

# Wholesale Power Price Forecast

*Status Report*

Jeff King

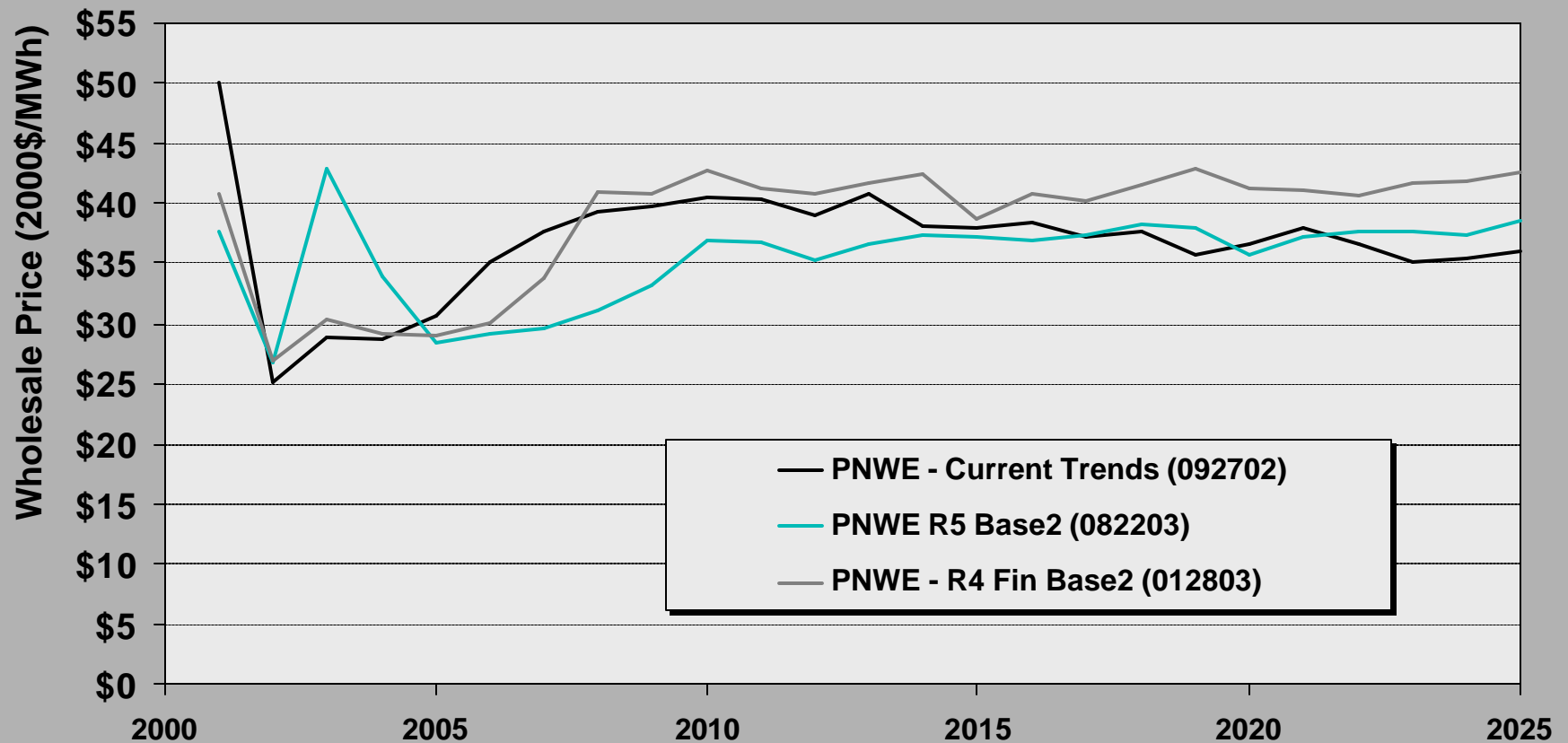
October 9, 2003

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# Where we left things in September...

