

A Bleak **Future for Colstrip Units 1** and 2 Has **Become Much Bleaker**



David Schlissel March 4, 2016

Who Am I

- Attorney, Consultant, Expert Witness and Electric Resource Planning and Ratemaking Issues for more than 40 years.
- Have testified as an expert witness in 150 cases before state and federal regulatory commissions
- Currently Director of Resource Planning Analysis for the Institute for Energy Economics and Financial Analysis (IEEFA)

Recent History

- IEEFA June 2015 report concluded that Talen
 Montana, owner of 50% of Units 1& 2, would earn
 relatively small profits in coming years or, even more
 likely, would experience significant financial losses.
- Original response from Puget Sound Energy was that Talen is making money on Colstrip and is in for the long haul.
- Now, Puget Sound admits Talen is "hemorrhaging" money at Colstrip and may be looking to get out.

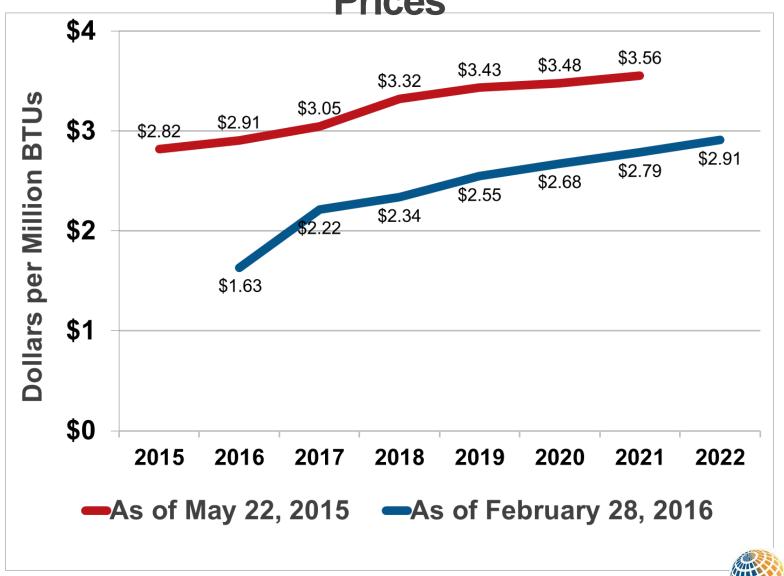
Findings of Updated IEEFA Analysis

- Talen will experience very significant financial losses due to Colstrip 1&2.
- Generating power at Colstrip 1&2 is substantially more expensive for Puget Sound's ratepayers than buying power at Mid-Columbia Hub.
- Talen's share of Colstrip 3 has little to negative value.

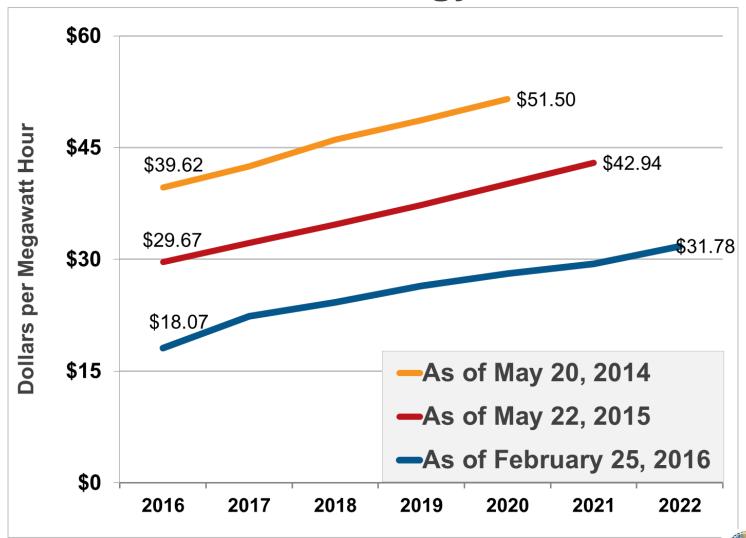
What Has Changed in Last Eight Months?

- Natural gas forward prices are lower and are expected to remain low for years.
- Forward Mid-Columbia Energy Market prices are lower and can be expected to remain low for the long-term.

