

Wholesale Power Price Forecast

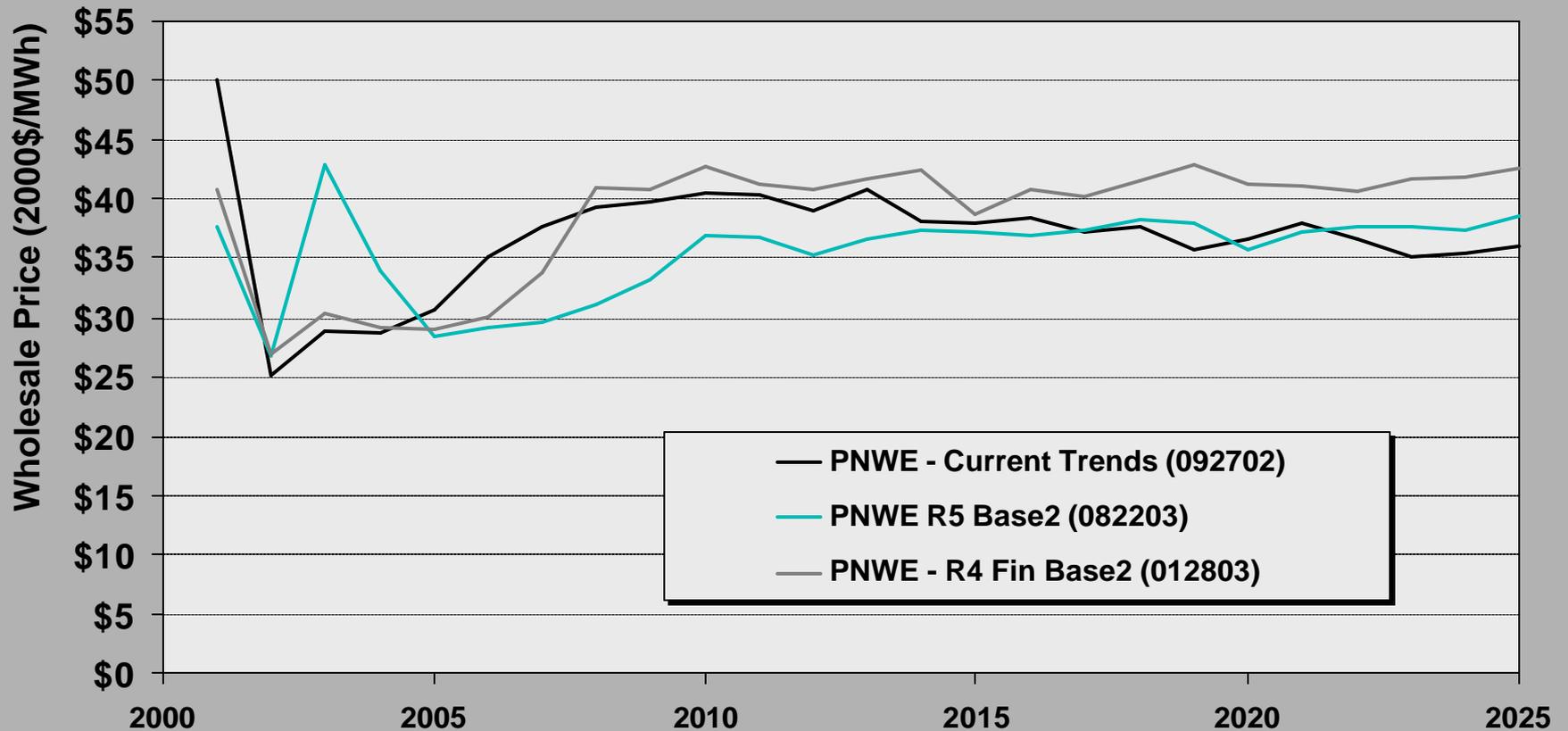
Status Report

Jeff King

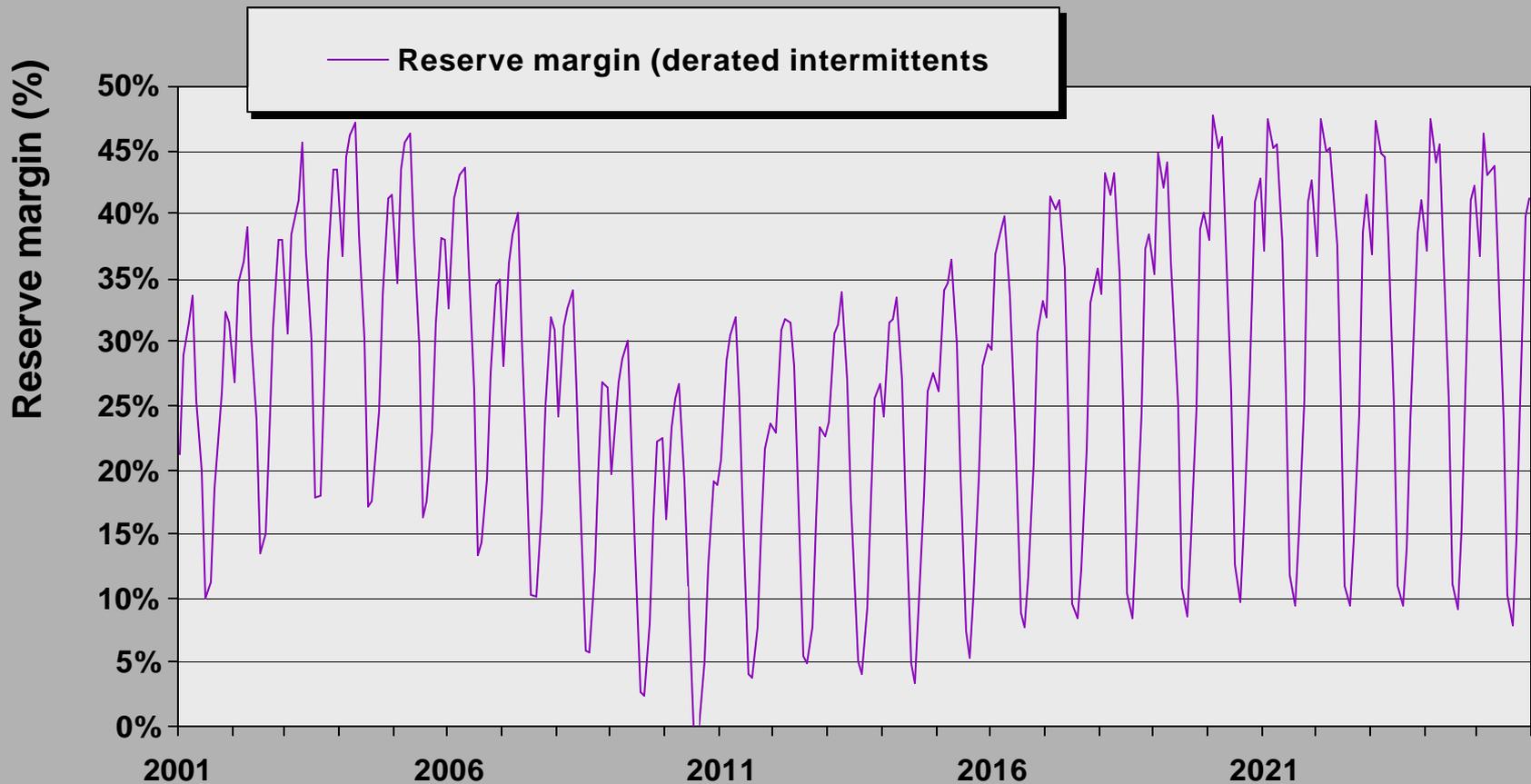
October 9, 2003

Where we left things in September...

Mid-Columbia price forecast (September briefing)



WECC Reserves (September briefing)



