

Corrective Actions Taken

Component/Condition	Immediate Actions	Corrective Actions
• Loose connection	Tightened loose connection	Revise PM procedure to ensure connections are tight.
• Clogged oil filter	Filtration rig installed	Revise oil analysis program to analyze for non-metal particulates.
• SBM switch	Switch replaced	Operator training on SBM switch.
• Exciter brushes	Brushes replaced. Implemented thermography to ensure proper brush seating.	Perform thermography when brushes replaced and weekly checks to ensure proper operation.

Corrective Actions Taken

(Continued)

Component/Condition	Immediate Actions	Corrective Actions
• Rack mounted controller	Replaced controller.	Study being performed to replace with digital controller. If replacement not performed, periodic refurbishment of circuit cards will be performed.
• 4 kV switchgear cell switch	Linkage to actuate cell switch adjusted.	Revise PM procedure to include operational check of cell switch.
• DC positioning motor	Brushes replaced. Motor cleaned.	Initiate predefine to perform periodic maintenance.

Long-Term Actions

- To reduce further challenges from Recirc MG set components
 - Install auto-start feature for Unit 2
 - Similar to Unit 3
 - Complete Point to Point review by June 1, 2001
 - Complete all Point to Point prescribed actions by D3R17
 - Evaluate future system upgrades

Point to Point Review

- Performed a point to point review of the Recirc MG set system
 - Site Engineering Policy Number 12
- Multidiscipline team
 - Station (Operations, Maintenance, Design and System Engineering)
 - Corporate and Vendor Support
- Review previous 5 years of LERs, CRs/PIFs, PM data
- Review previous MCIP, OPEX, EPIX, Mod history, VTIP
- Complete design review of system against as-built plant
- Comparison with other Exelon practices and design
- Review of maintenance and operating procedures
- Identify and assign corrective actions

Point to Point Review (Continued)

- Point to Point review a proven process for creating improvements
 - system/plant performance
 - material condition
 - capacity factor
- Previous examples include HPCI, Diesel Generators and EHC
- Applied this same methodology to raise Recirc MG Set system performance level

Point to Point Review Results

- 11 most important areas for improvement, 65 total
 - Lack of lube oil pump auto start feature
 - SBM switch operation
 - 4kv switchgear cell switch PM weakness
 - MG set brush monitoring procedure weakness
 - Positioner DC motor no predefine
 - MG voltage regulators no predefine
 - Oil analysis lacked non-metallic particulate
 - 2A MG set oil contaminated with non-metallic particulate
 - No spare field breaker available
 - 2B MG set drive end vibrations high and oil pressure fluctuations
 - MG set voltage regulators oscillate near 100% speed
- Programmatic reviews complete
 - Several enhancements identified
 - No significant programmatic deficiencies found

Concluding Remarks

- Reviewing for fleet-wide implications and applications
 - Plant Material Condition Excellence Initiative
- Station and corporate management actively engaged