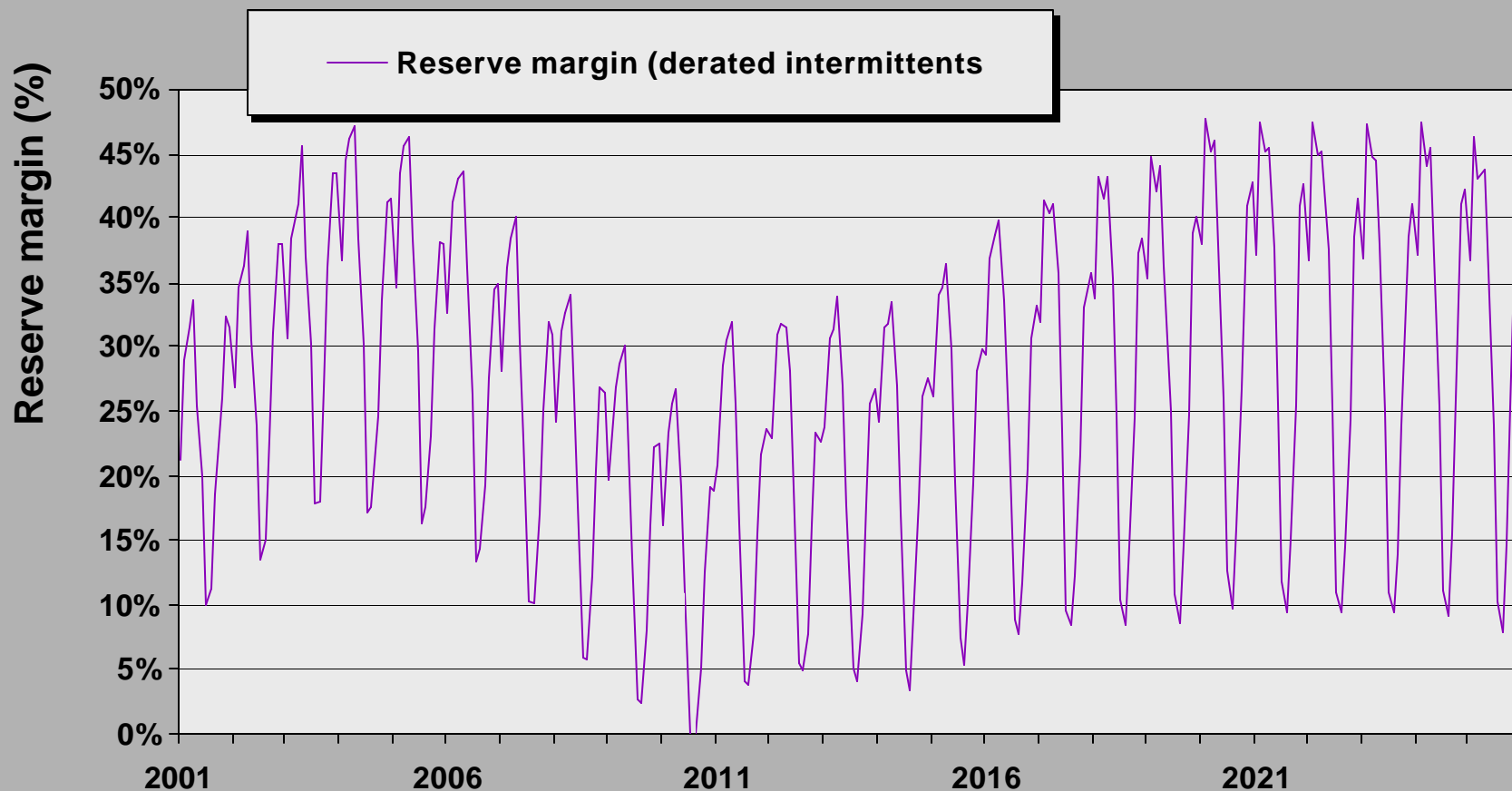
# Mid-Columbia price forecast

## (September briefing)



# WECC Reserves

## (September briefing)



# To complete

(ca. September briefing)