To complete

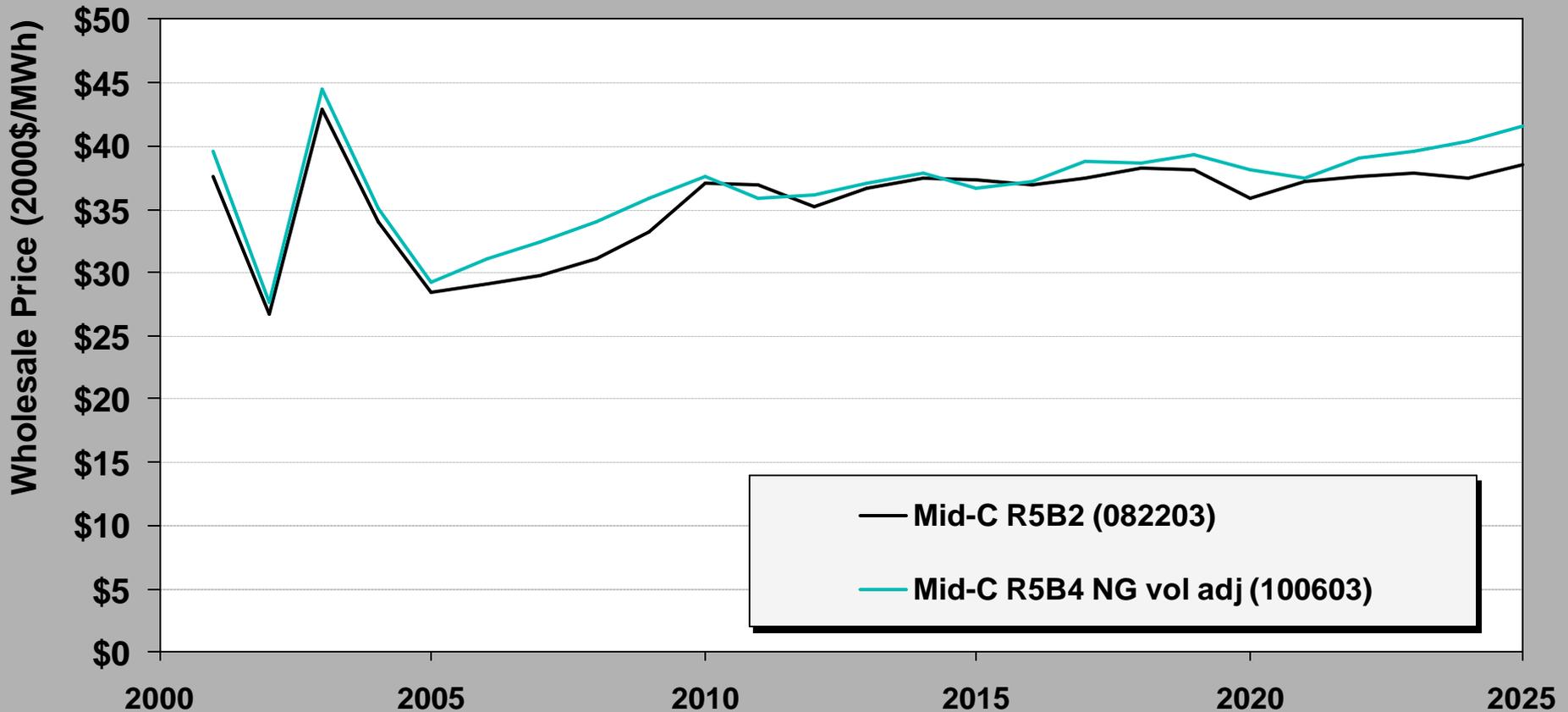
(ca. September briefing)

- Estimate implied adequacy (for PNW) by running GENESYS with AURORA resource portfolio.
- Adjust capacity payment until acceptable (5% LOLP) level of system reliability is achieved.
- Write up paper, post for comments.

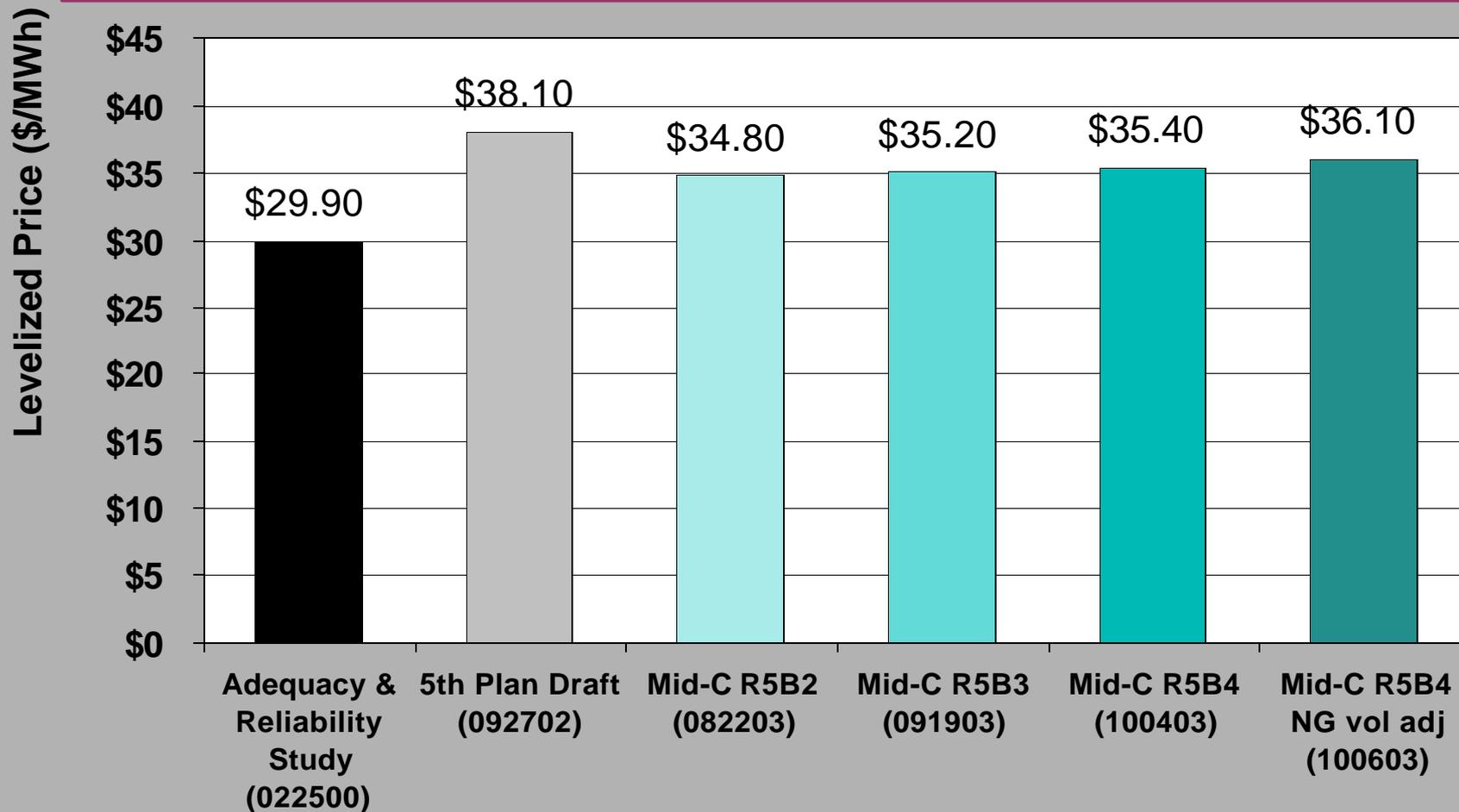
Base Case Refinements since September briefing

