Background
With the increasingly competitive electric utility marketplace, nuclear power plants are being forced to find ways to operate more efficiently. The refueling window during an outage offers the most room for improvement, and the best way to effect this is to reduce the refueling outage duration.

As a leading global supplier of fuel-handling equipment for PWRs and BWRs, PaR Nuclear, a subsidiary of Westinghouse, has been dedicated to providing and supporting equipment that reduces fuel movement time, saving our customers significant amounts of money. To this end, we’re pleased to offer the auxiliary bridge.

Description
The Westinghouse auxiliary bridge lets you perform outage-related operations simultaneously from the main refueling platform and from a parallel second bridge. The auxiliary bridge complements the refueling platform by providing multiple access to a single operation for better visibility and control of the work, or allowing several underwater jobs to proceed simultaneously. As such, it saves outage time and associated radiation exposure as well as adds to the effectiveness of plant personnel.

The auxiliary bridge is also compatible with the Westinghouse Rigid Pole-Handling System. The entire Rigid Pole-Handling System can be operated from the auxiliary bridge by adding the poles and fittings to the already installed pole assembly station and pole storage rack. This system provides a safe and effective way to manipulate servicing tools from the bridge. Several bridge configurations can be provided ranging from moving walkways to fully equipped.

Benefits
• Access to Underwater Regions
  Coverage for virtually all underwater regions is provided from the traveling bridge by the bridge-traversing trolley.

• Additional Hoist Availability
  A 1-ton hoist operates from a monorail positioned along the bridge. The hoist allows servicing tools to be lifted and positioned at the end of handling poles.
• Precise Operator Control
  A control station and cable festoon for positioning the bridge, trolley, and hoist provide direct, precise operator control of all movements for enhanced tool access to any underwater location traversed by the bridge.

• Optional Enhancements
  A trolley can be equipped with independent retractable cable or hose systems for underwater work, using:
  – Lighting
  – TV cameras
  – Compressed air or water to operate underwater power tools

• Enhanced Maneuverability
  The light weight of the auxiliary bridge relative to the refueling bridge, and the absence of the refueling mast tower permit greater maneuverability by personnel on the bridge platform. Multi-speed motors afford greater ease in positioning the platform for access to underwater work zones.

• Reduced Critical Path Time
  By allowing independent underwater work to proceed simultaneously from the refueling bridge and from the ABB auxiliary bridge, it is frequently possible to shorten critical path time and to reduce personnel radiation exposure. Two independent jobs can be worked on simultaneously, or a single complex job can be completed more quickly and effectively with good access from the two bridges.