

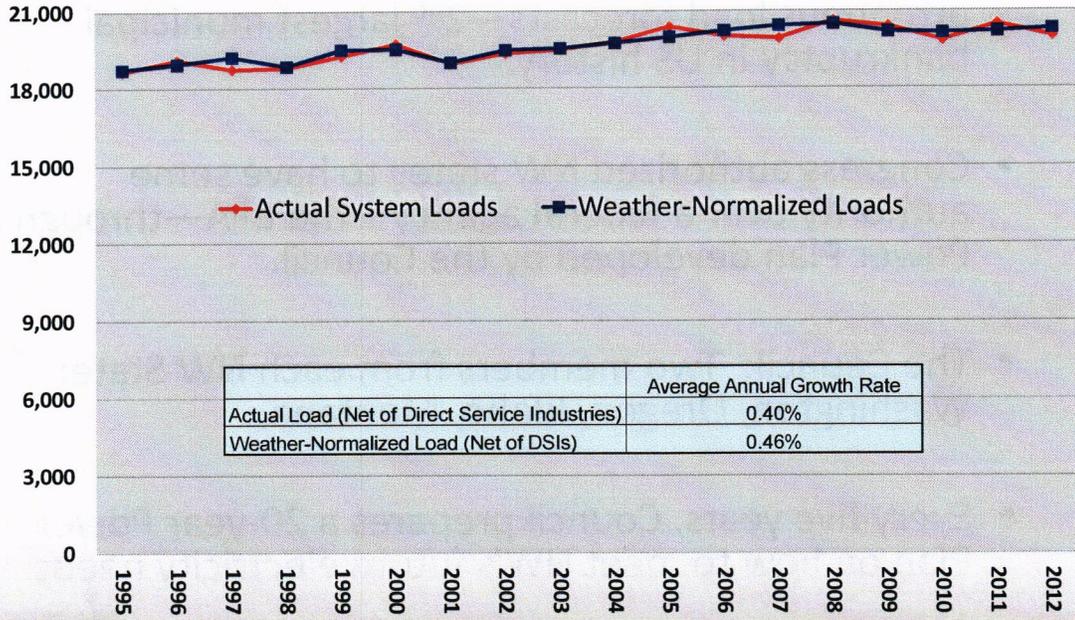
# 1980 Northwest Power Act

- Congressional response to BPA-Utility Overbuild of NW Power Plants (nuclear) based (in part) on erroneous load forecasts—2<sup>nd</sup> largest municipal bankruptcy in US history.
- Congress authorized NW states to have some authority over a federal agency—the BPA—through a Power Plan developed by the Council.
- The Council: Two members from each NW State: Washington, Oregon, Idaho, Montana.
- Every five years, Council prepares a 20-year Power Plan on how to meet NW's future electricity needs.

