Steam Generator Repair Options

- Criteria for Satisfactory Repairs
 - 100% Reactor Power at uprate conditions for the new HP Turbine
 - Restore margin in both thermohydraulic margin and tube plugging capacity
 - 40-year SGR life cycle

Option 1

- Anti-vibration bar repairs performed in the existing steam generator; entry worked through existing manways and steam deck hatches
- Material, labor, tools and equipment need to fit into steam dome via manway and will require specialization to perform

• Option 2

- Anti-vibration bar repair/ replacement performed by main steam line sever and steam dome cut and removal for access to the top of the tube bundle
- Top of bundle work platforms and shielding review

Option 3

- Replace steam generators lower tube assemblies and channel head bowls utilizing through-containment-wall construction opening
- Lower tube assemblies and channel head bowls will be replaced
- Steam domes will be refurbished and reinstalled

Option 4

 Replace SGRs (complete replacement) in-kind like the first SGR project scope by creating 'through containment wall' construction openings