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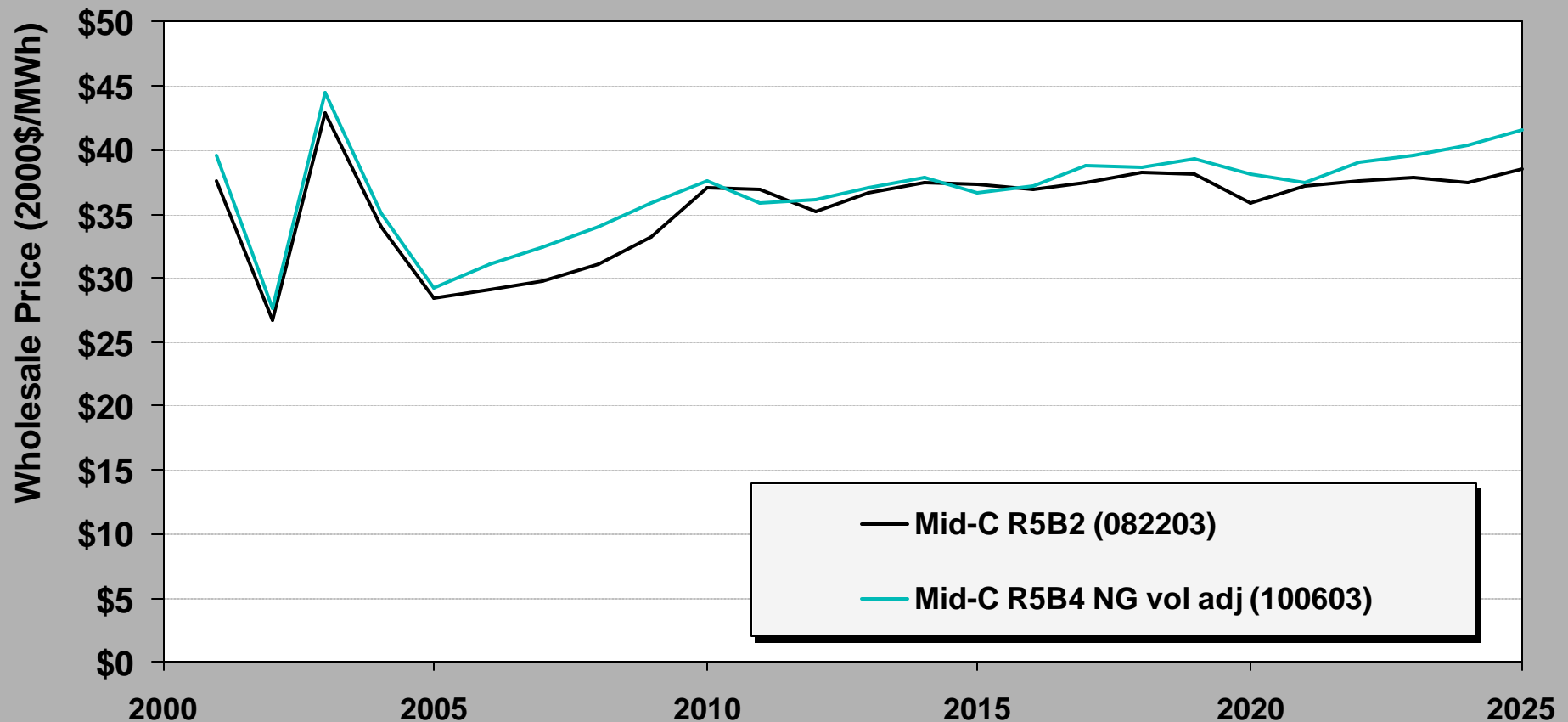
- Estimate implied adequacy (for PNW) by running GENESYS with AURORA resource portfolio.
- Adjust capacity payment until acceptable (5% LOLP) level of system reliability is achieved.
- Write up paper, post for comments.