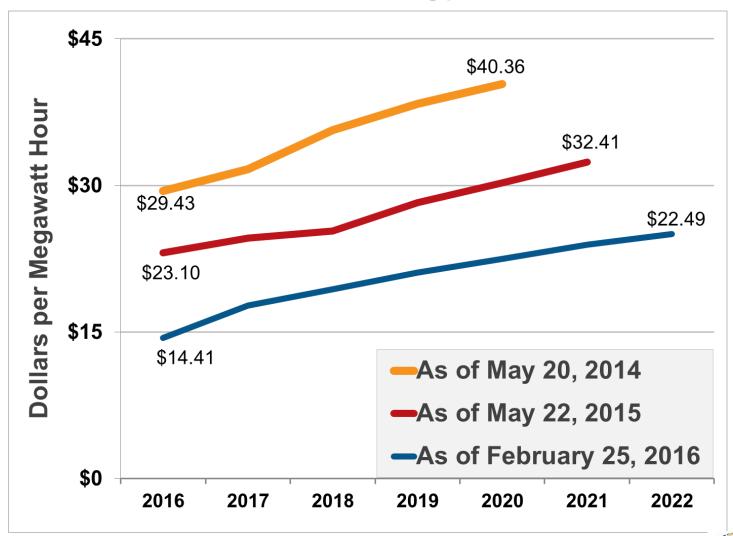
Much Lower Expectations for Future Natural Gas Prices



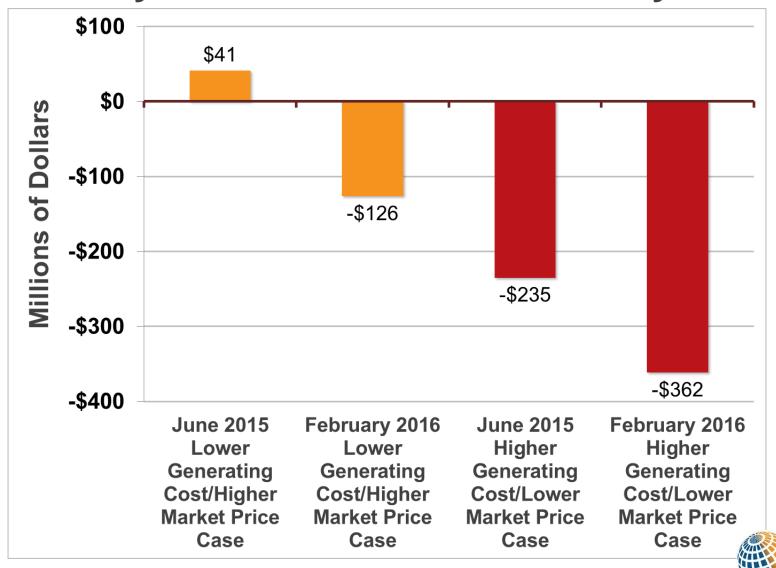
Much Lower Expectations for Peak Period Mid-Columbia Hub Energy Market Prices



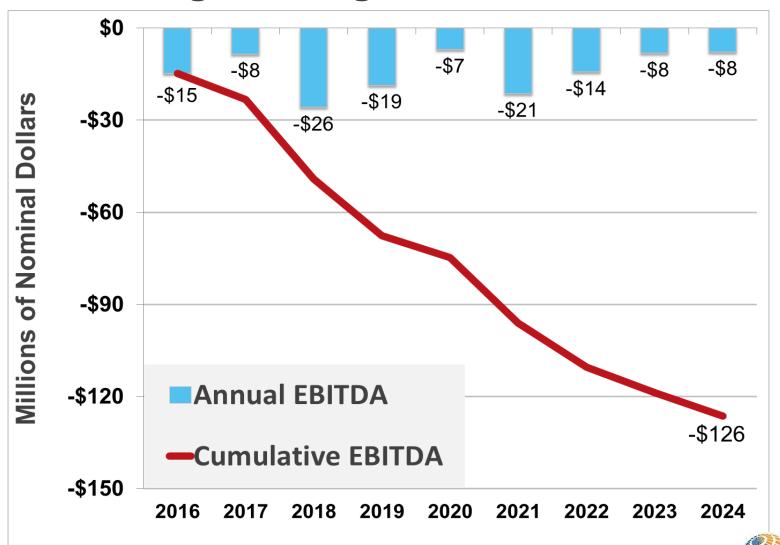
Much Lower Expectations for Off-Peak Period Mid-Columbia Hub Energy Market Prices



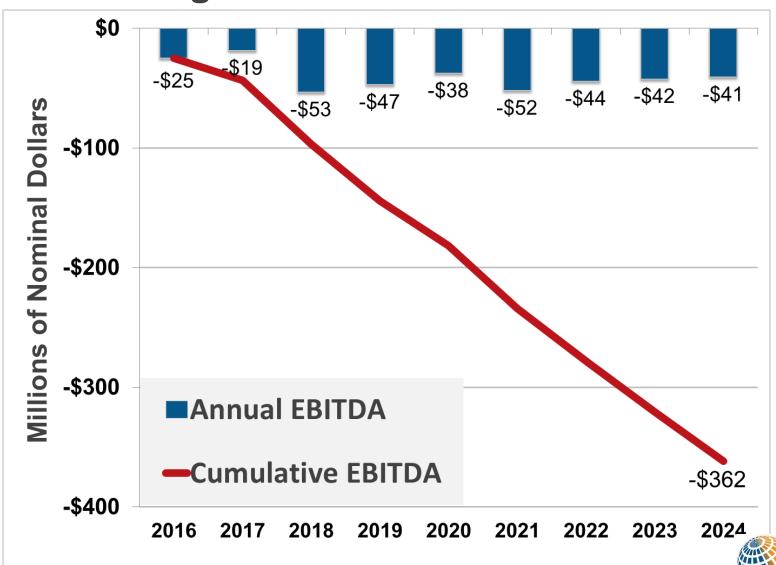
Results of February 2016 New IEEFA Analysis versus June 2015 Analysis



