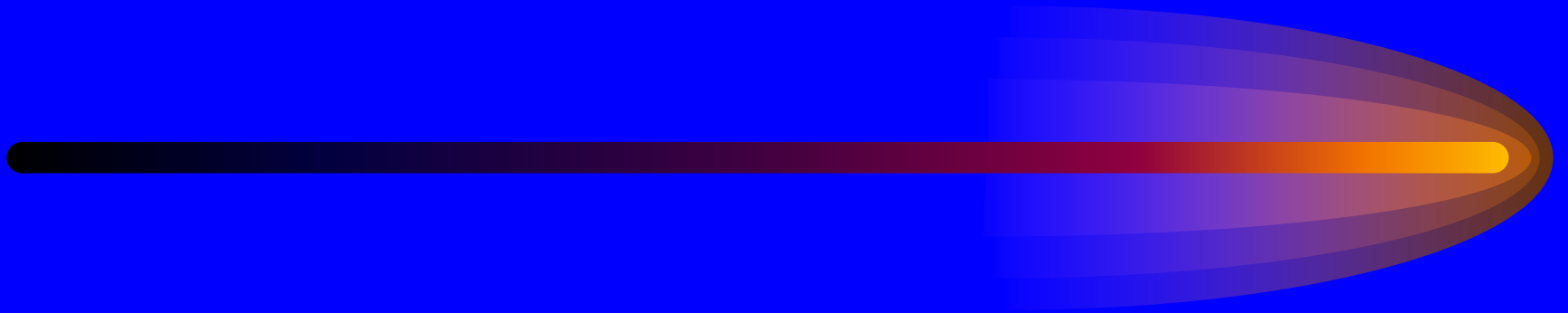


# System Control Monthly Statistics

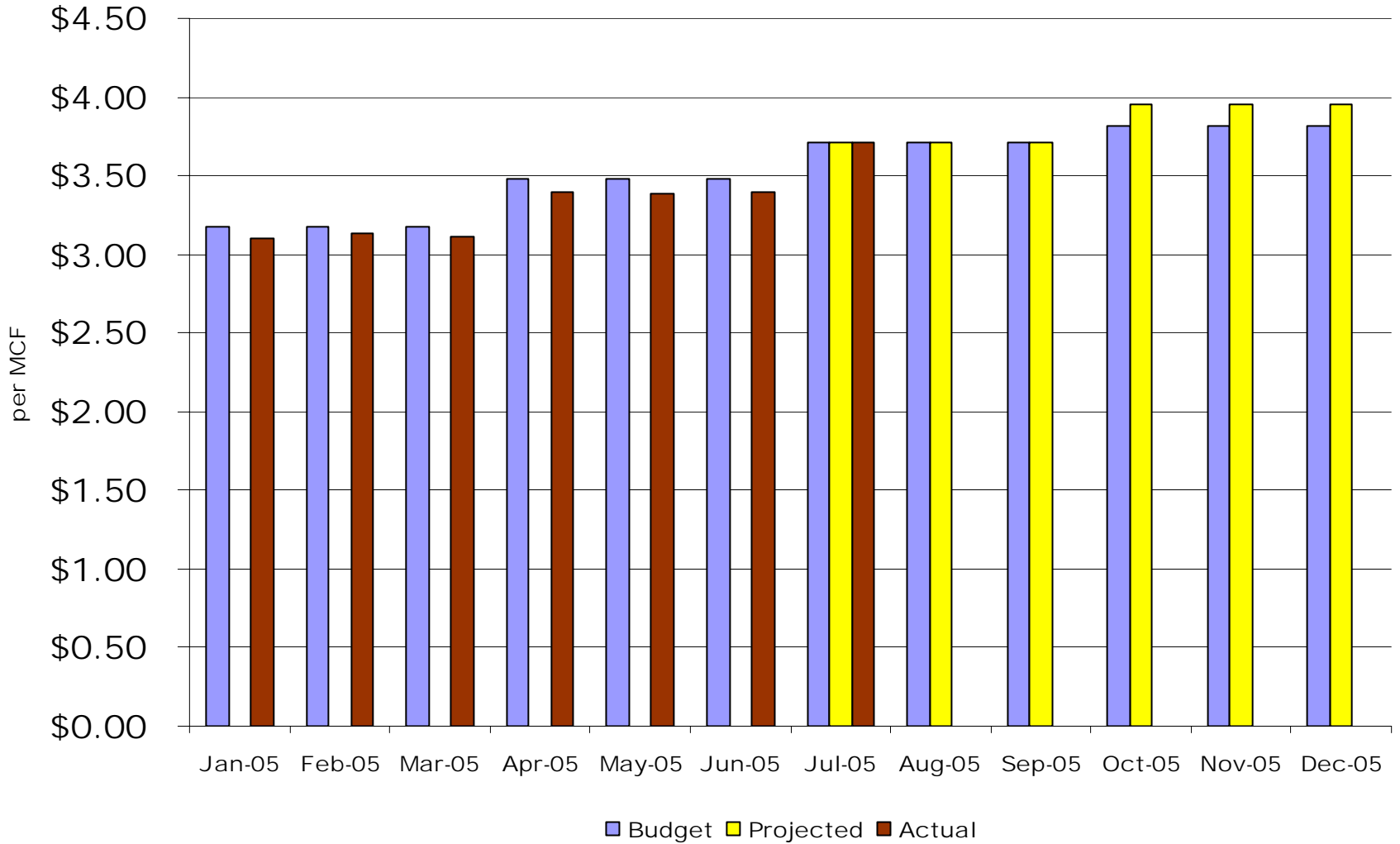


Presented to BOD