# Base Case Refinements since September briefing

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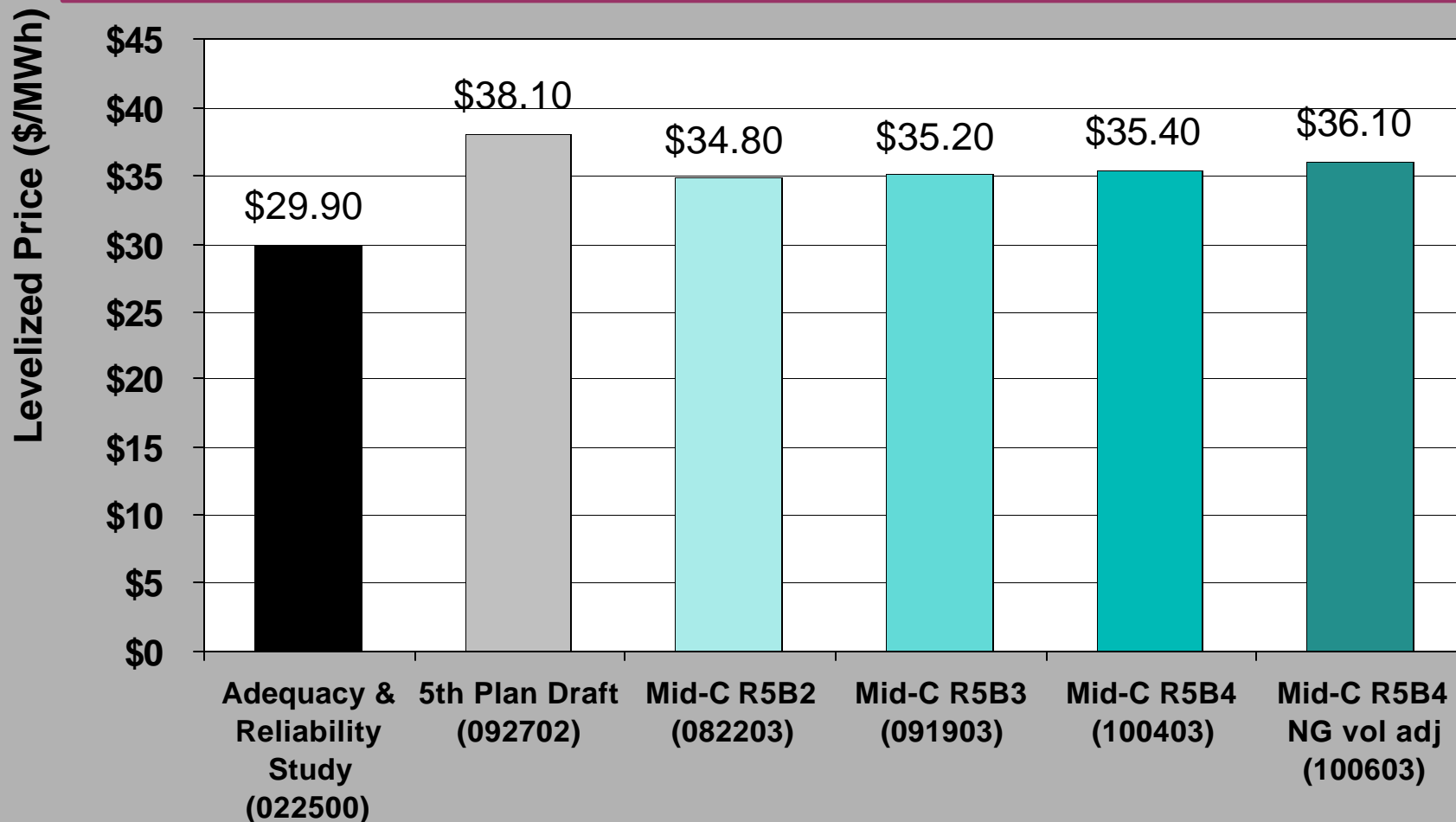
- Renewable Portfolio Standard & System Benefit Charge resources:
  - Annual acquisitions ramp up over periods of acquisition
  - Total acquisition 75% of current target levels
- Minor correction of base year loads.
- Green tag credit reduced ( $\$7/\text{MWh} > \$6/\text{MWh}$ ).
- Updated PNW project 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



