

Questions from First Workshop

- **Non-Routine Extraordinary Maintenance (NREX) Items – How do other utilities classify NREX?**
- **What is NREX?**
 - Necessary work required for safe, reliable, operation and maintenance of Corps and Reclamation dams
 - Large, infrequent work activities classified as expense (activities are not extending the life or improving the performance of the asset)
 - The FCRPS is seeing large costs associated with repairing failed generation units across system and significant NREX requirements for spillway gates, penstock tubes, cranes, etc. as a result of aging infrastructure
 - Mostly related to unit reliability (Grand Coulee Third Power Plant overhaul work and gates across system)
 - Water control, operations support, infrastructure and cranes also may include NREX activities and costs
 - FCRPS has always had some NREX costs
- **Who did BPA ask about NREX?**
 - BPA contacted the following regional utilities and reviewed their publicly available audited annual reports
 - Seattle City Light, Tacoma Power, Grant PUD No. 2, Douglas County PUD No. 1, Chelan County PUD No. 1, and EWEB
 - BPA contacted Tennessee Valley Authority (TVA) and reviewed its annual report and Portland General Electric's annual report
 - BPA contacted the other Power Marketing Administrations and reviewed their annual reports
 - Southeastern Power Administration (SEPA) - markets power from the Corps dams
 - Southwestern Power Administration (SWPA) markets power from the Corps dams
 - Western Area Power Administration (WAPA) markets power from both Reclamation and Corps dams



Questions from First Workshop

■ How do other utilities classify NREX?

- No utility appears to capitalize NREX as property plant & equipment (PP&E)
- All utilities follow their own capitalization policies, consistently applied, to determine what equipment is capitalized upon installation, either initial or as a replacement
- Capitalization policies can vary among utilities
- In general, property units identify capital or expense replacements
- In general, additions and betterments are capitalized
- In general, extraordinary maintenance is expense

- Portland General Electric's annual report states:
 - "Plant replacements are capitalized, with minor items charged to expense as incurred."
 - "Costs of periodic major maintenance inspections and overhauls at the Company's generating plants are charged to operating expense as incurred."
 - [This is consistent with NREX as an expense.]



Questions from First Workshop

- **How do other utilities classify NREX (continued)?**
 - TVA
 - Maintains 29 conventional hydroelectric dams on the Tennessee River system and one pumped-storage facility
 - 5,494 MW of summer net capability
 - Stated they would expense NREX as described by the Grand Coulee examples
 - Has no regulatory assets or other assets related to NREX-type work
 - Douglas County PUD
 - Recorded a regulatory asset for major maintenance related to its Wells Hydroelectric project, specifically for "...costs associated with restoring the turbine runners to their expected production capacity and repairing the east embankment..."
 - Regulatory assets are not PP&E and do require specific approval from the rate regulator
 - BPA also reviewed audited 2009 annual reports of two Canadian utilities, BC Hydro and Manitoba Hydro.
 - Canadian accounting principles may not be comparable with US accounting principles
 - BC Hydro has a regulatory asset for significant unplanned major maintenance related to a turbine failure
 - Manitoba does not have regulatory assets
 - Neither utility appeared to be capitalizing NREX



Questions from First Workshop

- **How do other PMAs classify NREX?**
 - The PMAs are similar yet unique
 - All market power from Corps/Reclamation dams

 - WAPA
 - "The costs of additions, major replacements and betterments are capitalized; whereas, repairs and maintenance are charged to operation and maintenance expense as incurred."
 - Co-wrote property guide book ("Blue Book") with Reclamation to identify property units
 - Works with Corps and Reclamation on capital or expense determination

 - SEPA and SWPA
 - Work with Corps on capital or expense determination
 - No power marketed from Reclamation dams



Questions from First Workshop

■ Corps Policy

- Principles of capital-vs.-expense determination are the same nationwide
- District policies within FCRPS (Portland/Seattle/Walla Walla) are similar to Kansas City and Omaha districts
- “Non-routine extraordinary expense is any repair that is non-routine, non-cyclical (or is an extremely long cycle), and extraordinary in nature that returns the equipment or asset to operating condition but does not restore the equipment back to its original or new asset life cycle, as would be the case of a capital replacement of that asset (an addition and betterment)
 - Examples of such work are cavitation blade repair, crane repair, head gate repairs, generator rewedged, replacing turbine oil, etc.
 - [Corps Direct Funded O&M Program of the JOC, Processes and Guidelines, Nov08]



Questions from First Workshop

Reclamation Policy

- Principles of capital-vs.-expense determination are the same nationwide
 - “Replacements, Units, Service Lives, Factors” book (Blue Book)
 - Reclamation and WAPA co-wrote and follow this guidance
 - Identifies retirement units and minor items for capital vs. expense determinations
 - Additions to plant are always capitalized but replacements and extraordinary maintenance can be expensed or capitalized depending on nature of the work
 - “Replacements and extraordinary items due to maintenance of operating projects” are expense items [Financing and Financial Reporting Requirements memorandum, April 27, 2004, attachment B]
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- **NREX Summary and Observations**
 - In general, research has shown that NREX is expense except for isolated cases when treated as regulatory asset
 - Aging hydro system is requiring increased NREX to address wear and tear on equipment and infrastructure
 - **Categories of items/activities have been identified, but specific project details are determined as each project develops**