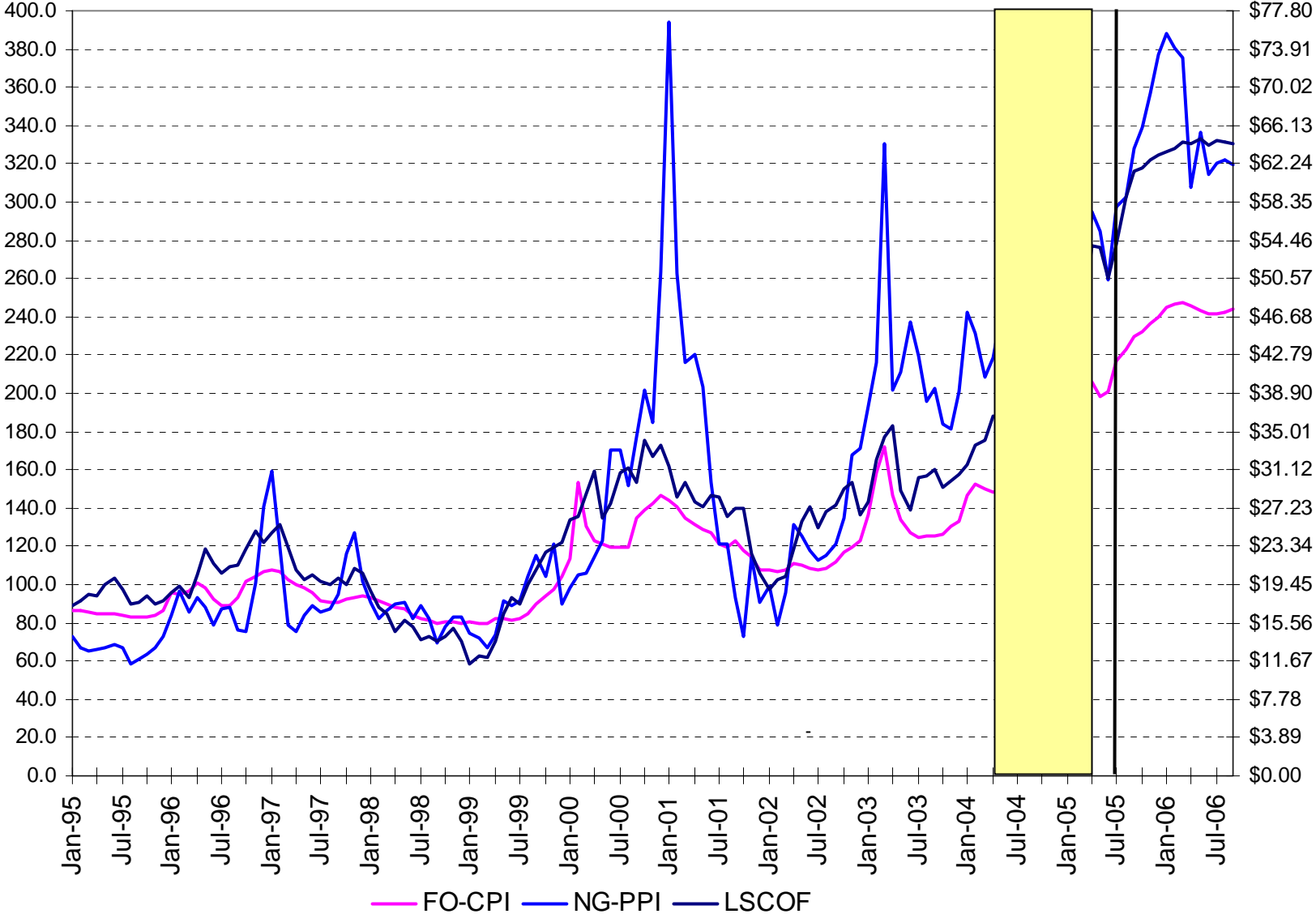
August 24, 2005

John S. Cooley, PE

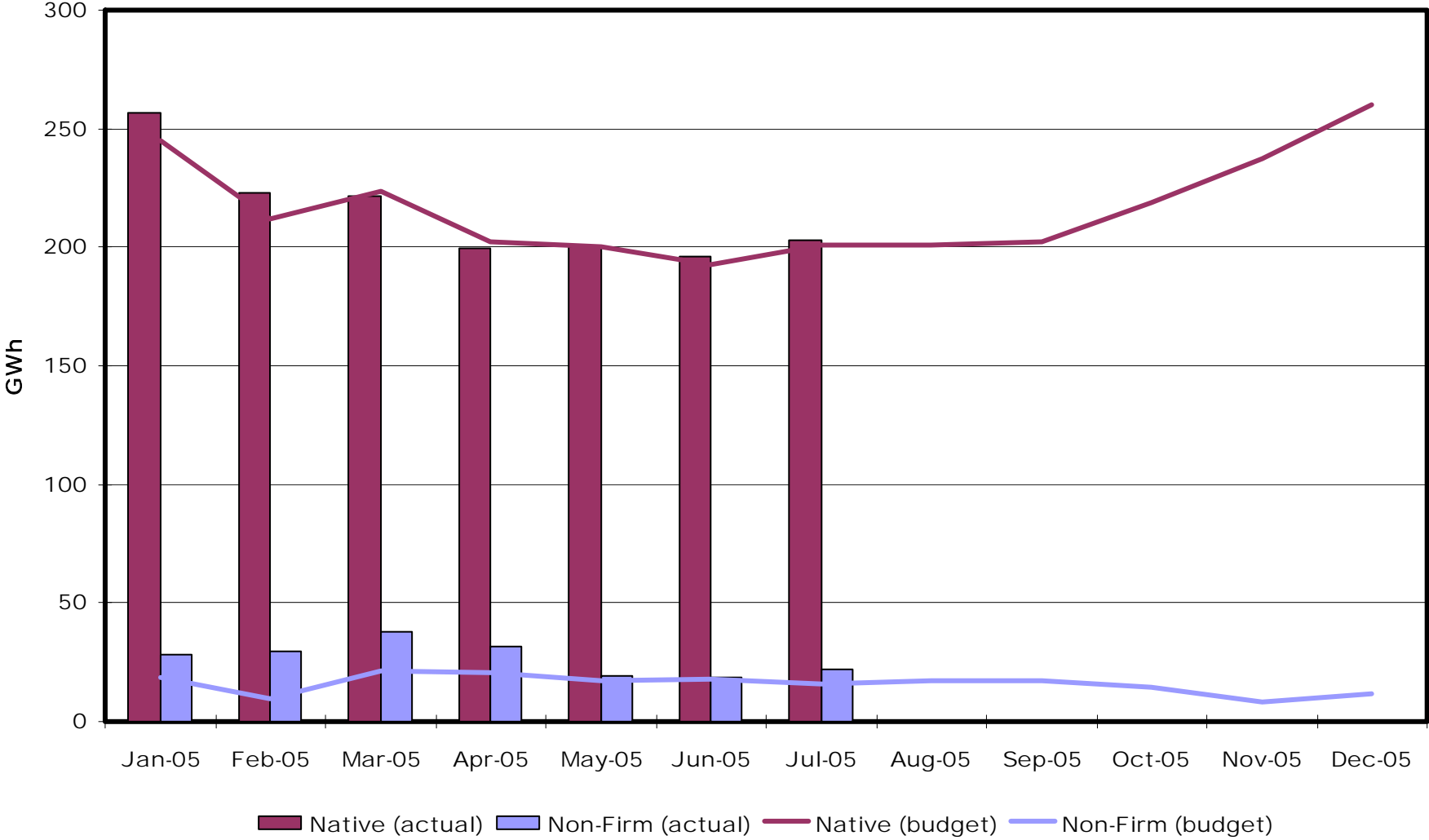
# Chugach Gas Price (Marathon with taxes)