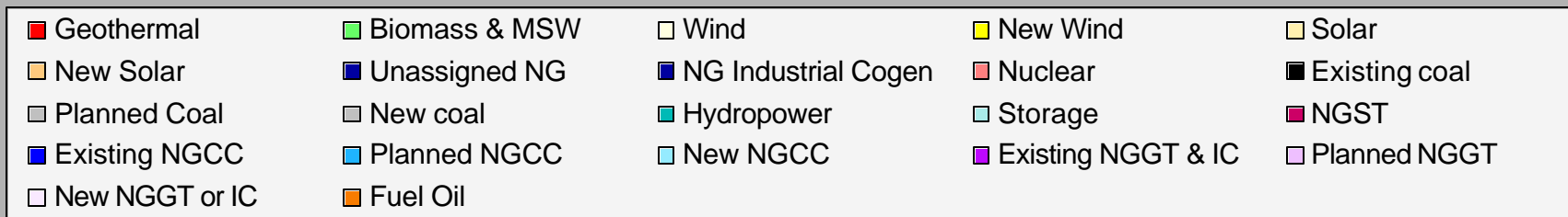
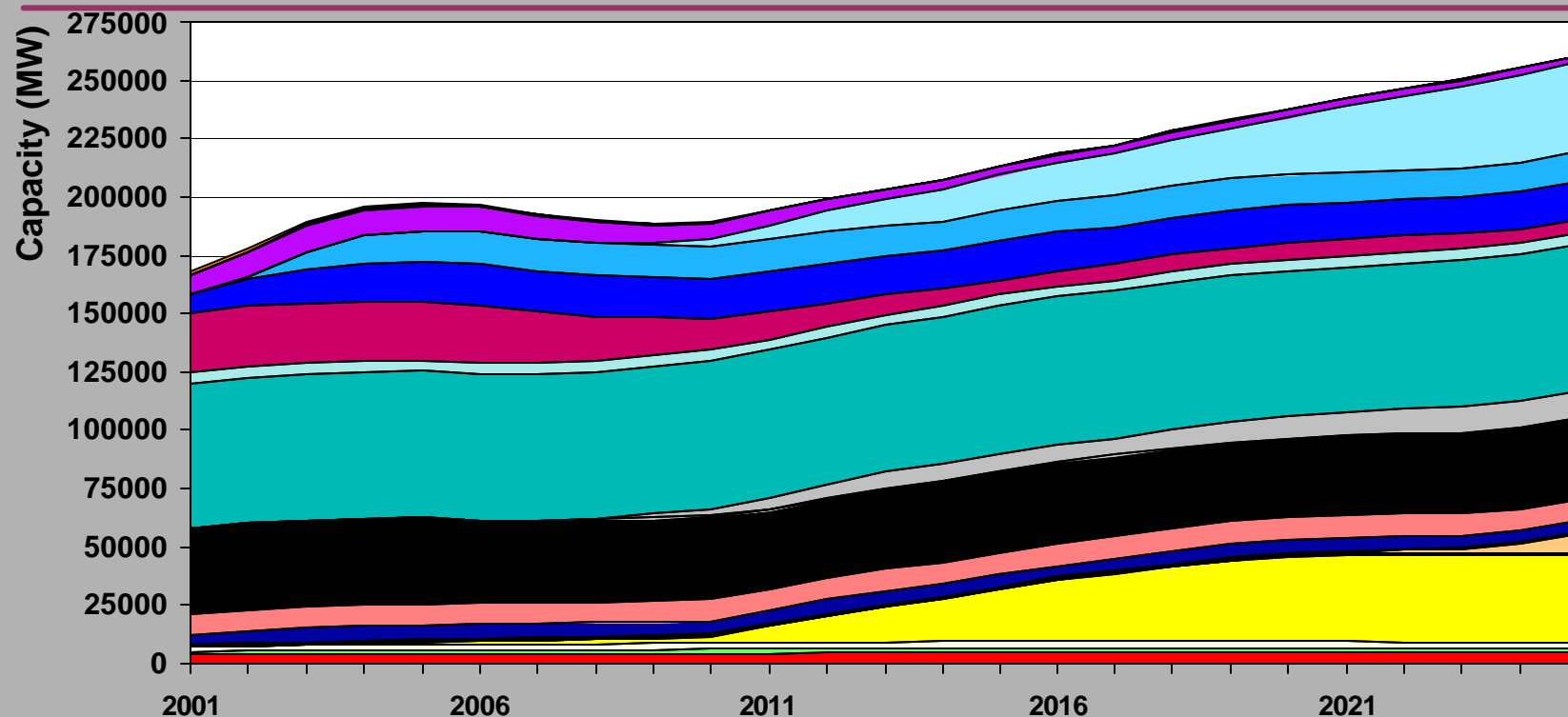
# Base Mid-Columbia price forecast is stable

