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Washington

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Washington

July 1, 2014

MEMORANDUM

TO: Council Members

FROM: Steve Crow and Tom Eckman

SUBJECT: Presentation on Columbia Generating Station Operations

At the July meeting, Mark Reddemann, the Chief Operating Officer of Energy Northwest, will brief the Council on the status of operational improvements made over the past few years at the Columbia Generating Station, the region's sole nuclear generating station.

Mr. Reddemann assumed duties as CEO of Energy Northwest in August 2010. Prior to his current position, he was vice president of Operations Support with Xcel Energy, during which he also served on the Energy Northwest Corporate Nuclear Safety Review Board. From 2005 to 2006 Mr. Reddemann was vice president of Nuclear Assessment with Nuclear Management Company. Before that position, he was vice president of Plant Technical Support at the Institute of Nuclear Power Operations.



**Energy
Northwest**

A not-for-profit
Municipal Corporation

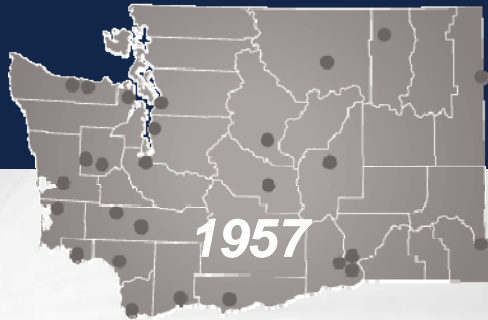
1957

*Provide our public power members and
regional ratepayers with safe, reliable
and cost-effective power*

**ENERGY
NORTHWEST**

Energy Northwest

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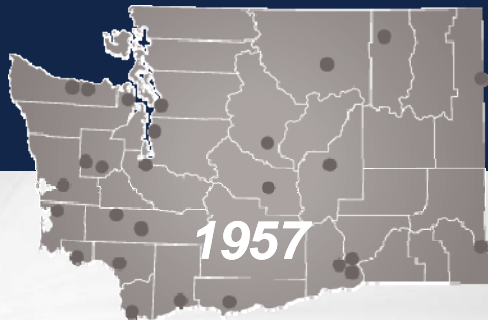


Asotin County PUD	Clark Public Utilities	Kittitas County PUD	Pend Oreille County PUD
Benton County PUD	Cowlitz County PUD	Klickitat County PUD	Seattle City Light
Chelan County PUD	Ferry County PUD	Lewis County PUD	Skamania County PUD
City of Port Angeles	Franklin County PUD	Mason County PUD 1	Snohomish County PUD
City of Richland	Grant County PUD	Mason County PUD 3	Tacoma Public Utilities
City of Centralia	Grays Harbor County PUD	Okanogan County PUD	Wahkiakum County PUD
Clallam County PUD 1	Jefferson County PUD	Pacific County PUD	



Energy Northwest

A not-for-profit
Municipal Corporation



Packwood Lake Hydro-
electric Project (27 MWe)



Nine Canyon Wind Project
(96 MWe)



White Bluffs Solar Station
(38 KWe)



Columbia Generating
Station (1,170 MWe)





Safety First – 2013



12M Hours

Without a lost-time accident

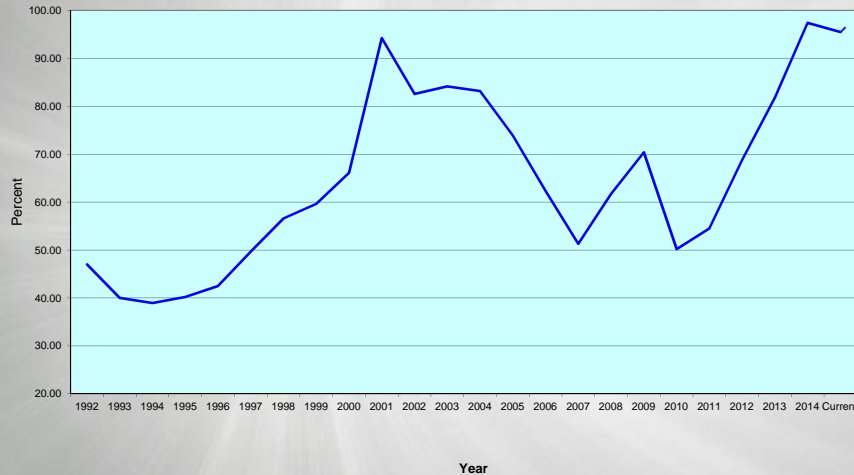
**Association of
Washington Business
Workplace
Safety Award**