- Renewable Portfolio Standard & System Benefit Charge resources:
 - Annual acquisitions ramp up over periods of acquisition
 - Total acquisition 75% of current target levels
- Minor correction of base year loads.
- Green tag credit reduced ($\$7/\text{MWh} > \$6/\text{MWh}$).
- Updated PNW project capacity per 2003 WECC report
- Adjustment for price bias introduced by gas price volatility.

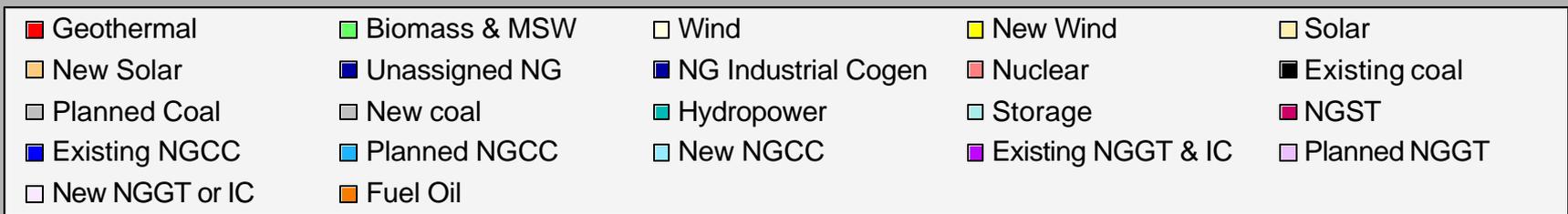
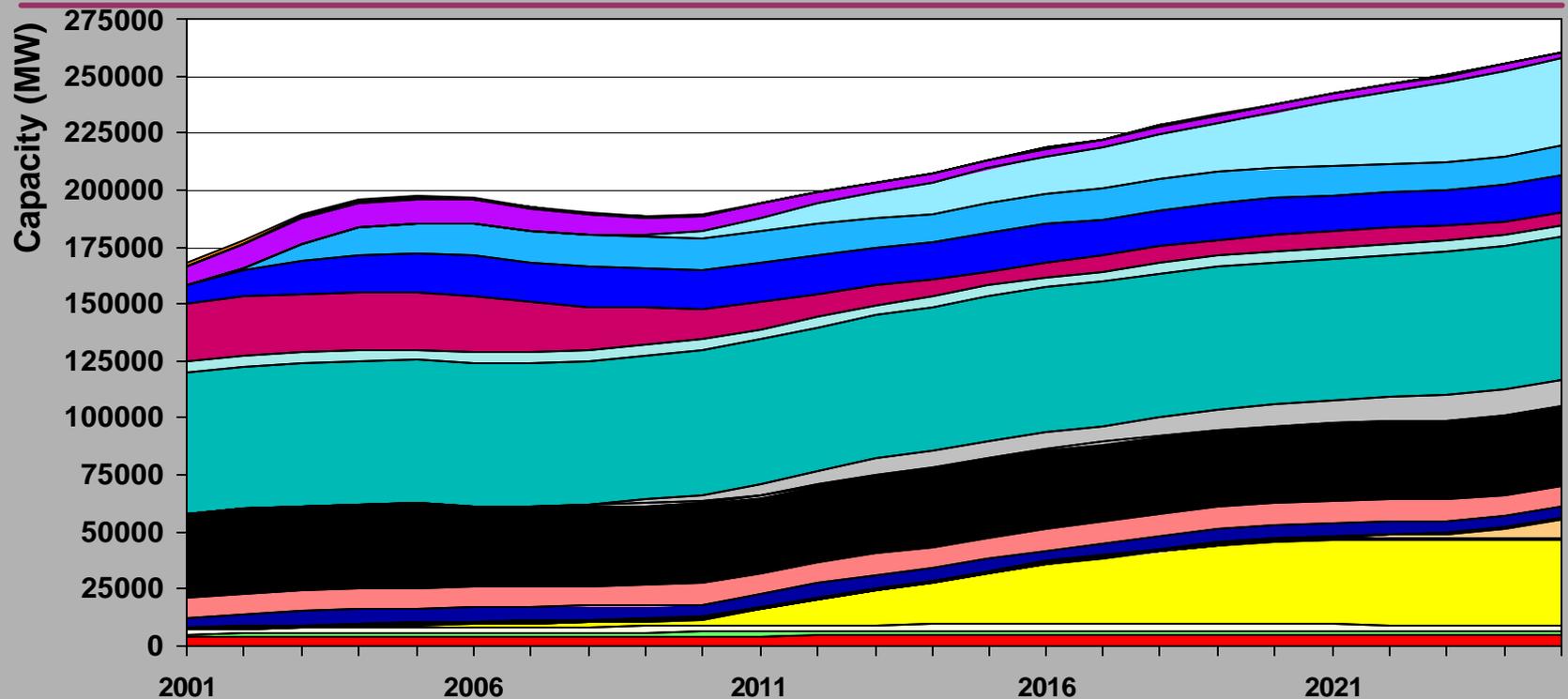
Forecast annual average Mid-Columbia price 08/22/03 vs 10/06/03



