

Integrated Resource Plan ("IRP")

Public Utilities Commission of
Nevada ("PUCN")



PUCN's Statutory Authority

- NRS 704.741 - Requires that a Utility file every three years a plan to increase its supply of electricity or decrease its demand. This plan is commonly referred to as an Integrated Resource Plan (“IRP”).
- NRS 704.746 - Requires that the PUCN hold hearings on the adequacy of the IRP. It allows the PUCN to give preference to the measures and sources of supply that:
 - Provide the greatest economic and environmental benefits to the State;
 - Provide levels of service that are adequate and reliable.



PUCN's Statutory Authority

- NRS 704.751 – Requires the PUCN to accept the IRP or specify any portions of the IRP that the PUCN deems to be inadequate.
- NRS 704.7821 – Requires that the PUCN establish a portfolio standard that directs each provider of electric service to generate, acquire or save electricity from portfolio energy systems (i.e. renewable) or efficiency measures in an amount that is not less than 20% of the provider's total sales by the year 2015.

PUCN's Regulation Governing Utility Supply Plans

- NAC 704.937 outlines the criteria by which Utility supply plans are presented and evaluated. The criteria includes:
 - Flexibility
 - Diversity
 - Reduced size of commitments
 - Choice of projects that can be completed in short periods
 - Displacement of fuel
 - Reliability
 - Selection of fuel and energy supply portfolios
 - Financial instruments or electricity products



PUCN's Regulation Governing Utility Supply Plans

- (NAC 704.937 continued)
All of the supply plans proposed by the Utility must:
 - Provide adequate reliability;
 - Be within regulatory and financial constraints;
 - Meet the portfolio standard;
 - Meet the requirements for environmental protection.
- The Utility is required to identify its “preferred plan” and fully justify why that supply plan was selected.



What the PUCN Approved (2006)

Docket Nos. 06-06051 / 06-07010

- Approved NPC/SPPC's request to proceed with the development of Phase 1 of the Ely Energy Center ("EEC") and the North-South Intertie.
- Granted resource planning approval of \$300 million for development activities associated with the EEC and the Intertie.
 - Limited NPC/SPPC's expenditure authority to \$155 million until the final air permit for the EEC is granted.
 - Authorized NPC/SPPC to spend the additional \$145 million once the final air permit is granted.

What the PUCN Approved (2006)

Docket Nos. 06-06051 / 06-07010

- Ordered NPC/SPPC to file a resource plan amendment (“EEC Amendment”) once the air permit is received (Q2 of 2008).
- The EEC Amendment is to contain the following information:
 - A detailed cost estimate for the EEC
 - An updated project schedule (and status)
 - A new economic analysis using updated fuel and rail costs, as well as updated environmental factors (including CO₂ regulation)