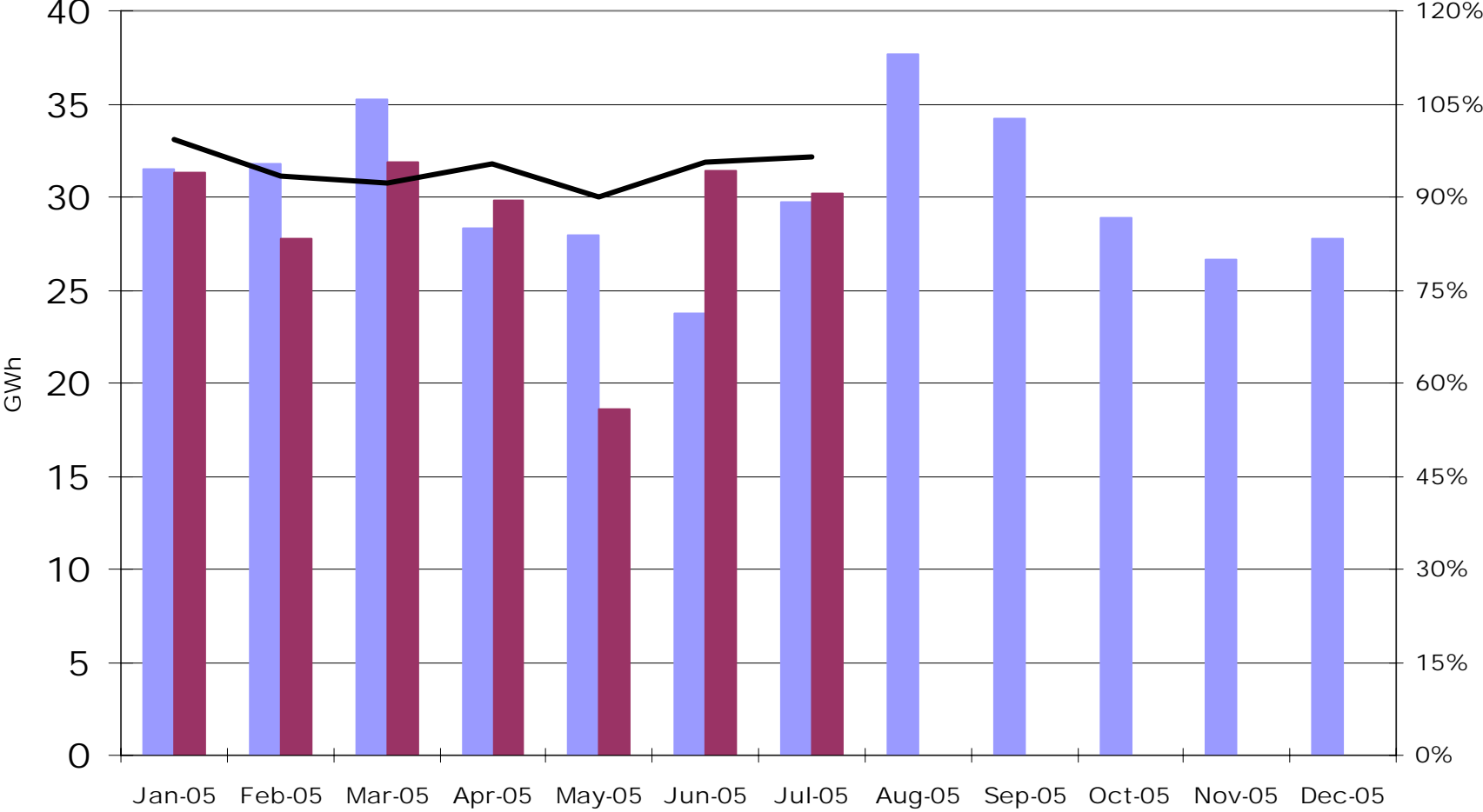
# Gas Price Indices



# Monthly Energy Requirements