## levelized net present value, 2006-25

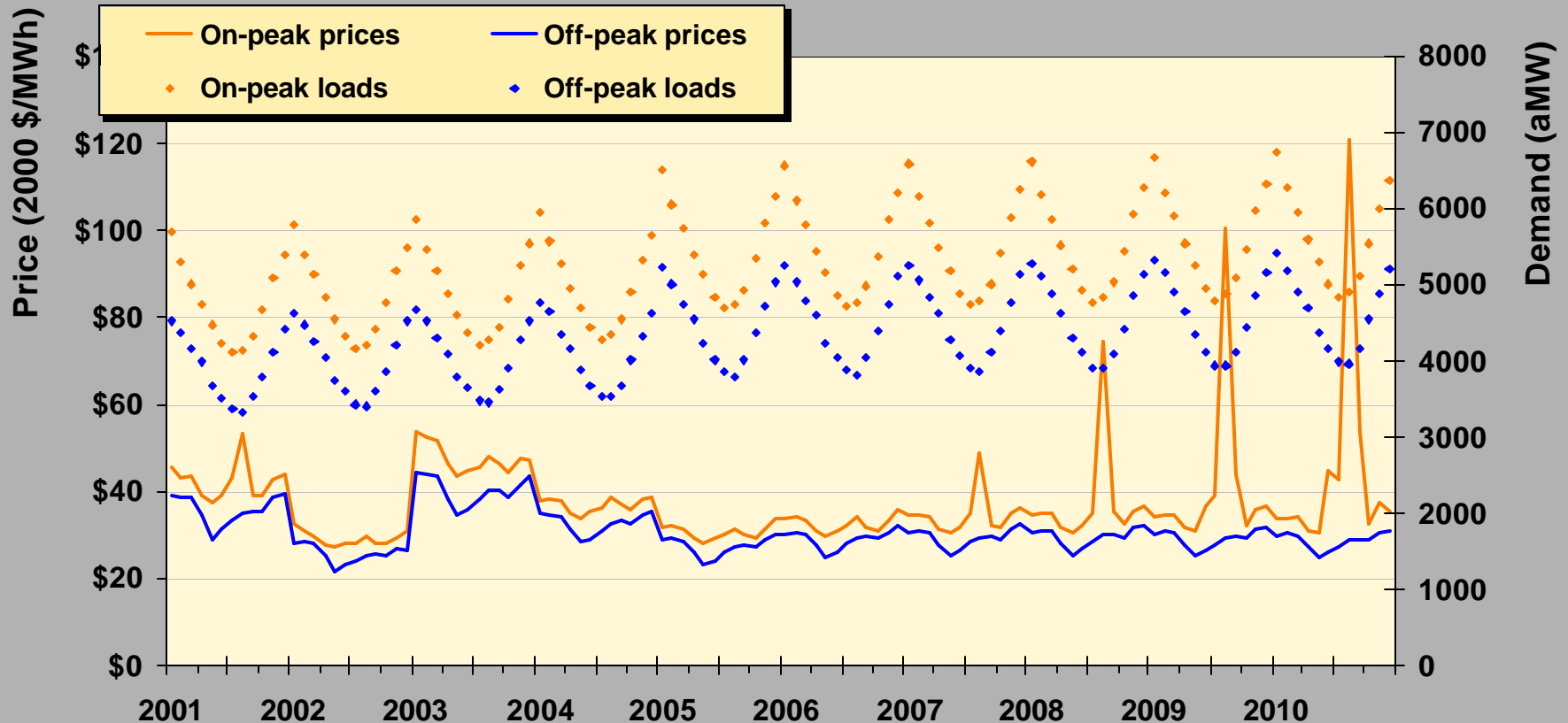




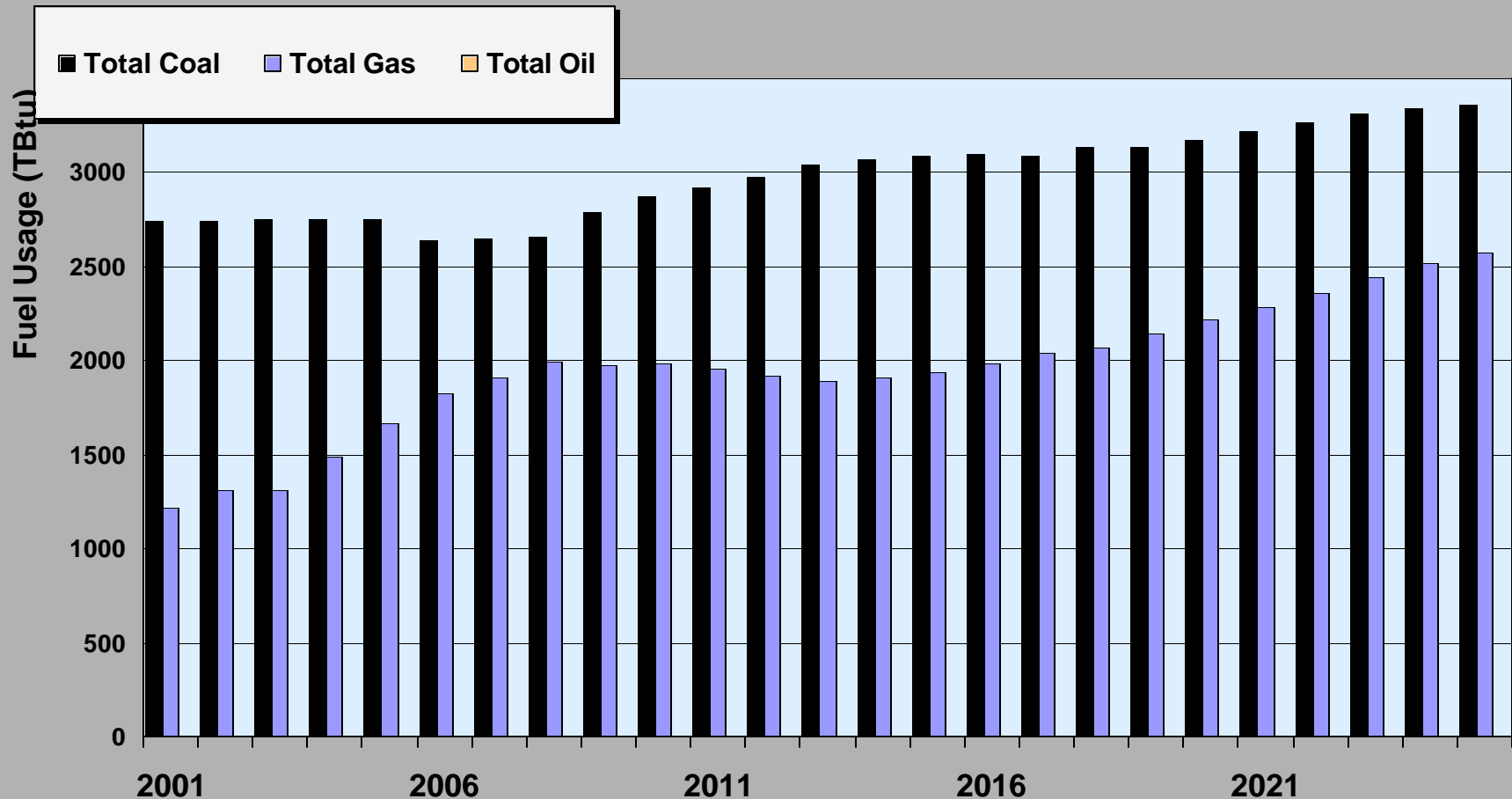
# Forecast WECC Resource Mix (R5B4 100603)



