

# Washington Utilities and Transportation Commission

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## *Mission Statement*

*The WUTC protects consumers by ensuring that utility and transportation services are fairly priced, available, reliable, and safe.*

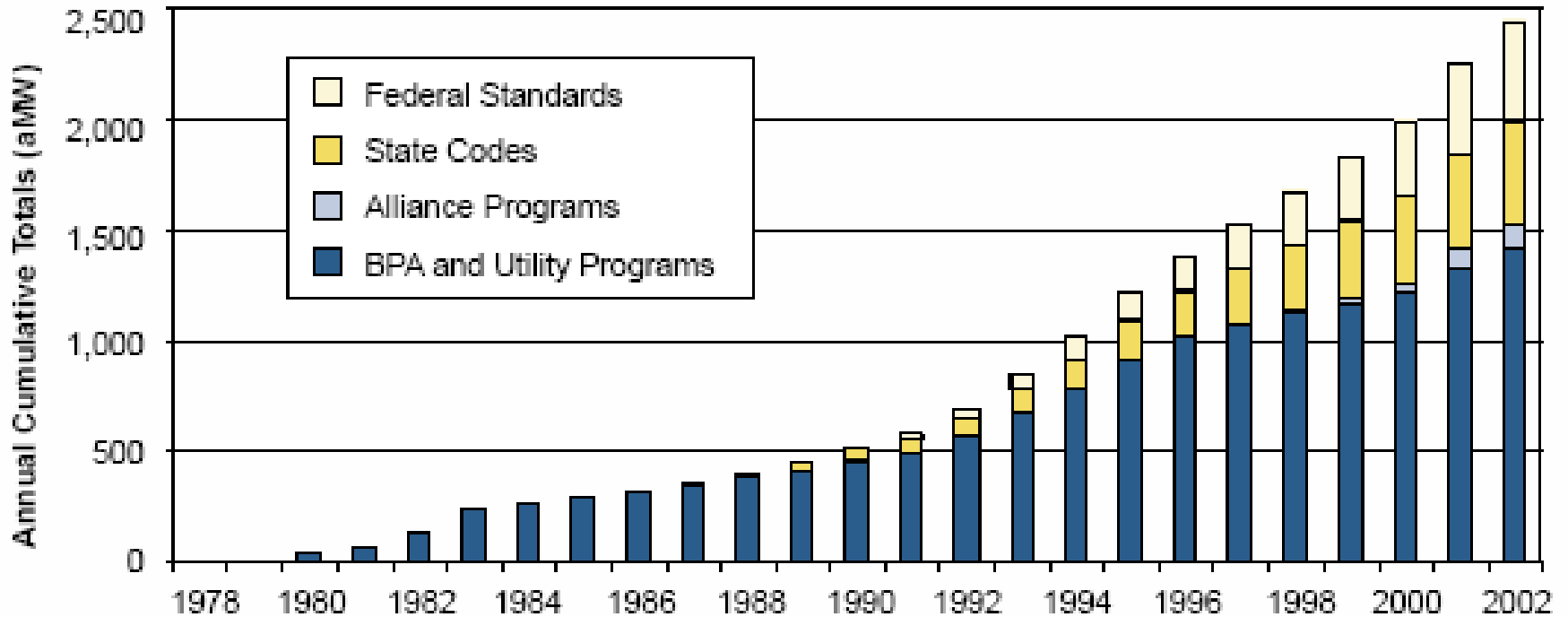
## Regulatory Efforts to Implement Energy Efficiency Action Plan Recommendations

Patrick Oshie, Commissioner



September 12, 2006

# Cumulative Conservation Savings Across the Region



Northwest Power and Conservation Council's Fifth Power Plan

# Cumulative Conservation Savings of Washington IOUs

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PSE: 229 aMW, 1985 – 2004

Avista: 111 aMW, 1978 – 2005

PacifiCorp: 34 aMW, 1992 -2005

# Recent IOU Conservation Activities

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## PSE

- Energy efficiency programs saved 39.3 aMW in 2004-2005
- C&I, residential and small business energy efficiency services, low-income retrofit, lighting

## Avista

- Energy efficiency programs saved 6.6 aMW in 2005
- Appliances, HVAC, Industrial processes, lighting, weatherization