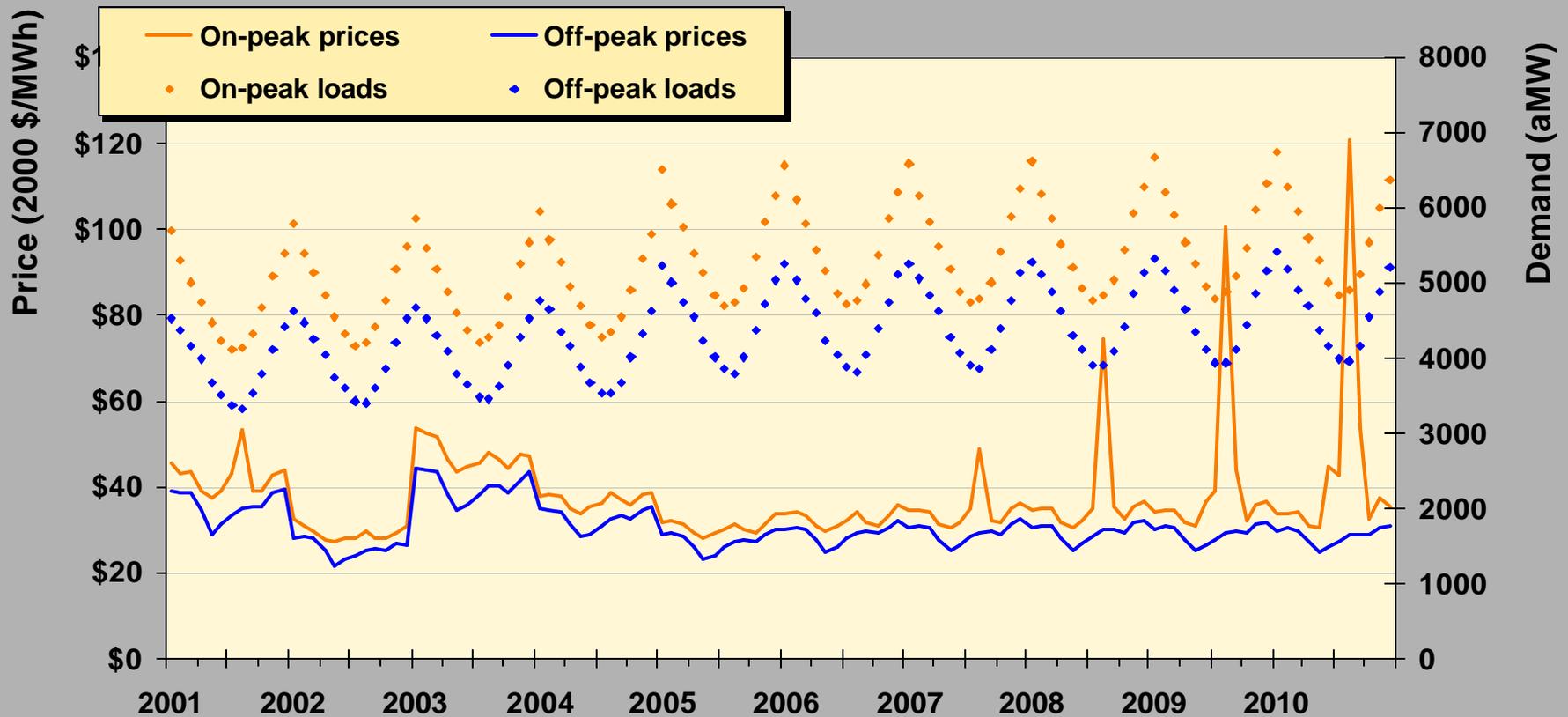
Base Mid-Columbia price forecast is stable levelized net present value, 2006-25



