



# Power Plant Fuel Off-loading System Stripping Line Project

## BACKGROUND

Due to stricter environmental regulations enforced by the U.S. Coast Guard and State Fire Marshal, a bayside power plant installed a stripping system to empty its fuel lines and fill them with inert gas (Fig. 1). By emptying these lines, the plant would minimize the potential of spillage into the Bay and allow for easier annual hydrostatic proof testing.



Figure 1: View of the plant from the

## DISCUSSION

In this project, MIS provided the following services to the plant:

- Re-design existing piping through pressure testing
- Piping layout design
- Piping stress analysis
- Support design and analysis
- Pump sizing and selection
- Piping construction drawings

- Development of special requirements for construction specifications
- New operating procedures
- Construction management support during system installation
- Revision of hydrostatic test procedures.
- Testing and verification for the operation and safety of the system.

The new system (Figs. 2 &3) met all relevant piping codes and environmental regulations.

## CONCLUSION

MIS designed and engineered a stripping system to empty both a residual fuel oil line and a distillate fuel oil line from the off-loading docks to the respective storage tanks. We also provided construction management support, testing procedures, and operating procedures for this stripping system. Furthermore, MIS participated in the testing for verification and adequacy of all systems.

## PIER 70 PIPING, VALVES, AND PUMPS

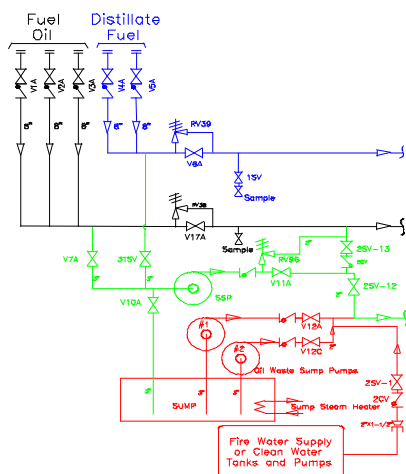
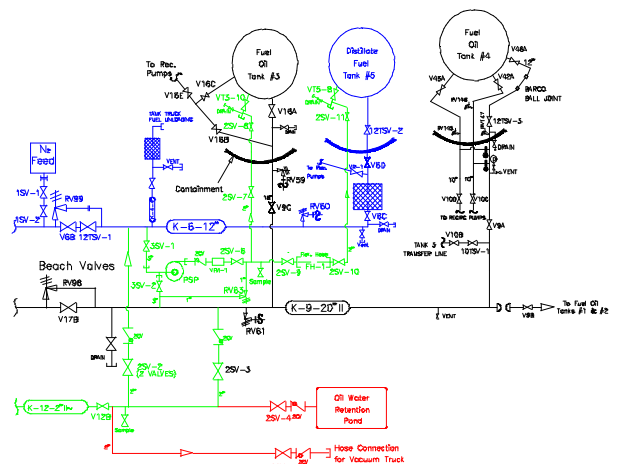


Figure 2. Offshore Piping System



## TANKAGE PIPING, VALVES, AND PUMPS

Figure 3. Plant-side Piping System