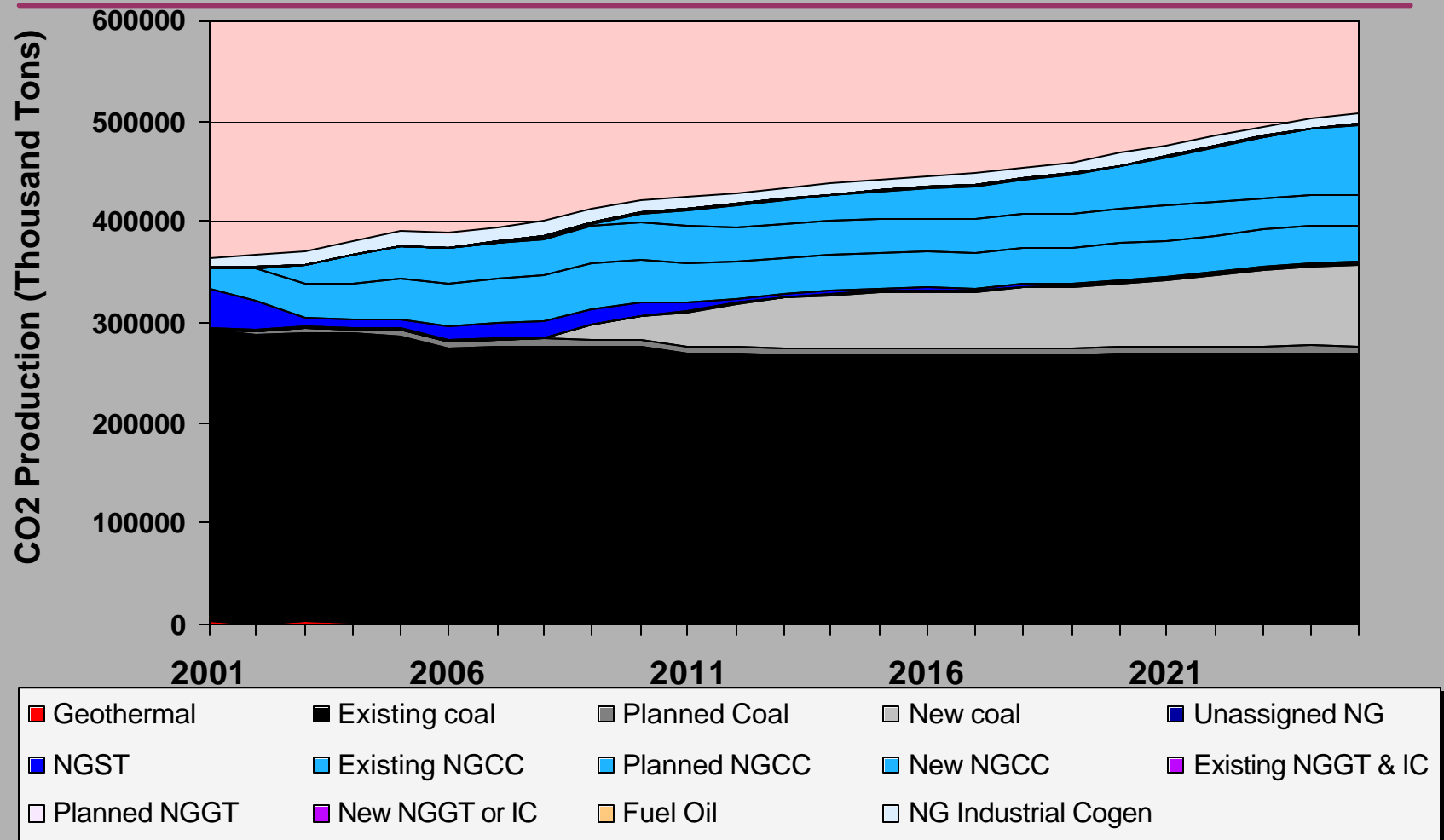
# Mid-Columbia monthly ave prices & loads (R5B4 100603)



