Grand Coulee Third Powerhouse Roof Replacement

The existing roof is a sprayed foam product with silicon waterproofing. In 2008, a roof contract was awarded to repair sections of the roof. Today, the roof has bird-baths/puddles, poor adherence at drains and joints and edges, no run-up seals at vents or parapets, as well as voids and bubbles up to 4’x6’. Due to additional aging and breakdown of the existing 1970’s vintage roof sections, the roof continues to leak onto the operations floor at edges and construction joints. Issues include:

- Slip/trip and electrical safety hazards;
- Potential contractor claims due to water damage of stored materials and equipment;
- Cascading rainwater at edges and mid-joints, wall discoloration and puddles;
- Warping of plywood flooring sections at generator overhaul sites;
- Need for plastic coverings on stored and operational equipment, and
- The potential for operational shut-down or limitations during exceptionally large rainfall or snow melt events.

This proposed project involves complete roof removal down to the concrete decking and replacement with a more modern robust low-slope single ply roof system. The work will also include seismic reinforcement and installation of a railing/fall-arrest system.