## **Full-system Chemical Decontamination**

## Background

Westinghouse has designed, fabricated and installed a full-system decontamination modular system at an operating nuclear power plant and performed a 105,000-gallon, in-situ chemical decontamination of the pressurized water reactor, steam generators and plant cooling systems. The ion exchange process system was designed to remove 10,000 curies of radioactive contaminants from the plant systems in a six-day decontamination solvent application.

## **Description**

The system's operating weight is 280 tons with a minimum floor space requirement of 840 ft<sup>2</sup> (28 ft X 30 ft). The 1,500-gpm-rated modular system comprises:

- Nine 160 ft<sup>3</sup> ion-exchange vessels
- Four 320 ft<sup>3</sup> spent-resin storage tanks
- · Full-flow backwashable filters
- · Remote resin fill and transfer system
- Fully computerized/programmable logic control system



Reactor full-loop chemical decontamination system



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