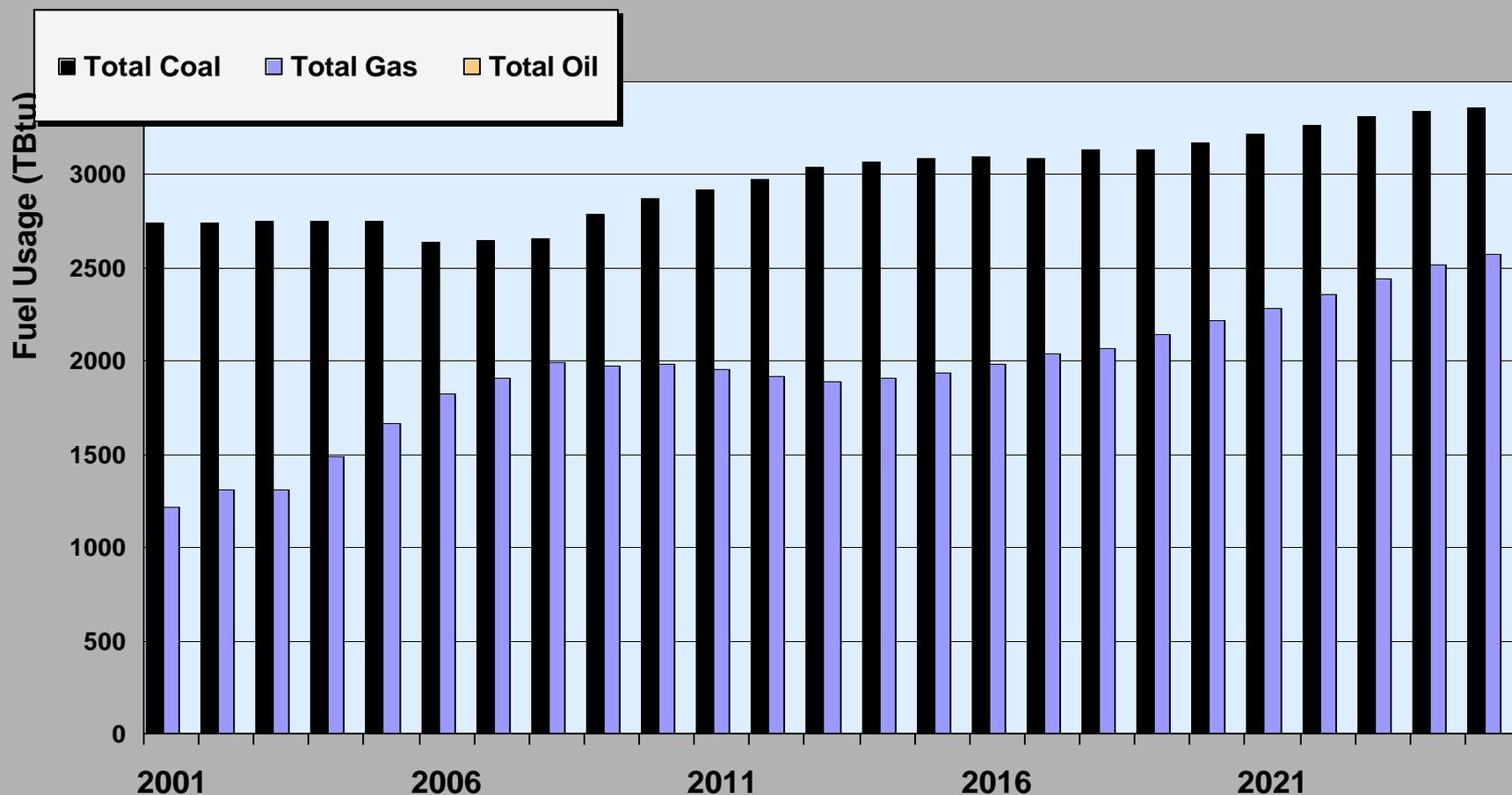
Forecast WECC Resource Mix (R5B4 100603)