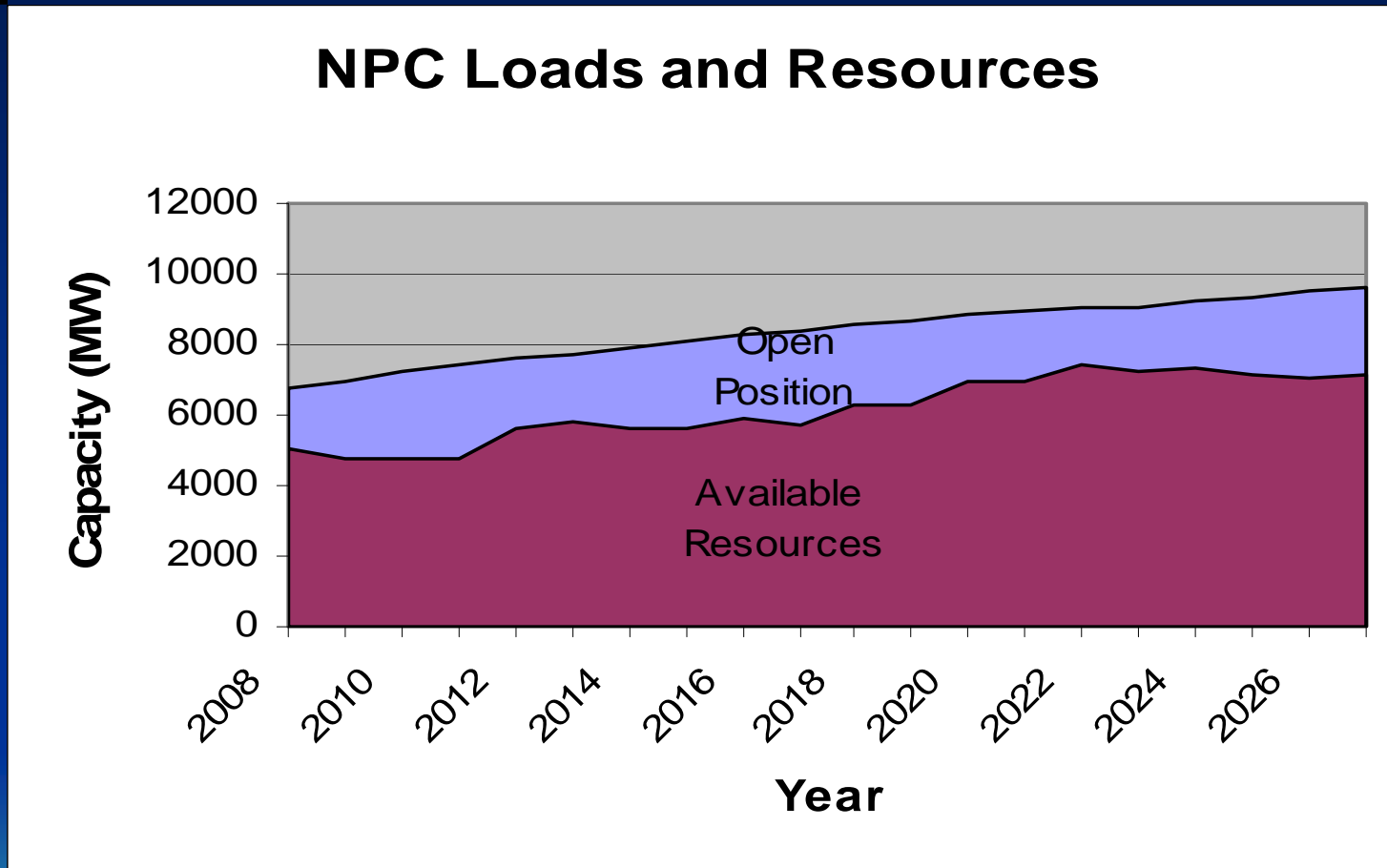


Why the PUCN Authorized NPC/SPPC to Proceed with Development of the EEC

- The PUCN took into consideration:
 - Infrastructure needed to support the State's economy;
 - Resource adequacy in Nevada and the Western United States;
 - Fuel diversity, fuel costs, and fuel availability;
 - Economic benefits associated with construction of the EEC;
 - Impact on customer rates;
 - Projected environmental impacts and costs;
 - The timing of new resources;
 - Available generation options;
 - Level of capacity available from renewable resources;
 - Conservation and load management (i.e. Demand Side).



Specific Information Considered



- Even with the EEC, NPC is still going to be short resources

Fuel Diversity

- From 1995 to 2006, NPC's peak load almost doubled from 3000 MW to 5600 MW.
- During that 11 year period, NPC constructed only one new generating unit (a 72 MW CT).
- In 2006, NPC acquired 1600 MW of natural gas fired generation (Lenzie & Silverhawk plants).
- NPC is 75% to 80% dependent on natural gas fired generation for meeting electricity demand.



Price Stability

Figure 1: Daily Henry Hub Spot Price, 1994-2006



Source: *NGI's Daily Gas Price Index*, Intelligence Press

- Natural Gas prices have been very volatile:
 - Weather Conditions (Hurricanes)
 - World events
 - Price of oil (natural gas and oil prices are correlated)
 - Dwindling North American Supplies
 - Difficulties in permitting Liquefied Natural Gas facilities

**** The EEC will lessen this dependency on Natural Gas ****

Price Stability

- Nevada Power Company:

- Since 1990 Residential Electricity Rates have increased by almost 120%

1990
5 cents/kwh

2006
11 cents/kwh

- Sierra Pacific Power Company:

- Since 1990 Residential Electricity Rates have increased by almost 73%

1990
7.5 cents/kwh

2006
13 cents/kwh

NEVADA HAS THE HIGHEST ELECTRICITY RATES IN
THE WESTERN UNITED STATES (Excluding California)



Other Actions Taken By The PUCN

- Demand Side Management/Conservation
 - NPC's budget has increased from \$2.8 million per year (2001) to \$37 million per year (2008)
**** A 1200% Increase in the DSM Budget ****
 - SPPC's budget has increased from \$2.8 million per year (2002) to \$10 million per year (2008)
**** A 257% increase in the DSM Budget ****



Other Actions Taken By The PUCN

- Renewable Energy Resources
 - The PUCN has approved between 50 MW to 100 MW of new renewable energy contracts every year since 2003.
 - The plan is to approve even more renewable resource contracts as NPC becomes compliant with the State's Renewable Portfolio Standard.
 - Key projects include
 - 5 new geothermal contracts with Ormat (100 MW)
 - The 65 MW Nevada Solar One facility
 - A 10 MW Solar PV facility at Nellis Air force Base
 - 1 MW Biomass Plant at the Carson Prison