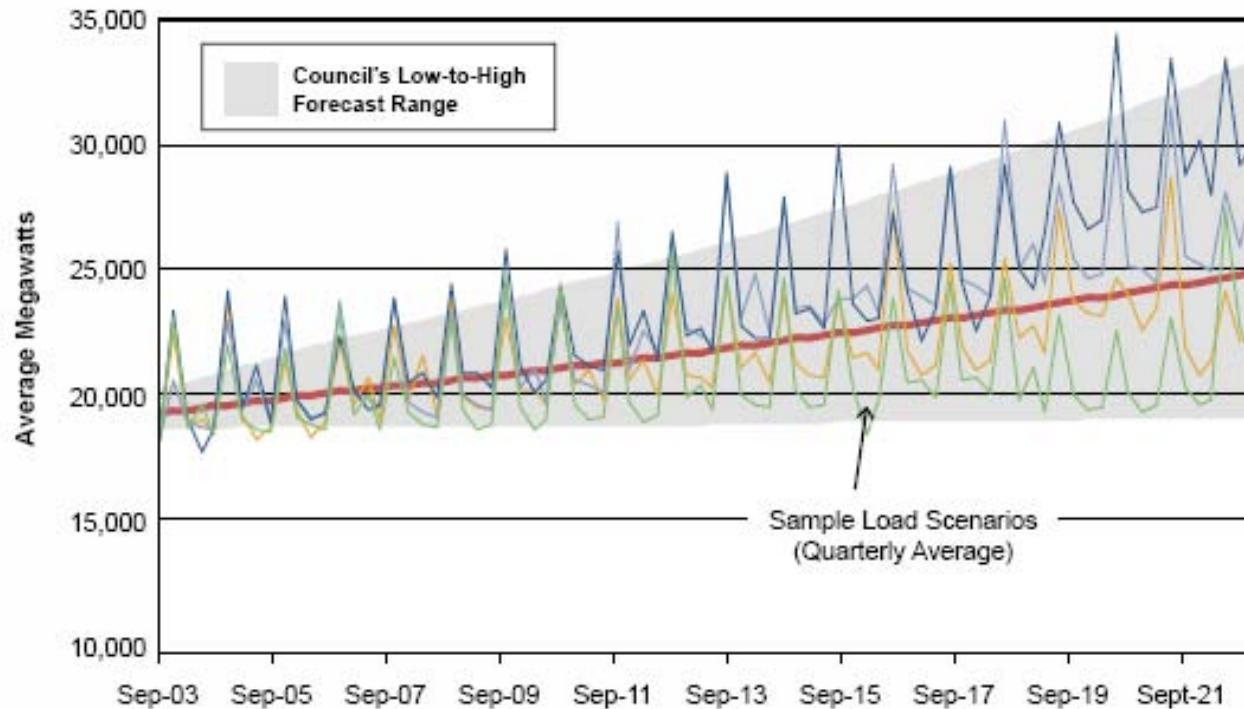
## PacifiCorp

- Energy efficiency programs saved 3.3 aMW in 2004
- weatherization, lighting, C&I retrofit incentives

# Regional Demand for Electricity

Year 2015 demand forecast 22,105 aMWs

Forecast range of Annual and Quarterly Loads



Northwest Power and Conservation Council's Fifth Power Plan

# Electricity Demand in Washington

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Washington utilities project significant near-term deficits in electricity supply.

- Puget Sound Energy
  - 300 aMW (2008), 1400 aMW (2013)
- Avista Utilities
  - 40 aMW (2010), 360 aMW (2016)
- PacifiCorp – Western Control Area
  - Sufficient (2011), 1000 aMW (2015)

# Power Council's Projections

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Power Council's 5<sup>th</sup> Power Plan calls for 700 aMW of new conservation over next 5 years

- Conservation costs less than the generating resources utilities are planning to develop
- Most of the conservation identified in this plan is new technology and application that have had limited market penetration
- The average rate of conservation acquisition from 1991-2002 was greater than the plan recommends
- The target represents a 10 percent improvement in efficiency.

# Potential Conservation Resources

	Sector and End-Use	Average Cost (Cents/kWh) (Levelized 2004\$) <sup>10</sup>			Cost- Effective Potential	Cumulative Potential
		Low	Avg	High	(MWa in 2025)	(MWa in 2025)
1	Commercial New and Replacement Lighting <sup>2</sup>	1.12	1.32	1.51	245	245
2	Commercial New and Replacement Infrastructure <sup>2,8</sup>	1.30	1.53	1.76	11	256
3	New & Replacement AC/DC Power Converters <sup>2</sup>	1.36	1.61	1.85	156	412
4	Residential Dishwashers <sup>2</sup>	1.47	1.72	1.98	10	422
5	Agriculture – Irrigation <sup>2</sup>	1.47	1.72	1.98	80	502
6	Commercial New and Replacement Shell <sup>2</sup>	1.48	1.74	2.00	13	514
7	Industrial Non-Aluminum <sup>2</sup>	1.56	1.83	2.11	350	864
8	Residential Compact Fluorescent Lights <sup>2</sup>	1.56	1.83	2.11	535	1399
9	Commercial Retrofit Lighting <sup>2</sup>	1.68	1.98	2.27	114	1513
10	Residential Refrigerators <sup>2</sup>	1.92	2.26	2.60	5	1518

Northwest Power and Conservation Council's Fifth Power Plan

# Conservation Programs Identified in IRPs

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## PSE

- IRP call for 100 aMW of savings by 2010
- 45% from residential programs
- 50% from commercial programs

## Avista

- IRP call for 35 aMW by 2010
- 20% from residential programs
- C&I programs = 30% and 50% savings

## PacifiCorp

- IRP calls for 20 aMW by 2010

# Expanding Conservation in Resource Portfolios

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## Begins with IRPs

- Develop a Conservation Supply Curve
  - Based on NWPCC data
  - Group measures as appropriate
- Include Conservation Supply Curve in the assessment of all available resources
- Identify those conservation resources included in the Preferred Resource Portfolio

# Expanding Conservation in Resource Portfolios

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## Advisory Groups

- Utilities vet the conservation resources included in the Preferred Resource Portfolio
  - Cost, reliability, certainty, savings potential, non-energy benefits
  - Look for “Grouping” synergies
  - Consider pilot programs for untested resources
- Utilities file their conservation plans with the Commission

# Expanding Conservation in Resource Portfolios

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## Assessment and Cost Recovery

- Utilities annually assess the performance of their conservation efforts
  - Open process includes advisory groups
  - Look for variations from expectations
  - Look for improvement opportunities
- Cost recovery
  - PSE – Tariff rider
  - Avista – Deferred costs with annual true ups
  - PacifiCorp – System benefit charge

# Potential Future Policies to Support Conservation

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Financial incentives for energy efficient  
appliances and project development

Remove disincentives to expanding energy  
efficiency programs

Conservation-only RFPs

Enhanced appliance efficiency standards