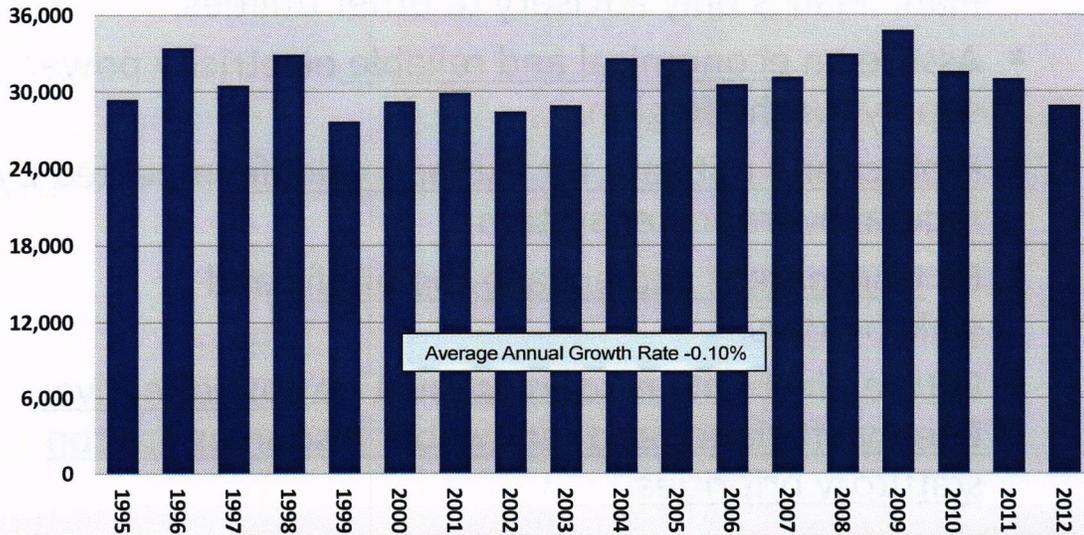
## Council Authority and Mission

- BPA's acquisition of resources to meet *future* regional electricity loads must be "consistent with" Council's Plan. Plan is only advisory to other utilities.
- Assure an economical and reliable electricity power supply for the Region.
- Protect and mitigate for fish and wildlife impacted by federal hydropower system.
- Be transparent and engage the public and stakeholders.
- Future electricity resources must be cost-effective. Energy efficiency and renewable resources are top statutory priorities.

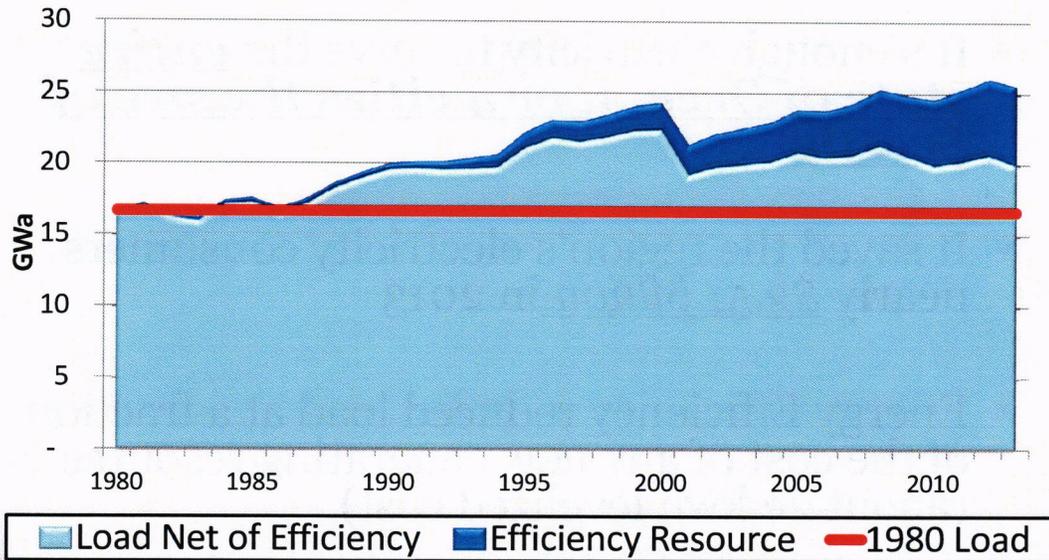
# Pacific Northwest Electricity Loads Annual Average Megawatts 1995-2012