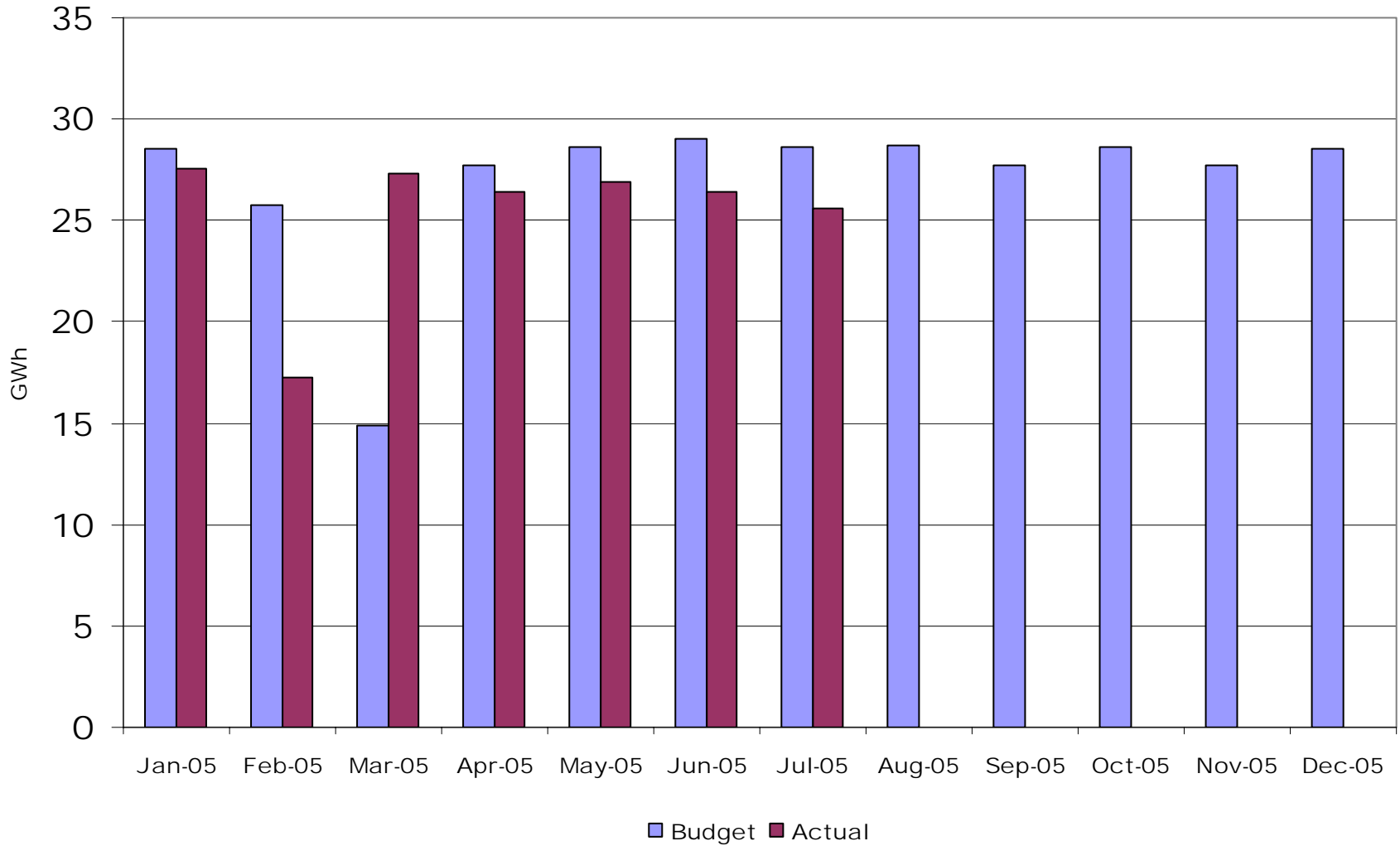


# Monthly Hydro Usage

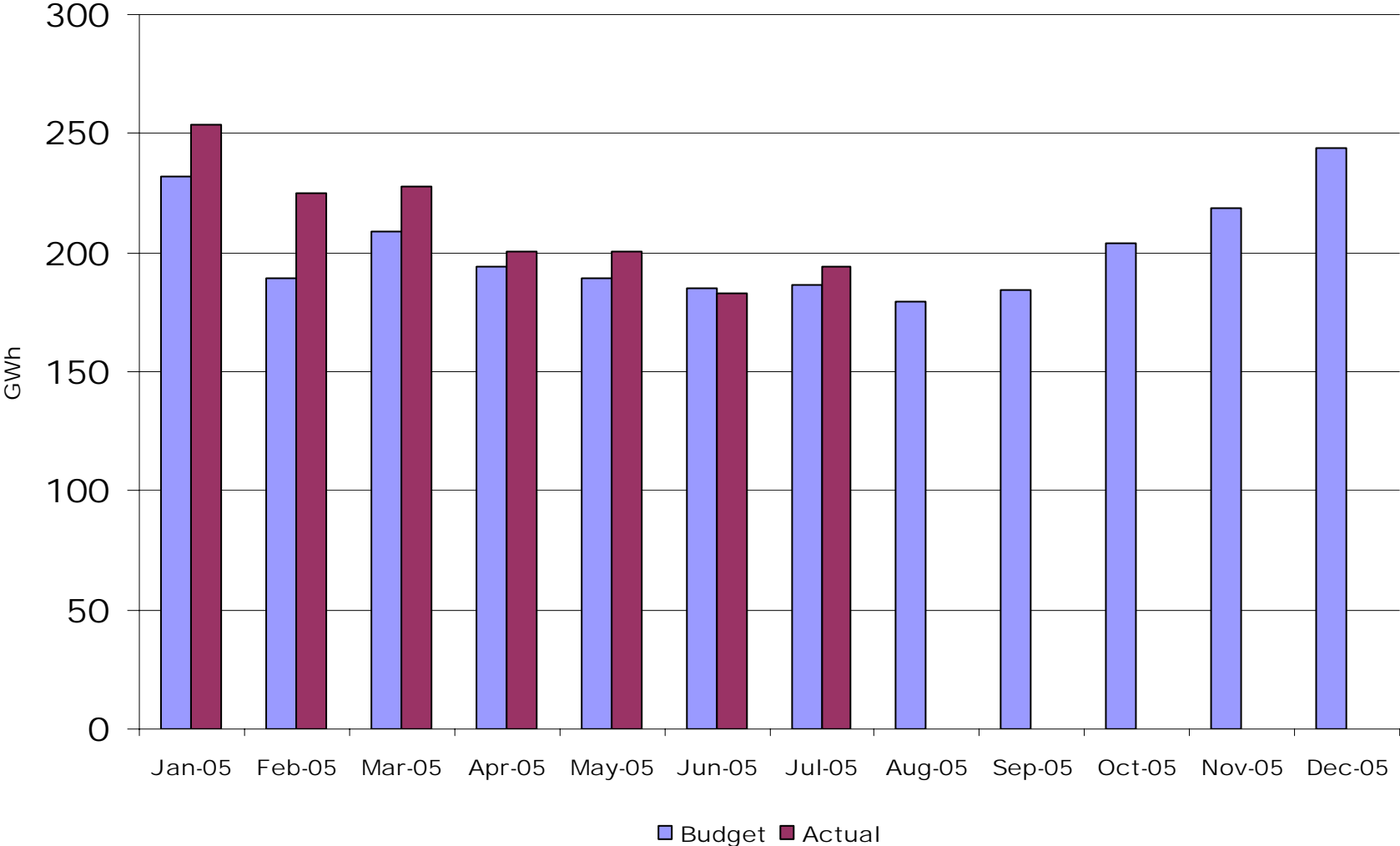


Budget Actual YTD