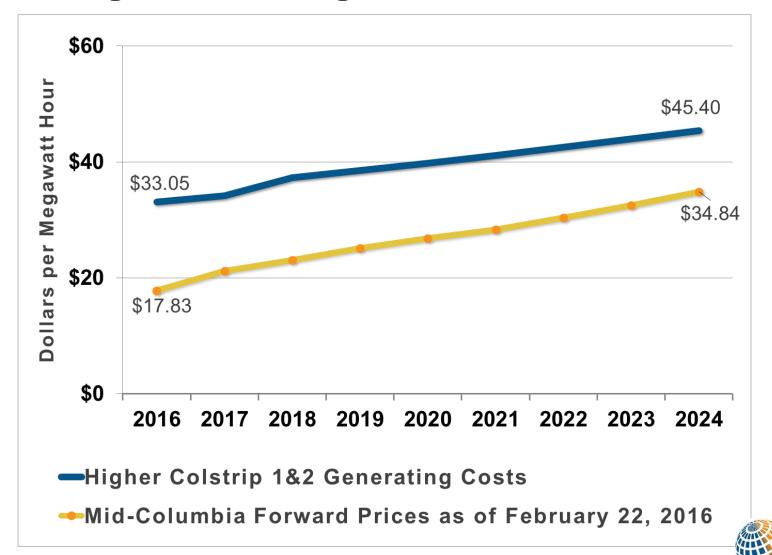
Talen's Pre-Tax Losses - February 2016 Lower Generating Cost/Higher Market Price Case



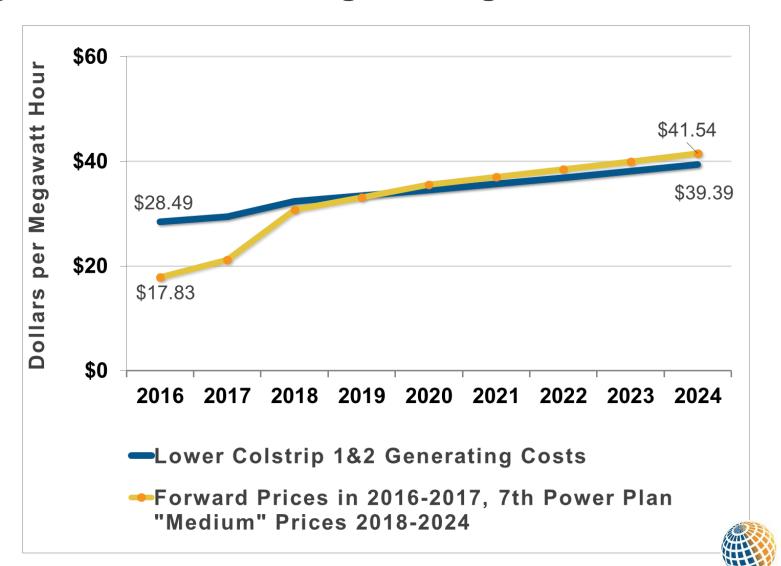
Talen's Pre-Tax Losses – February 2016 Higher Generating Cost/Lower Market Price Case



Cost of Power for PSE's Ratepayers – IEEFA February 2016 - Higher Generating Cost/Lower Market Price Case



Cost of Power for PSE's Ratepayers – IEEFA February 2016 Analysis - Lower Generating Cost/Higher Market Price Case



IEEFA February 2016 Analysis Significantly Understates the Relative Cost of Colstrip 1 & 2 to PSE Ratepayers

- Doesn't include any Capex When it evaluated purchasing Talen's share of Colstrip Northwestern Energy assumed that the capex for Colstrip 1&2 would be between \$118 million and \$129 million during the years 2016-2024.
- Doesn't reflect the higher cost of transmitting power from eastern Montana to western Washington State.
- Doesn't include any CO₂ prices.

The Value of Talen's Share of Colstrip 3

- Preliminary IEEFA analysis shows that Talen's share of Colstrip 3 has little to negative valuation over the next twenty years.
- This analysis is conservative because it does not:
 - Include any transmission costs.
 - Reflect any CO₂ prices.
 - Include any income, gross revenue or property taxes.
 - Reflect the rate basing of any acquisition costs.

Recommendations

- Bring all stakeholders together to prepare for a just transition to life after Colstrip 1&2.
- Require Puget Sound Energy to analyze lower cost alternatives to the continued operation of Colstrip 3.
- Require Puget Sound Energy to demonstrate the economic viability of its continued ownership of Colstrip 4.