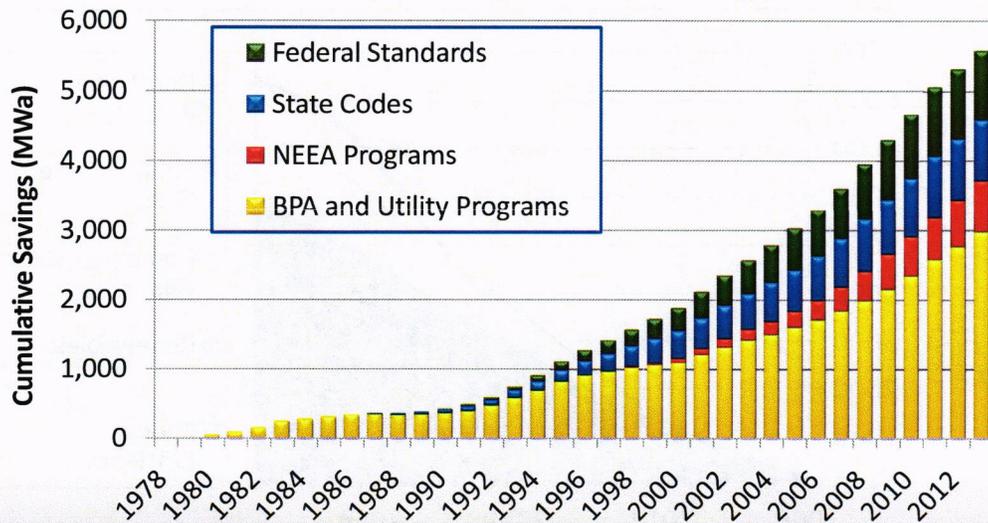
# Pacific Northwest Electricity Loads Winter Peak Megawatts 1995-2012



## Efficiency Has Met Nearly 62% of PNW Load Growth Since 1980



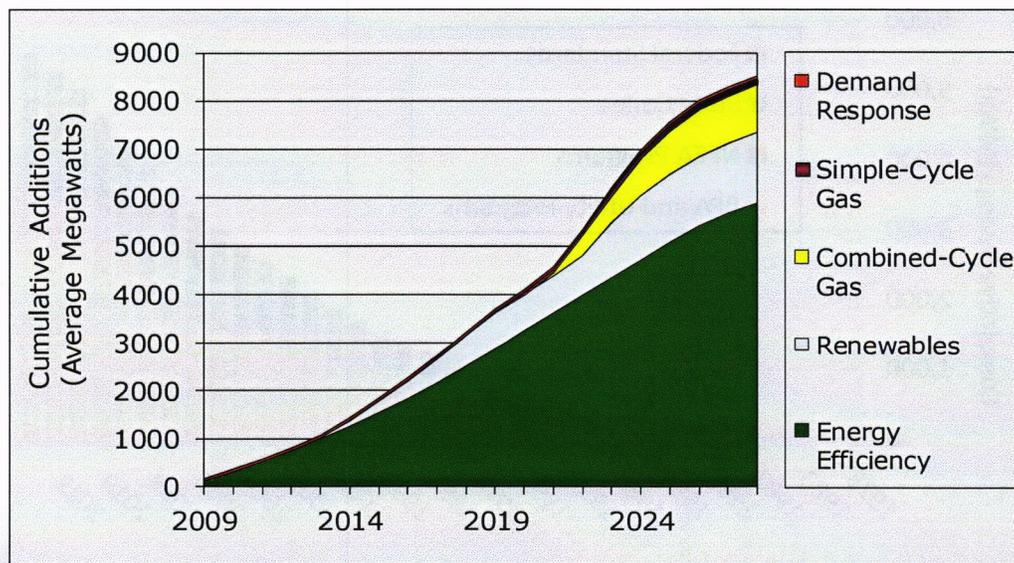
## Since 1978 Utility & BPA Programs, Energy Codes & Federal Efficiency Standards Have Produced Almost 5600 MWa of Savings



