### Southeast Alaska Power Agency

Update of
Renewals and
Replacement (R&R) Plan

### Overview

- Background of R&R requirements and funding
- Methodology of analysis
- Summary of projected R&R expenses
- Estimated payments to R&R Fund
- Self-Insured Risk fund

## Background

- Future R&R expenditures were estimated prior to divestiture
  - State's obligation to fund future R&R expenses factored into Four Dam Pool purchase price
  - Net present value of estimated future R&R costs reduced purchase price
- State Loan provisions required establishment of 5R Fund to provide a reserve fund and establish means to assure FDPPA had monies available to fund R&R costs
- 5R Fund provisions were retained in the Indenture of Trust with FDPPA bond issuance in 2004
- First R&R Plan report was prepared in January 2002
- Updated R&R Plan report was provided in January 2007

## Methodology

- Long-term renewals and replacement expenditures
  - Define major components and systems of SEAPA facilities
    - Estimate typical service life
    - Estimate replacement cost
    - Evaluate current condition
    - Establish schedule of replacements for all components
  - Develop 30-year projection of estimated replacement costs
    - Apply estimated inflation to current dollar costs
- Near-term renewals and replacement expenditures
  - SEAPA budgeted costs
  - Dryden & LaRue list of near-term replacement items

## Analysis

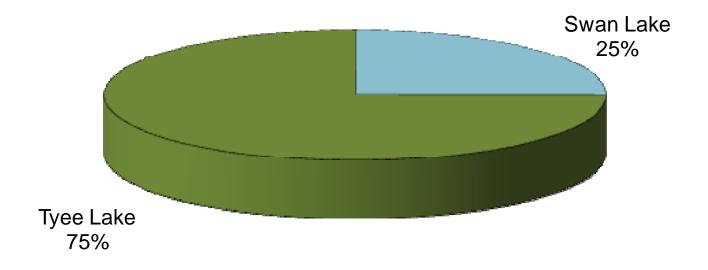
- Combine near-term and long term estimated costs
- Determine annual payments needed to fund these costs over time
  - Payments deposited to the R&R Fund
  - Interest earnings accrue to the fund
- Estimate balance in R&R Fund over time
  - Balance at end of FY 2012 at \$17.4 million
    - Includes Self Insurance Reserve, Dedicated R&R Project Fund and Minimum R&R balance
  - Minimum balance should not drop much below the Self Insurance Reserve amount

### Total Estimated Long-Term R&R Expenses

30 Years 2013-2042 (2012 \$000)

	Sv	Swan Lake		Tyee Lake		Total
Generation Facilities	¢	12 626	<b>C</b>	12.652	¢	26 290
	Ф	13,636	\$	12,653	\$	26,289
Transmission Facilities		13,158		66,620		79,778
Rolling Stock		337		1,861		2,198
Total	\$	27,131	\$	81,134	\$	108,265

# Total Estimated Long-Term R&R Expenses 30 Years (2013-2042)



#### Near-Term R&R Costs

- Based on SEAPA budget
- Includes, among other costs:
  - \$3.4 million for helicopter pads
  - \$2.6 million for Wrangell reactor
  - \$1.5 million for Tyee stream gauge
  - \$13.2 million for Swan Lake reservoir expansion

	2013	2014	2015	2016
R&R Expense Job Costs	\$ 504,506	\$ 145,000	\$ 145,000	\$ 145,000
Work in Process R&R Capital Projects	2,040,851	6,331,721	2,007,000	-
Future R&R Capital Projects	575,000	1,929,000	5,385,000	7,404,448
Total	\$ 3,120,357	\$ 8,405,721	\$ 7,537,000	\$ 7,549,448

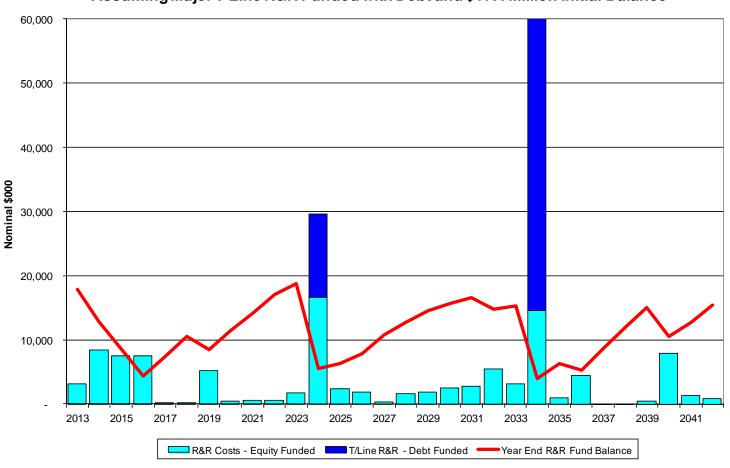
## **Necessary Payments**

- Amount needed annually to build up fund to pay costs when they come due
- Assumes major transmission replacement projects to be debt funded (\$13 million in 2024, \$101 million in 2034)
- Keep minimum fund balance at about \$10 million

Fiscal Years 2013 through 2022	\$ 3,073,000
Fiscal Years 2022 through 2027	\$ 3,073,000
Fiscal Years 2028 through 2032	\$ 3,273,000
Fiscal Years 2033 through 2042	\$ 3,173,000

### Estimated R&R Fund Balance

Projected Annual R&R Expenditures and R&R Reserve Balance Assuming Major T-Line R&R Funded with Debt and \$17.4 Million Initial Balance



### Self Insured Risk Fund

- Provides funding for uninsured risks
  - Transmission lines
  - Submarine cables
- Covers insurance deductibles
- Emergency repairs
- Should it cover more?
- Minimum balance currently set at \$10 million
  - Largest single loss contingency estimated at \$7.8 million
    - Total deductible for major earthquake damage