Actual to Budget %

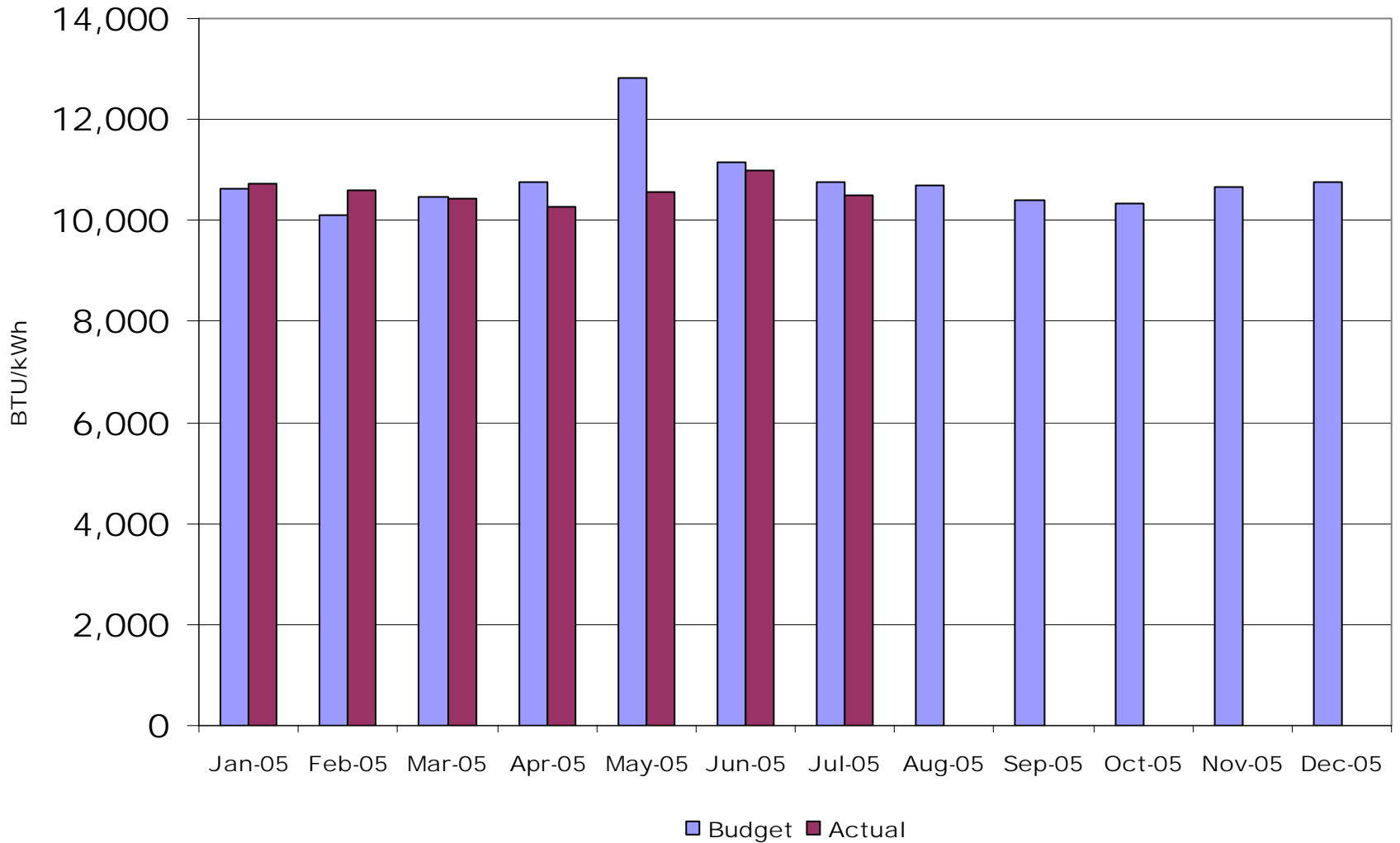
# Monthly Purchased Power (excluding Bradley Lake)