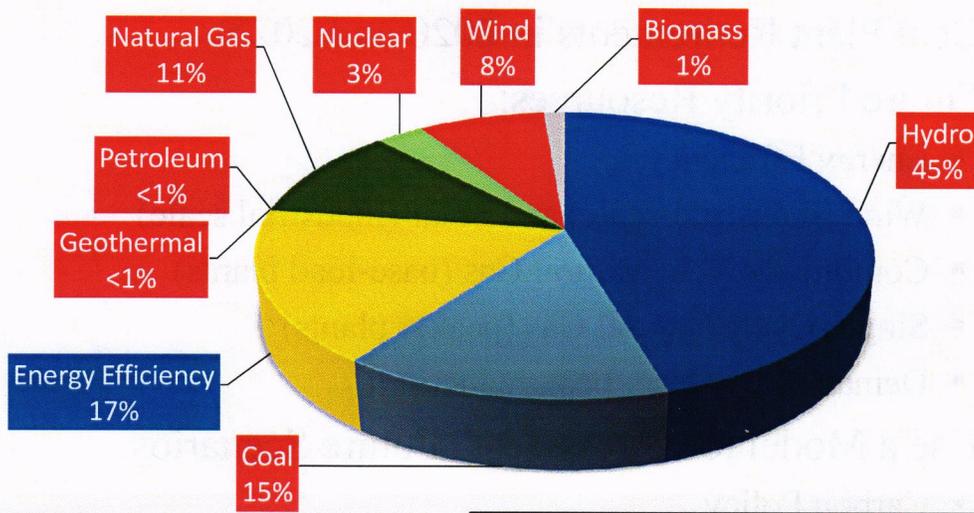
# So What's 5600 aMW?

- It's enough electricity to serve the entire state of Oregon or 4 cities the size of Seattle
- It saved the region's electricity consumers nearly \$3.51 billion in 2013
- Energy Efficiency reduced load at a fraction of the cost of any new generating resource (about 2¢ kwh levelized cost)

## Sixth Northwest Power Plan Resource Additions

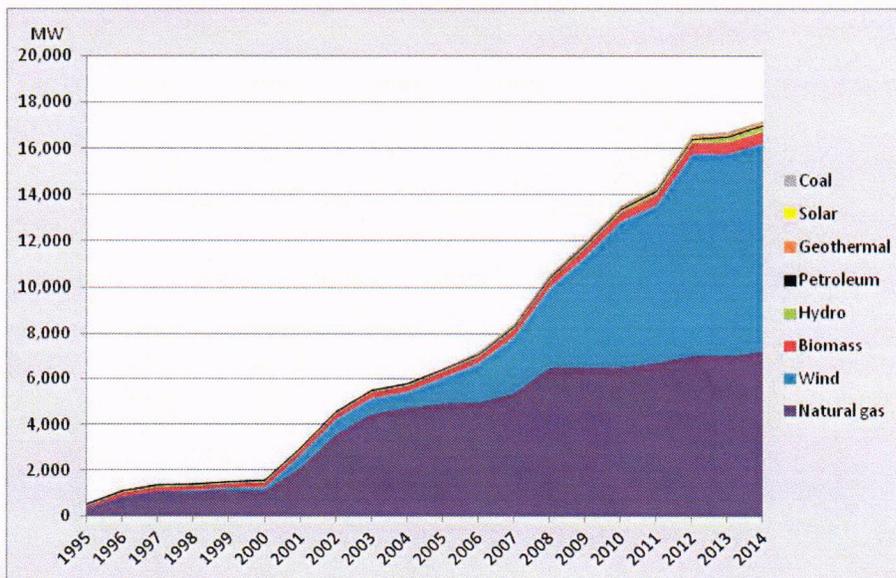


# Energy Efficiency Was The Region's Second Largest Resource in 2013



Based on 2013 Actual Dispatch (EIA) and Hydro Resource Output

# Pacific Northwest Cumulative Generating Capacity Additions 1995-2014





## 7th Power Plan (in progress) 2015 - 2035

- Load Growth: Lower Than Forecast in 6<sup>th</sup> Power Plan
- Coal Plant Retirements in 2020 and 2025
- Future Priority Resources:
  - Energy Efficiency
  - Wind (industrial-scale) and Solar (industrial scale)
  - Combined-Cycle Natural Gas (base-load plants)
  - Single-Cycle Natural Gas (peaker plants)
  - Demand Response (peak reduction)
- Use a Model to “Stress Test” Future Scenarios
  - Carbon Policy
  - Future Natural Gas Prices