

Property Insurance Overview

Objective of the Presentation

- Discuss and obtain customer feedback regarding property insurance and the potential value it could provide as a risk mitigation method for minimizing the financial consequences of a large unexpected property loss.

Background

- BPA presented the concept of purchasing property insurance at an IPR workshop in 2010 as a result of a recommendation to the Administrator by the BPA Enterprise Risk Management Committee.
- BPA is uninsured, not self-insured. We have no reserves or borrowing authority set aside to mitigate the cost of unexpected damage to major assets. If a major event were to take place, BPA would need to draw on its overall reserves and/or borrowing authority.
- BPA has a large number of expensive and aging assets. Replacement value of BPA assets total over \$50 billion. Generation assets are approximately \$42 billion, and Transmission assets are approximately \$8.5 billion (excluding lines and towers).



Property Insurance Overview

Why BPA has continued to explore property insurance since the last IPR.

- Seismic studies indicate BPA transmission assets have significant vulnerability to a major Cascadia subduction zone earthquake.
- Increasing concern about terrorism risk to the utility industry.
 - ▶ A recent shooting damaged transformers at a PG&E substation in California.
- Increasing threat of cyber security risk.
- Aging transmission and generation assets are more susceptible to mechanical breakdown.
- Recent crack in Wanapum Dam and fire at Grand Coulee Pump-Generating Plant demonstrate hydro project vulnerability.
- Purchasing property insurance is a common electric utility industry best practice that is well understood and used by BPA's customers. The vast majority of regional and national utilities purchase property insurance.
- Federal aid to BPA following a major loss event is not guaranteed, and if provided, could require repayment by ratepayers with potentially large rate impacts.



Property Insurance Overview

Benefits of Property Insurance

- Rate instability is minimized by potentially reducing the financial blow from a major property loss.
- After a loss, insurance pays for the replacement cost of assets thereby reducing unplanned BPA cash requirements or the need to use long-term borrowing authority that must be repaid.
- Insurance can provide a relatively quick source of funds following a catastrophic event. If BPA needed to request financial aid from Congress the funds could be slow to obtain, less than needed, and could require repayment by ratepayers.
- Insurance companies provide loss control services including inspections of facilities and recommendations for reducing the frequency and severity of losses that could help reliability.



Property Insurance Overview

Types of losses covered by property insurance

- A policy could cover powerhouses and associated equipment, all transmission substations, Ross complex, Dittmer and Munro Control Centers, Celilo Converter Station, office buildings and contents. (Transmission lines and towers would not be covered.)
- Major perils covered would include fire, earthquake, terrorism, vandalism, cyber attack, mechanical failure, flooding, explosion, lightening, wind and ice storm, volcanic action.
- An example policy for a large utility like BPA could typically have a \$10 million deductible, \$250 million limit for earthquake, and up to \$500 million limit for all other perils. Total annual premium for this structure would be approx. \$12 -14 million, with approx. \$9-10 million of the cost allocated to Power and \$3-4 million to Transmission.
- Many alternative insurance program structures are possible, including different limits, deductibles, quota sharing, etc., each with different premium cost impacts.
- Insurance programs for Transmission and Generation assets could have separate limits, deductibles, and policy structures, and they could be separately phased in over time.

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Examples of BPA large property loss exposures

- Large earthquake: over \$250 million
- Major Fire at Transmission or Generation asset: \$10 million to \$300 million
- Terrorism: \$10 to \$500 million
- Vandalism: \$10 to \$30 million
- Volcano eruption: over \$500 million
- Catastrophic flood: over \$500 million
- Mechanical failure at Transmission or Generation asset: \$10 to \$200 million



Financial Disclosure

- This information has been made publicly available by BPA on June 25, 2014 and contains information not reported in agency financial statements.