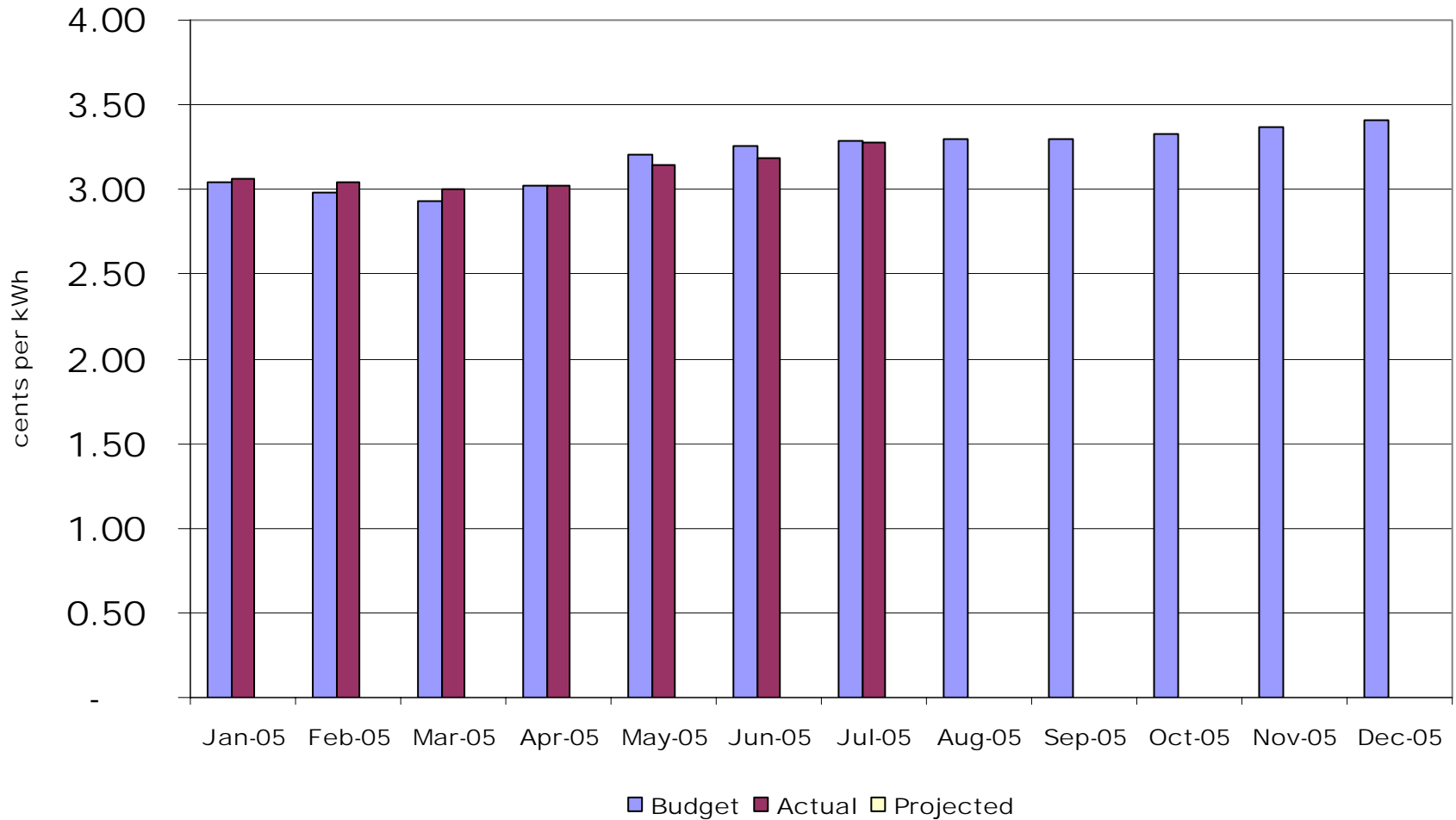
# Monthly Thermal Generation



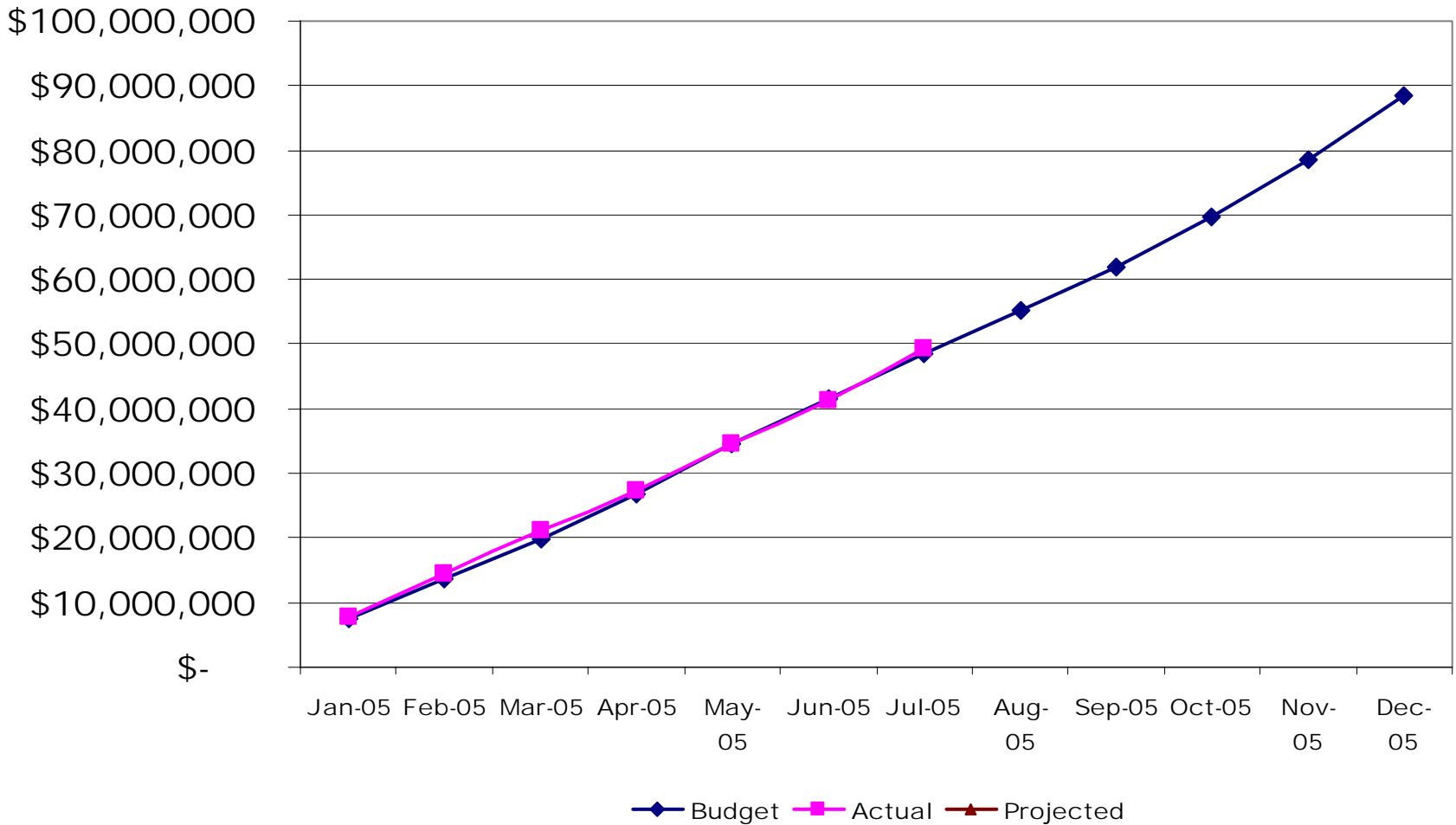
# Thermal Unit Heat Rate



## Net Fuel & Purchased Power Rate (F&PP minus economy & wheeling)

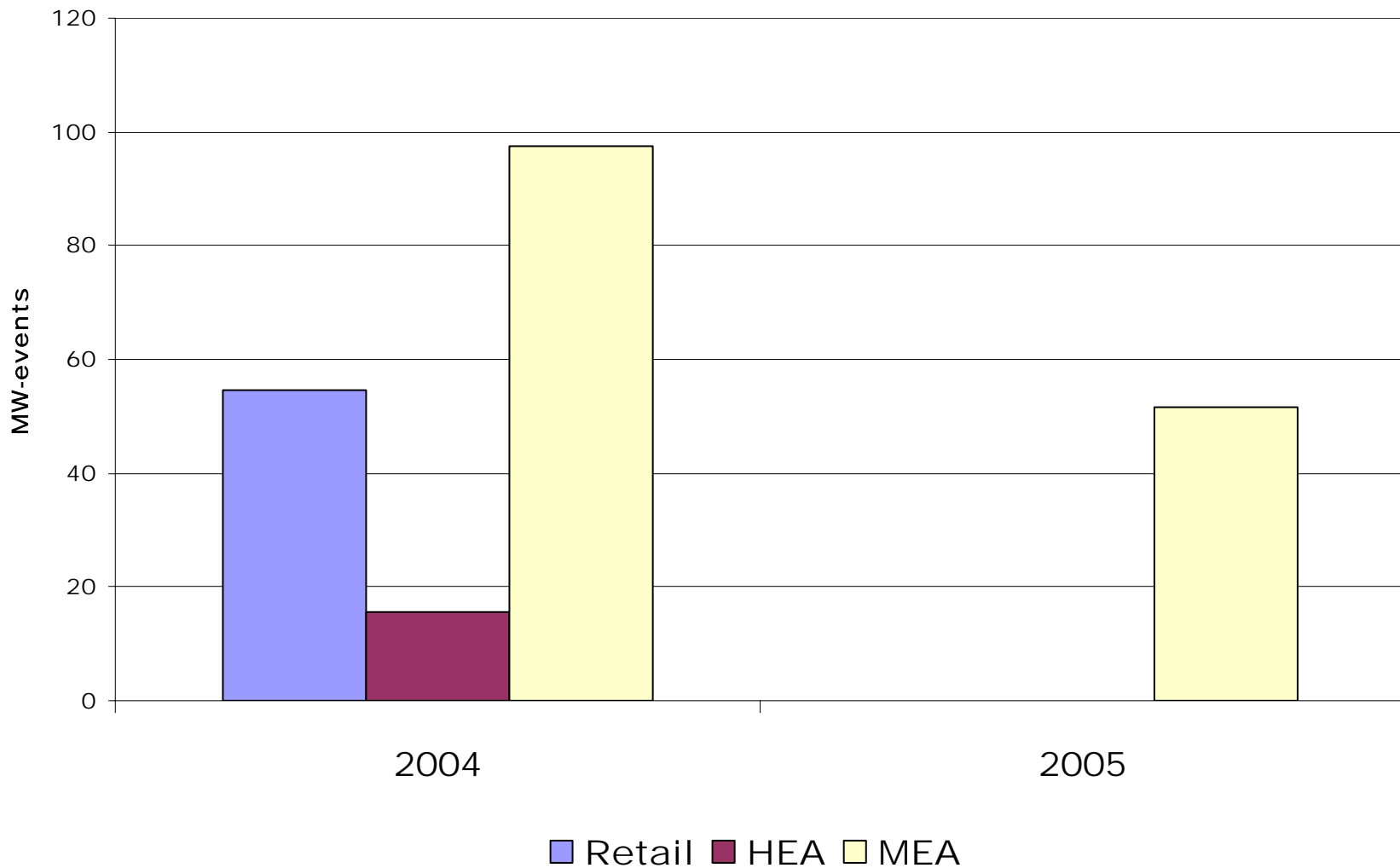


## Net Fuel & Purchased Power Cost (F&PP minus economy & wheeling)



# Wholesale Outage Statistics

(running 12 months through July)

