



Demand Response in the 5th Power Plan

NW Power and Conservation Council

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Helena, Montana

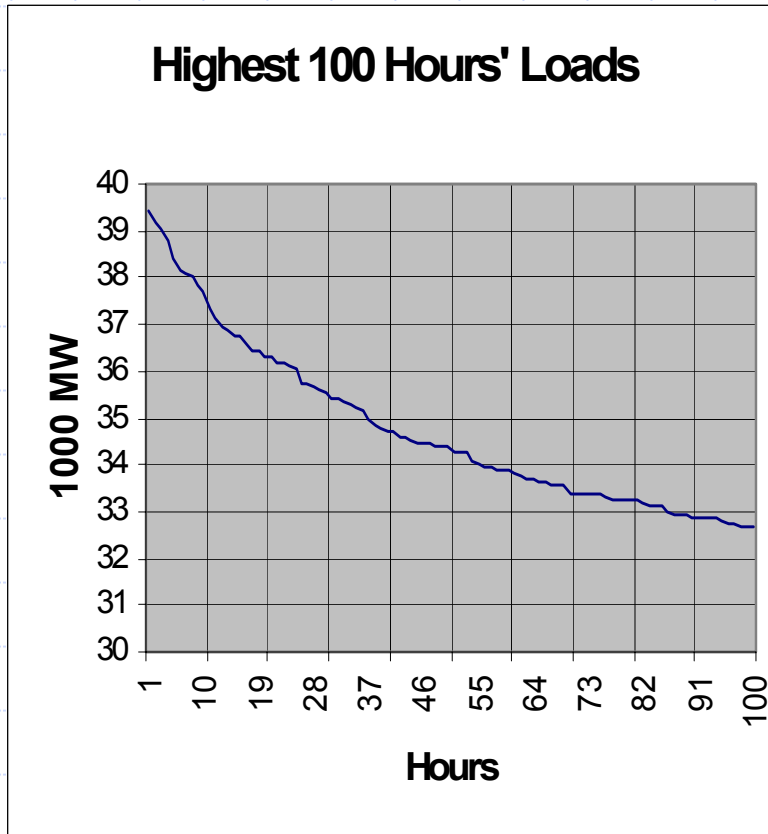
What is Demand Response?

- ◆ Change in demand that corresponds to change in power system cost
- ◆ DR often missing because consumers don't see power system cost
- ◆ In most cases, we've got "half a market"

Why Does Demand Response Matter?

- ◆ Without DR, loads are “too high” at peak
- ◆ More generation built, operated
- ◆ Increased vulnerability to market power

Illustration of Peak Load Costs



- ◆ More than 1700 MW served 10 hours/yr or less - \$6.49 to \$11.44/kWh
- ◆ Nearly 7000 MW served 100 hours/yr or less - \$0.68 to \$1.18/kWh

DR Is Not Conservation

- ◆ May or may not reduce energy use
- ◆ Unlike conservation, DR changes service

DR Mechanisms

- ◆ Price mechanisms
- ◆ Payments for reductions

Relative Advantages

◆ Price mechanisms

- Pro - low transaction cost, broad reach, flexibility
- Con - require meters & communication equip, unpredictable bills

◆ Payment for reductions

- Pro - more predictability
- Con - higher transaction cost, fewer participants

Next Steps

- ◆ Bring DR into utilities' IRPs
- ◆ Refine estimates of size of resource
- ◆ Preserve & expand options
- ◆ Regulatory issues
- ◆ Explore ways to make price mechanisms more acceptable.