Background
Westinghouse offers a complete line of head-lift rig and stud-tensioner carousel equipment. Each plant’s equipment is reviewed to provide the most cost-effective and efficient solutions to the carousel needs. These solutions can vary from and include: the adaptation of existing equipment to carousels, the provision of separate carousels and the provision of new combination carousel/lifting rigs.

Description
The Westinghouse upgrade program seeks to improve outage times with some of the following features:

- Integrated tensioner pump platform
- Nut and stud cover racks
- NUREG-0612 design and test
- Reduced welds in the load path
- Utilization of existing equipment where possible
**Benefits**

The benefits produced by these features include:

- Time-saving single lift for nuts, tensioners and reactor heads
- Space-saving storage on head during outage
- Improved safety with reduced rigging and cavity entry
- Improved tensioning control
- Improved tensioning and detensioning times
- Minimal costs for upgrades