

BPA's Response to The Challenge of Climate Change

PNWA Mission

March 4, 2008

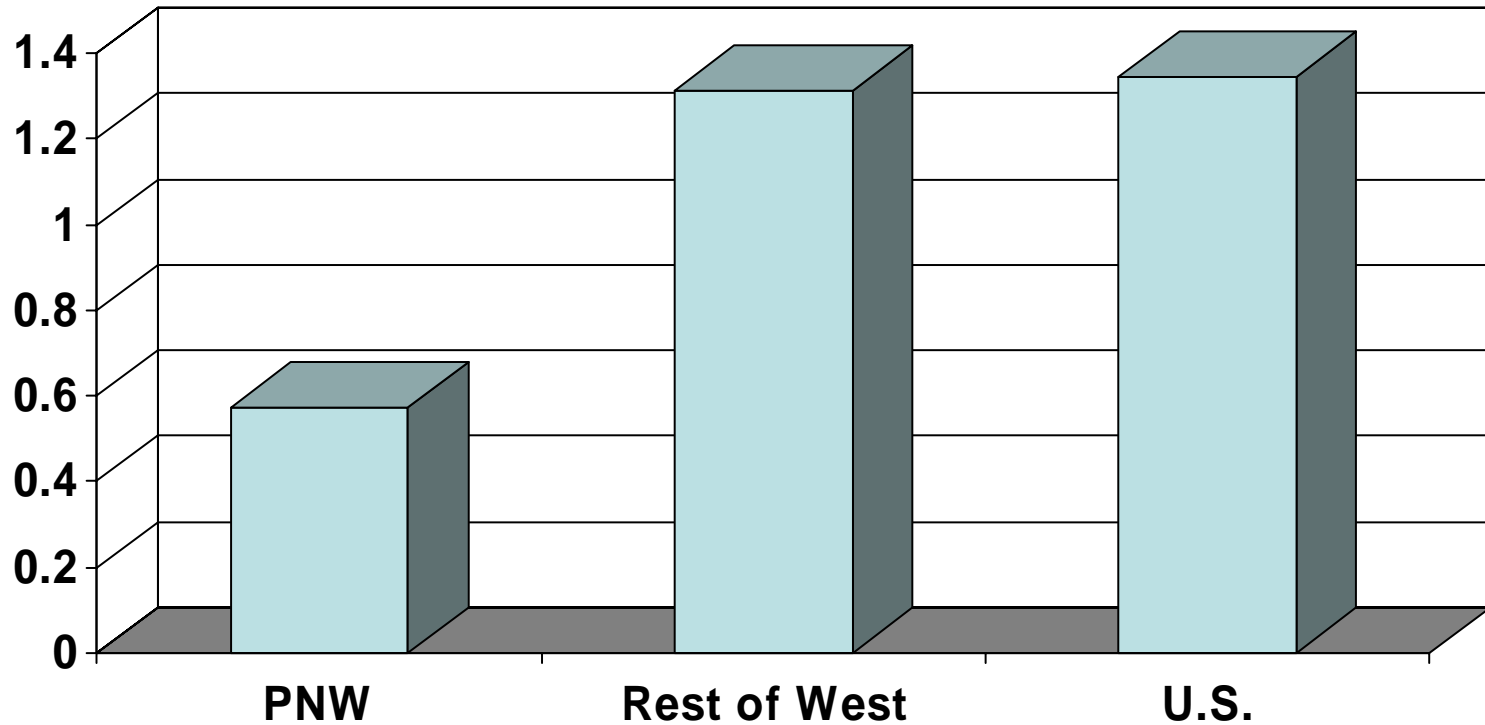
The Good News

- Emissions of greenhouse gases in the Pacific Northwest is minimized thanks to the role of hydropower and to the significant investments in energy efficiency that have been made in the past 25 years.
- We have reason to be proud of our emissions profile – conservation has reduced load growth in the Pacific Northwest by about 40% since 1978.

NW Electric Sector CO2 Intensity

(source: Northwest Power Planning and Conservation Council)

Pounds of CO2 Per kWh



The Challenge:

How do we not only maintain but reduce CO₂ emissions as we move into the future?

