

## **Operations and Maintenance Manuals Review**

The Maintenance and Operations manuals (O&M's) were reviewed and accepted except as noted below;

- 1. The controls O&M's manuals need more information regarding the fiber-optic network between the fuel cells and the Johnson control panel, specifically cut sheet data on the fiber-optic interface devices that were used. Johnson Controls provided the required information.
- 2. The control drawings do not depict a true point to point wiring diagram. The drawings do identify wire termination points for the controllers. A point to point wiring diagram is required.
- 3. The control drawings do not depict the interface of the fuel cell run status via relays. This detail needs to be added to the control drawings.
- 4. The mechanical O&M's that were provided did not include the fuel cells, the cooling modules or the RO water system. The O&M's were verified at the site and are acceptable.
- 5. The electrical O&M's that were provided were missing the transformer and the switchgear. The O&M's were verified at the site and are acceptable.