The Columbia Story
Reliable



23-Year History



Columbia Performance

Excellence Initiative



Phases of Excellence 2011-2014

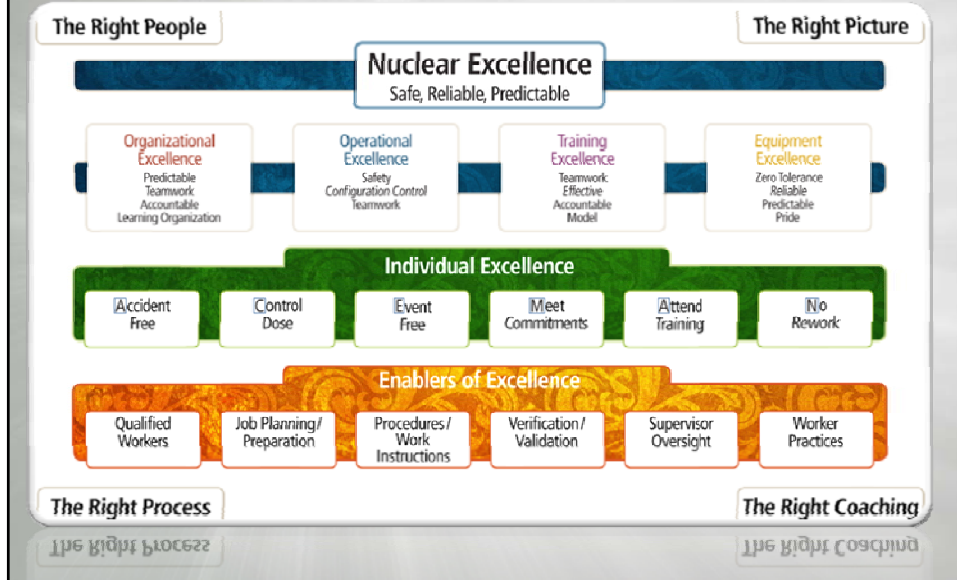
Phase I – Improving Behaviors

Phase II – Demonstrating Results

Phase III – Achieving Excellence

Phase IV – Sustaining Excellence

Excellence Model



New Leadership



Leadership Development



Leadership Development – 2012



Association of Washington Business **Job Training & Advancement Award**



Improving Behaviors... Demonstrating Results



Equipment Reliability

– 2011 – Refueling Outage 20





9,333,708

Columbia pushed more than
9.3 million megawatt hours
of electricity to the regional
power grid in 2012



Peer Recognition – 2013

Exemplary



A Turning Point



– 2013 – Refueling Outage 21



8,479,278

Columbia pushed nearly
8.5 million megawatt hours
of electricity to the regional
power grid in 2013





4 ½ Years

...operating without an
unplanned shutdown



92.47%

...average availability
factor for 2012 and 2013.



Regional Value



License Renewal



1984 – 2043



Gov. Christine Gregoire

Regional Savings



\$190,000,000

Energy Northwest and BPA collaboration on decommissioning fund and debt management provided the region \$190 million in rate relief in the next rate period

Regional Savings



The uranium tails fuel purchase agreement will generate more than \$88 million in additional BPA savings through the current and next rate case.

\$88,000,000

Uranium Tails Fuel Transaction

Regional Savings



\$171M – 275M

We expect total savings to be
between \$171 and \$275 million
for Northwest ratepayers

Uranium Tails Fuel Transaction

Regional Savings



\$100,000,000s

We expect total savings to be
\$100s of millions for Northwest
ratepayers

**Regional Cooperation Debt
Agreement**

Small Modular Reactor Proposal



www.energy-northwest.com

Energy Storage System



- Testing and evaluating modular energy storage
- Portable, modular, scalable
- Self-contained
- Partners: Powin Energy, BPA, PNNL, City of Richland



Columbia Generating Station



Safe

- * 12M hours without a lost-time injury
- * Almost 2 years without OSHA-recordable

Reliable

- * "Exemplary" Peer Recognition
- * 9.3 million MWh record in 2012
- * 8.5 million MWh record in 2013
- * No unplanned shutdowns in 4 ½ years
- * 9.7+ million MWh record in FY 14

Cost Effective

- * \$190M rate relief in next rate period
- * Another \$88M over next 2 rate periods
- * \$171M-\$275M fuel savings thru 2028
- * \$100Ms in savings through debt agreement

A collage of four black and white photographs: solar panels, a wind turbine, a dam, and a power plant. The "ENERGY NORTHWEST" logo is in the top right corner.

Our Road to Excellence

Mark Reddemann,
CEO

Northwest Power and
Conservation Council
July 8, 2014