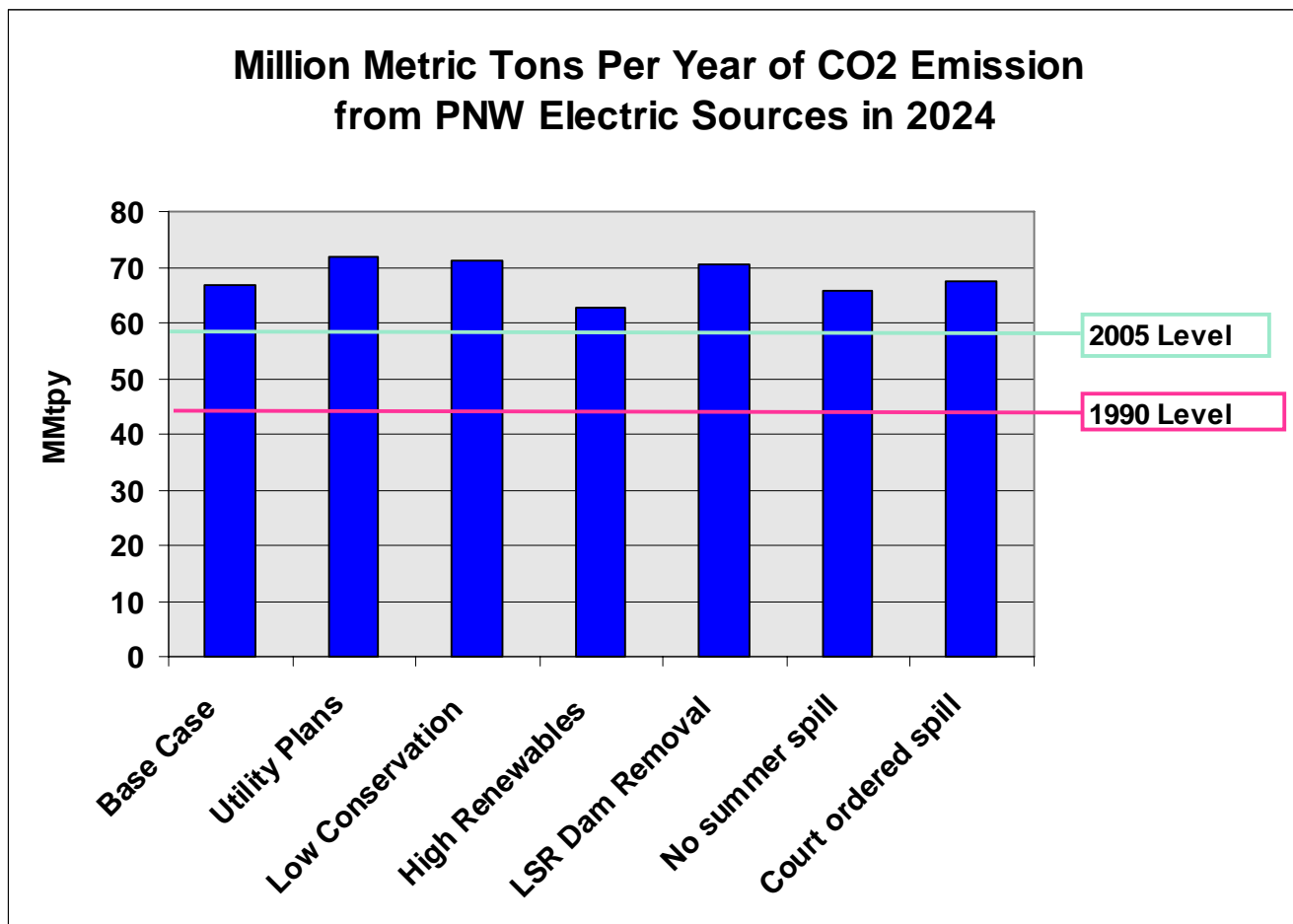
CO2 Reduction Targets in PNW

- Oregon :
 - Arrest Emission growth by 2012
 - 10% below 1990 levels by 2020
 - 75% below 1990 levels by 2050
- Washington
 - 1990 emission levels by 2020
 - 50% below 1990 by 2050
- Western Climate Initiative (AZ, BC, CA, NM, OR, UT, WA and Manitoba)
 - 15% below 2005 levels by 2020

Regulations May Make Targets Mandatory

	GHG Performance Standard	GHG Cap & Trade	2020 GHG Reduction Goals (all sectors)	Renewable Portfolio Standard
AZ		WCI ¹	2000 by 2020	15% by 2025
BC	Zero net CO ₂ for all new fossil plants; existing fossil zero by 2016	WCI	33% below 2007 by 2020	50% of future needs by consrv 90% of all generation renewable
CA	1100 lb CO ₂ /hr (New baseload power, contracts>5 yrs)	WCI/AB32	1990 by 2020	20% by2010
CO				IOU 20% by 2020 COU 10% by 2020
MT	New coal to capture 50% of CO ₂	WCI		15% by 2015
NM		WCI	10% below 2000 by 2020	IOU 20% by2020 REA 10% by 2020
NV				15% by 2015 (max 25% by conservation)
OR	1100 lb CO ₂ /hr (baseload) + min offset for new NG plants (proposed – not passed)	WCI	10% below 2000 by 2020	Lg 25%, Med 10%, Sml 5%, by 2025
UT		WCI	15% below 2005 by 2020 (WCI goal)	
WA	1100 lb CO ₂ /hr (baseload) + min offset for large new plants	WCI	1990 by 2020	15% by 2020 + cost-effective conservation

NWPPC Estimates That Emissions are Moving in the Wrong Direction



Reducing Emissions

- Achieving RPS standards and eliminating all summer spill would only reduce NW electric sector CO₂ emission *growth* by 75% (according to NWPPC report).
- A recent study suggested that the WECC will be 44,000 aMWs short of the no-emission resources it will need in order to meet the 2020 targets
- Though the NW electric sector has a low baseline emission profile, we face the same set of future resource options as do other regions.

So How is BPA Going to Respond?

BPA is committed to supporting CO2 emission reductions

2008 Strategic Business Objective states:

“BPA encourages and Implements integrated, cost-effective policies which lead to greenhouse gas emission reductions.”

BPA Recognizes that CO2 Limits Could Affect Its Core Business

- Value of the FCRPS - Non-emitting hydropower should be recognized for its low-emission profile
- Cost of resource acquisitions
- Transmission construction (very high demand for new renewables)
- Value of energy efficiency

BPA is Preparing A Climate Action Plan

First Priority:

Preserving our low-emission system

- Hydro refurbishments
- Nuclear relicensing
- Commitment to energy efficiency
- Renewables acquisition.

Climate Change Action Plan (Cont.)

- Build new internal competencies to function in a carbon constrained future
 - Fuels pricing
 - Carbon inventories
 - Facilities Operations
 - Etc.
- Develop better understanding of effects that climate change might have on hydro-supply
- Incorporate climate change into R&D plans
- Track regulatory developments
 - Be prepared for the future
 - Make sure that policy makers understand electricity fundamentals

Speaker Contact Information

- Sonya Baskerville
- Manager, National Relations Office
- Bonneville Power Administration
- 202-586-5640
- slbaskerville@bpa.gov