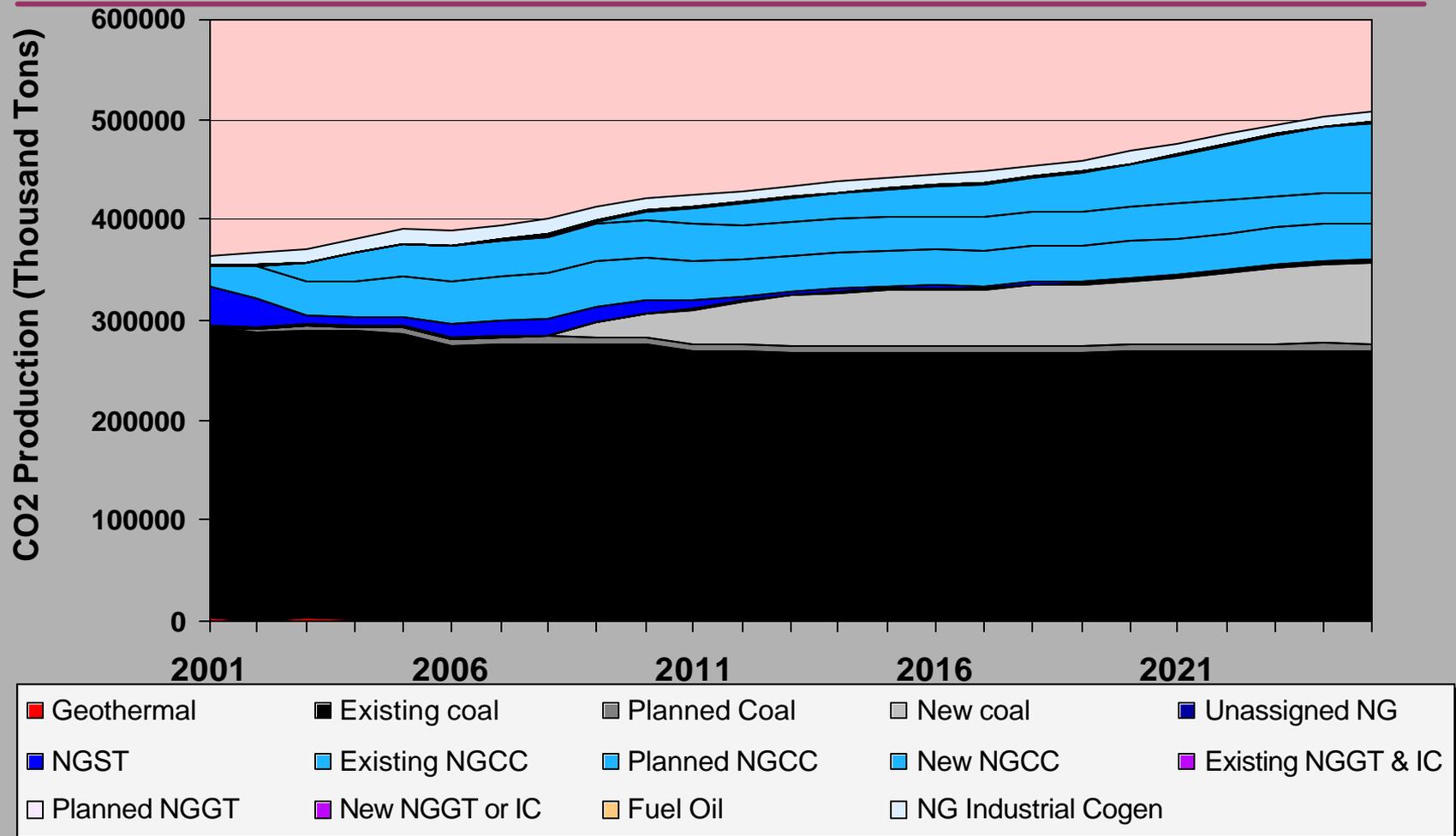
Mid-Columbia monthly ave prices & loads (R5B4 100603)



