse	393A701H03	MEMPHIS
WE00RCPCPR01B001	Heater	Pressurizer Immersion Heaters (78)	Westinghouse	393A701H04	MEMPHIS
WE00RCPCRV01A001	Material	Reactor Vessel Closure Bolting Stud Raw Material (1)	Westinghouse	Sizes: 7.5 inch dia., 10 7/8 inch dia.	MEMPHIS
WE00RCPCRV01A002	Material	Reactor Vessel Closure Bolting Stud Raw Material (1)	Westinghouse	Sizes: 7.5 inch dia., 10 7/8 inch dia.	MEMPHIS
WE00RCPCRV01B001	Material	Reactor Vessel Closure Bolting Stud Raw Material (1)	Westinghouse	Stud: 6.25" dia. Nut: 9.875" dia. Washer: 9.875" dia.	MEMPHIS
WE00TUELST01A001	Generator	Rotor (1)	Westinghouse	Size: 2-140x170	MEMPHIS
WE00TUELST01B001	Generator	Stator Coils and Parallel Rings & Misc. Parts	Westinghouse		MEMPHIS
WE00TUELST01C001	Generator	Stator Coils Lamination Dies	Westinghouse		MEMPHIS

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*Steering Committee Position



Withdrawal - Nine Mile Point 2 December 2018

- Catastrophic Failure of Emergency Diesel
- Replacement emergency diesel withdrawn from PIM (Memphis, TN)
- Arrived at site (Oswego, NY) within 32 hours after final withdrawal signatures were received
- Successfully installed, tested and placed in service 15 days after the event
- PIM Diesel was originally purchased in 1991
- Estimated cost of new diesel \$22M and at least 1 year to build
- Total cost to Nine Mile Point 2 to replace withdrawn diesel engine was \$3,623,956
- Cost savings to Nine Mile Point 2 was approximately \$18,376,044

"This is the reason that PIM exists. The likelihood of repairing the failed diesel in lieu of withdrawing the PIM diesel would have been extremely challenging, and the down time would have been substantial based on the discoveries made at the OEM."

- John Gallaher, Former MC Chairman (Exelon)

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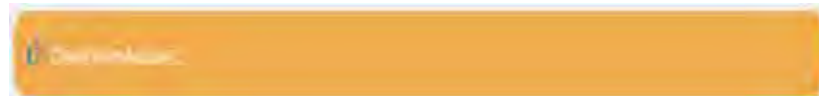
PEICo Website

User Registration

Access to the membership area is secured and requires registration. Open the PEICo Website (www.PEICo.org) and select “New Registration” to complete the form.



Next, select “Create User Account” which will send an email for your verification which must be responded to within in 24 hours.



Once your verification is received, you will be contacted notifying you that you now have Member Site Access to the PEICo website. Log onto www.PEICo.org and select “Member Site Access”.



Exploring Membership Information

From the main page you will see links to each of the main site areas where you'll find comprehensive information of equipment, membership, and rosters.



You can explore the advantages of joining equipment committees and generate work-flow requests.

Plants – This section provides each company's/site's Participant's key contact information, Equipment Committee (EC) involvement and a plant benefits summary. Additionally, site Roster Changes can be submitted electronically from this location.

Equipment – Provides a complete equipment list of all the ECs in the PIM Program. Each EC includes pictures, value, and its membership. Additionally, one can submit electronic requests to "Join" ECs or initiate equipment "Withdrawals."

Contacts – This area allows you to search a complete list of every company PIM representative along with their contact information. The Program Manager Organization contact information is also included. Should a change be needed, use the links provided on the Rosters page to submit a change request.

Rosters/Officers – There are more than 30 Rosters with 1-30 members each that make up the PIM Program. This section provides the various roles Participant's serve in. By selecting one of the rosters, needed changes may be submitted.

PIM Documents – If you are new to our program, the first link on this page includes the "PIM New User Guide". This page also contains a link to have the PEICo Rules and Procedures (PRP) Manual automatically sent to your email address.

Digital Signing – If your signature is needed, our system will automatically email you a link every 24 hours until we receive your signature. If you get lost in your emails, simply login to our site and the home page will let you know if your signature is needed.

Mobile Device Usage – All the features mentioned above, and more are all available from your mobile device. Using your mobile browser click on the send icon and look for "Add to Home Screen" button.

Conclusion – In conclusion, the PEICo Website stands as a testament to the program's commitment to fostering collaboration, innovation, and efficiency among its Participants. By providing easy access to membership information, shared equipment ownership details, roster roles, and request initiation processes, the website empowers Participants to maximize their involvement in the program. Explore the website today and unlock the full potential of your participation in the PIM Program.



www.PEICo.org

