



Department of Energy Mixed Oxide (MOX) Fuel Fabrication Facility MPR Helps Major DOE Project Start Construction on Track

CHALLENGE

Reducing the amount of weapon grade nuclear material in the US and Russia is a key part of reducing the threat of nuclear weapon proliferation. The US and Russia agreed to jointly dispose of tons of nuclear warhead material by “burning” it in nuclear reactors, thereby rendering the material unsuitable for use in weapons. To accomplish this, the warhead material must first be processed into mixed oxide fuel (MOX) that can be used in a nuclear reactor. The design and construction of the MOX Fuel Fabrication Facility (MFFF) for safely processing this hazardous material requires the successful integration of several technical disciplines, including: HVAC, Electrical/Instrumentation and Controls, Seismic/structural, Chemical and safety systems, Glovebox mechanical and electrical design, and Glovebox automation and software design.

SOLUTION

The Department of Energy (DOE) formed a strong team to oversee the design and construction of the MFFF to ensure that the hazardous material processes would be safe, reliable and meet all of the stringent regulatory requirements. The DOE has tasked MPR with a key role in the technical and management oversight of the MFFF, one of the largest construction projects in the world today, because of our demonstrated technical expertise with the design of integrated systems for processing hazardous materials, our independence from vendors, and our integrity in always doing what’s best for our clients.

RESULTS

The MFFF project has successfully passed senior program reviews and has started construction. MPR continues to provide support to help DOE ensure this large, complex, first of a kind project stays on track.