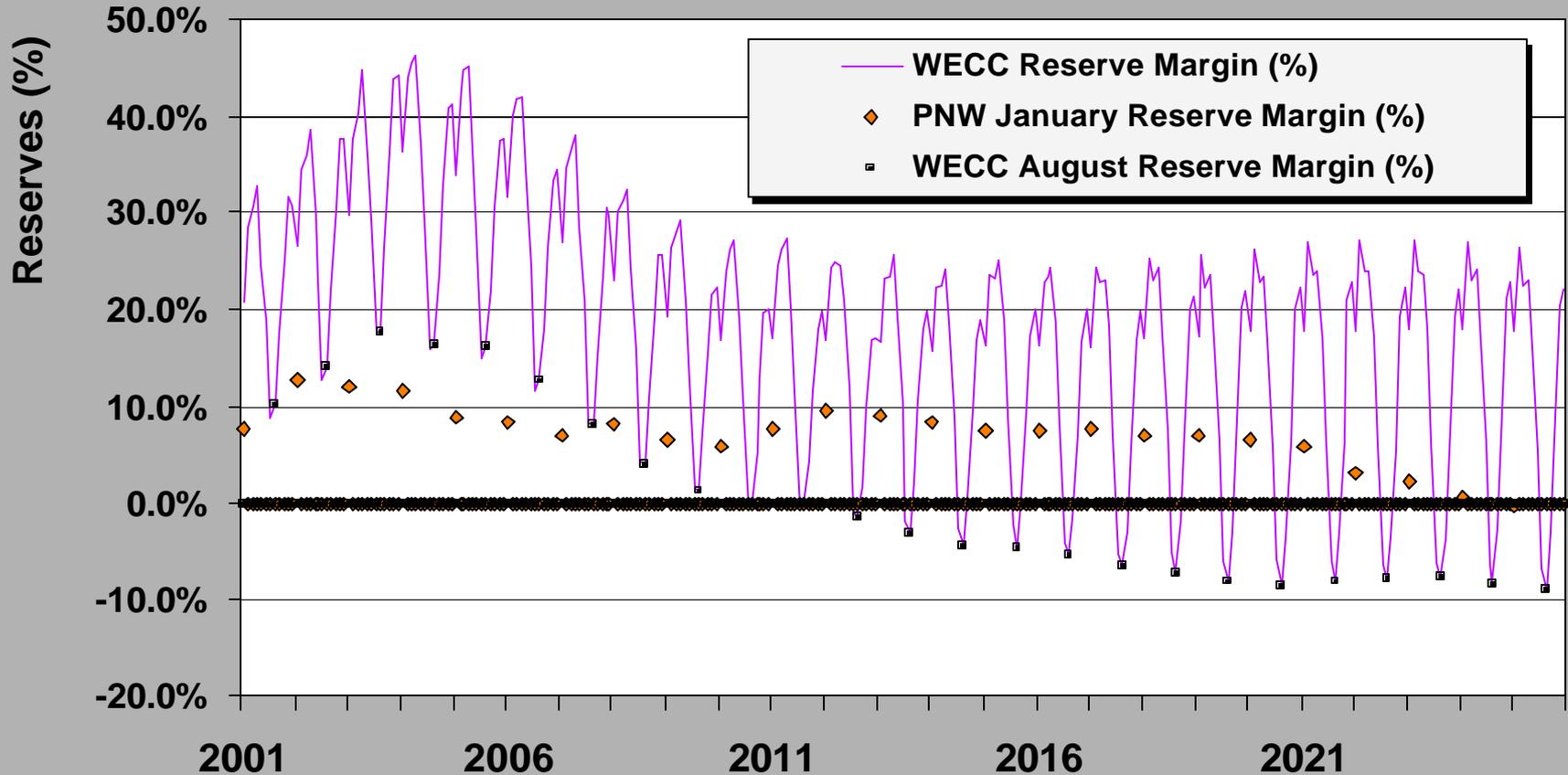
Forecast WECC fossil fuel use for electricity (R5B4 100603)



Forecast WECC CO2 production (R5B4 100603)



Reserve Margins (R5B4 100603)



With luck, we may have reasonable base case
reliability assessment to show here

To complete (1)

(ca. October)

Reliability/capacity payment issue:

- Work GENESYS until convincing base case reliability forecast is obtained
- Run GENESYS with AURORA resource portfolio to understand reliability implication of base case AURORA forecast.
- Adjust capacity payment in AURORA forecast until acceptable (5% LOLP) level of system reliability is achieved.

To complete (2)

(ca. October)

Sensitivity runs:

- Fuel price (Low > High cases)
- Demand (Low > High cases)
- CO2 policy (OR only > stabilization)
- Climate change hydro

Write up paper, post for comments.