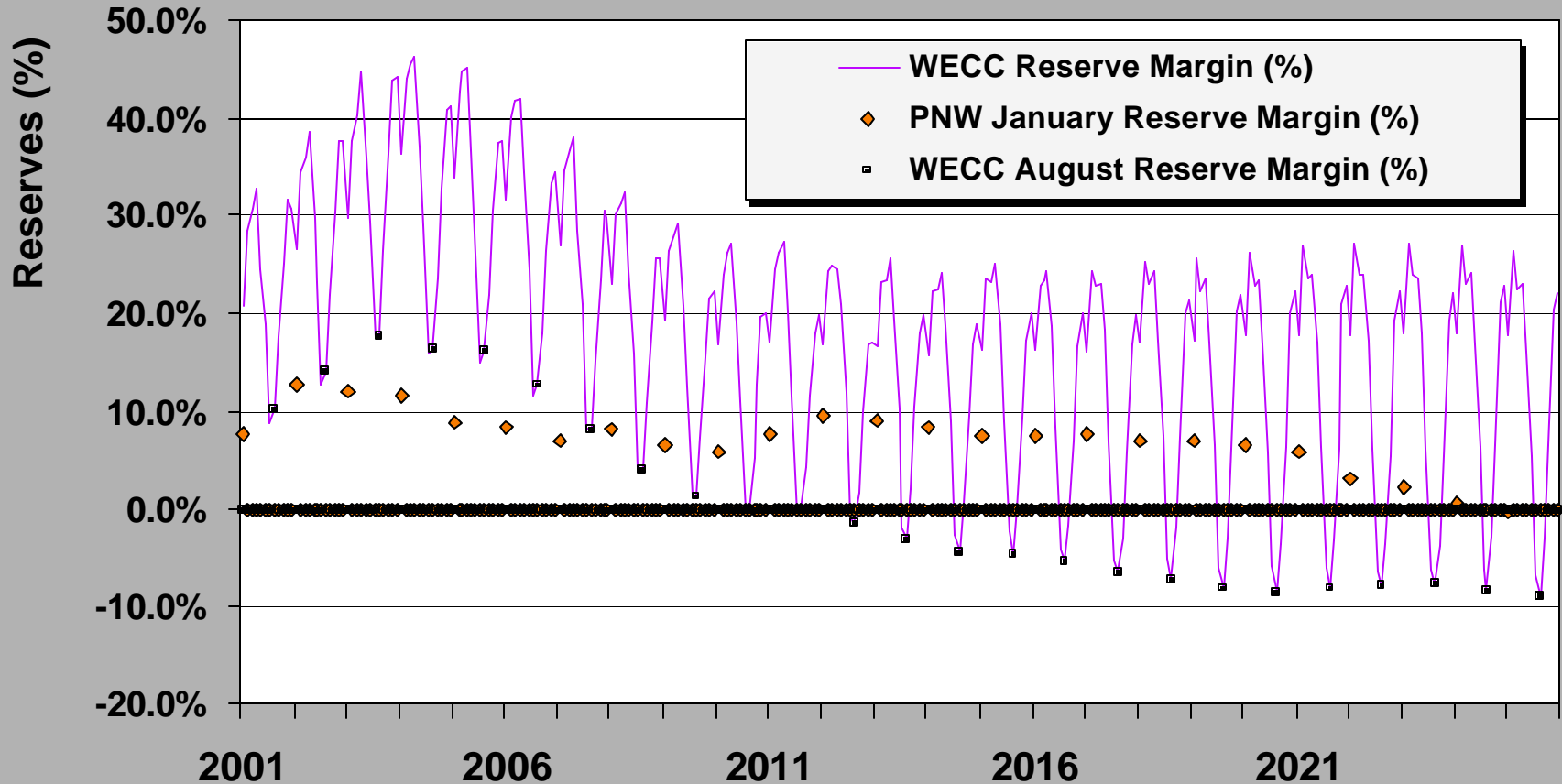
# Forecast WECC fossil fuel use for electricity (R5B4 100603)



# Forecast WECC CO2 production (R5B4 100603)



# Reserve Margins (R5B4 100603)



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

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# To complete (1)

(ca. October)

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## 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)

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## 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.