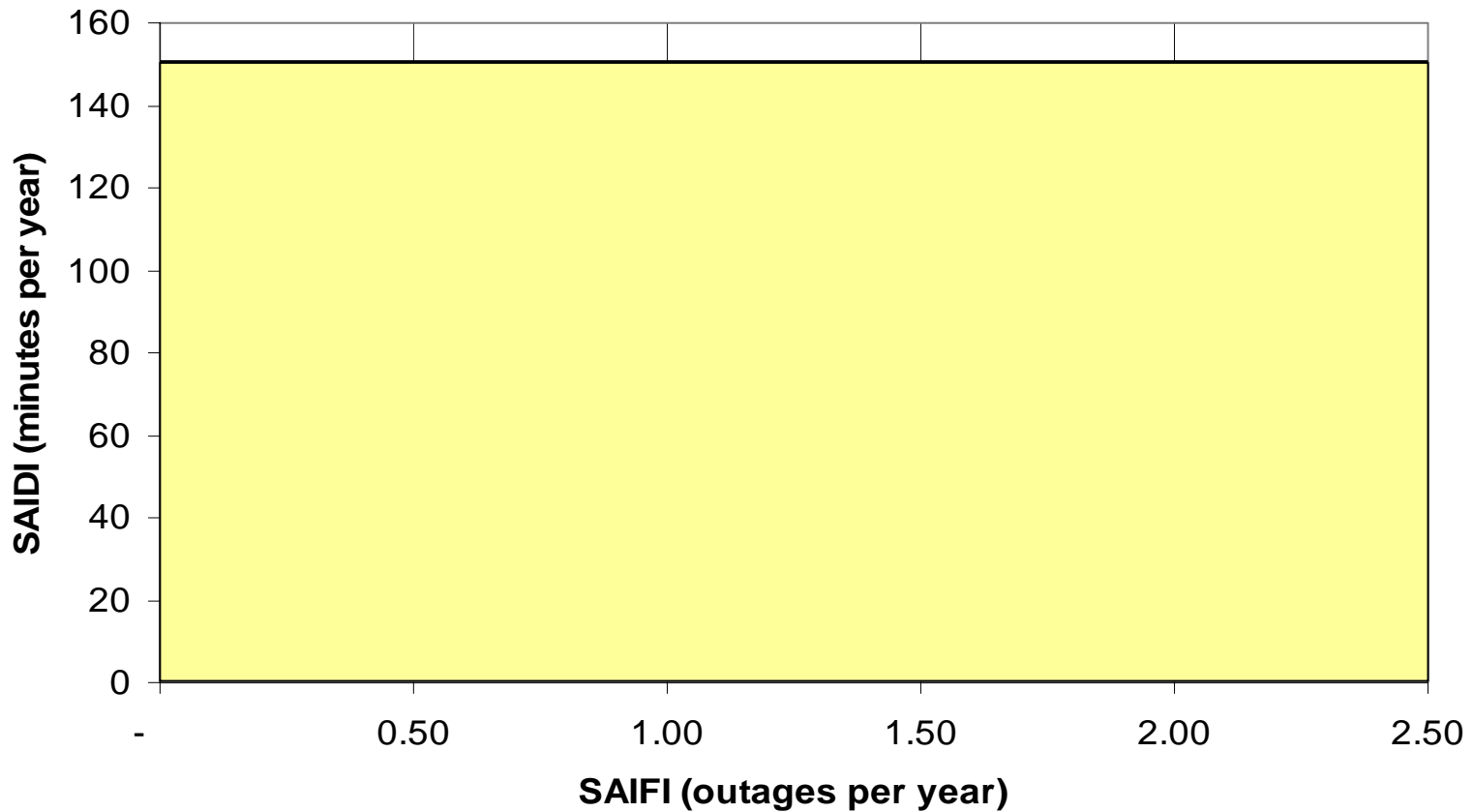


# Reliability Triangle

- Three outage statistics:
  - Length of outage in minutes (CAIDI)
  - Frequency of outages per year (SAIFI)
  - Total minutes out per year (SAIDI)
- Only two independent variables
  - $CAIDI \times SAIFI = SAIDI$  or
  - $SAIFI = SAIDI/CAIDI$
- Triangle shows all three simultaneously

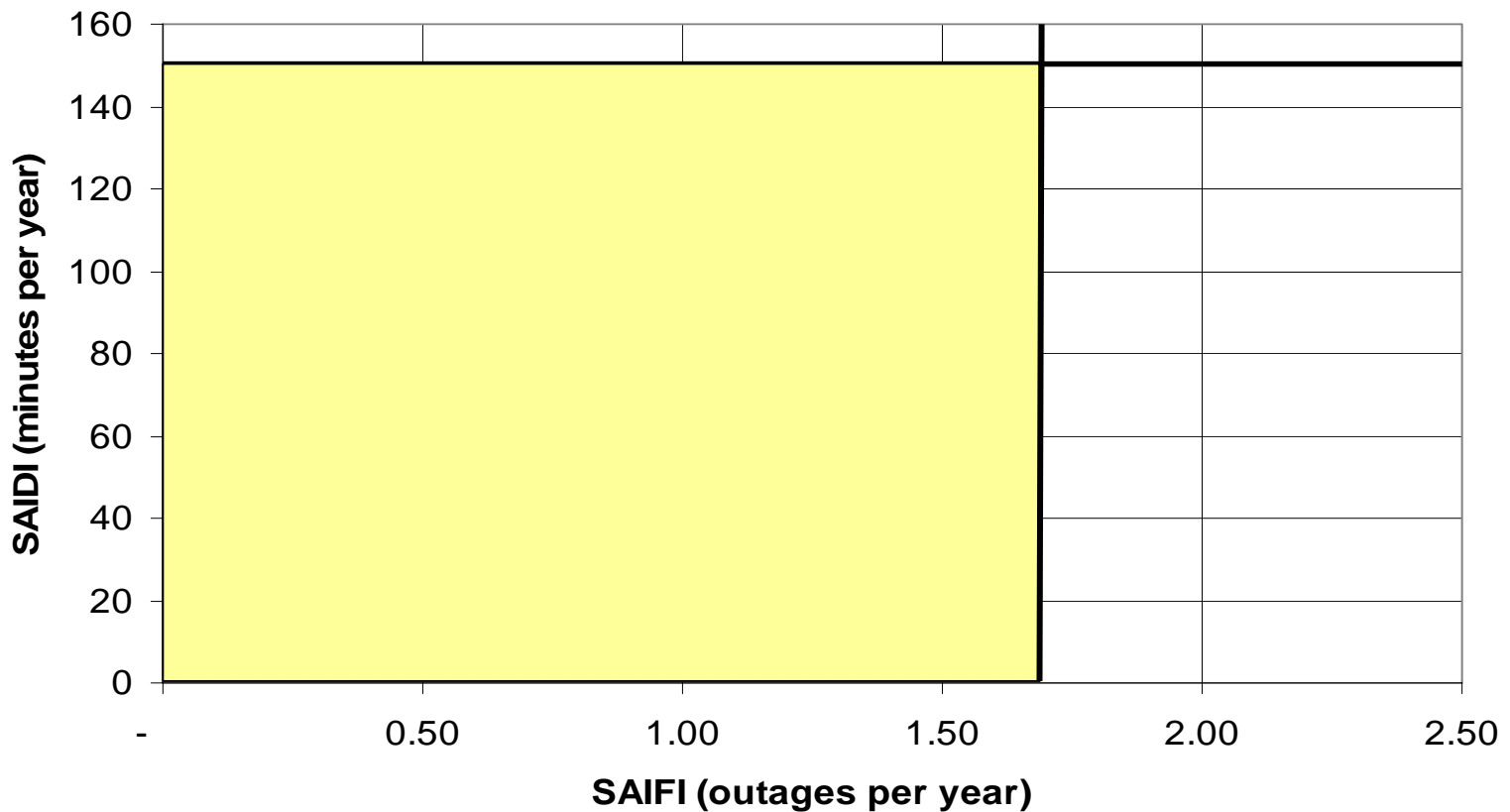
# SAIDI (< 150 minutes per year)

2005 Cumulative Monthly Performance

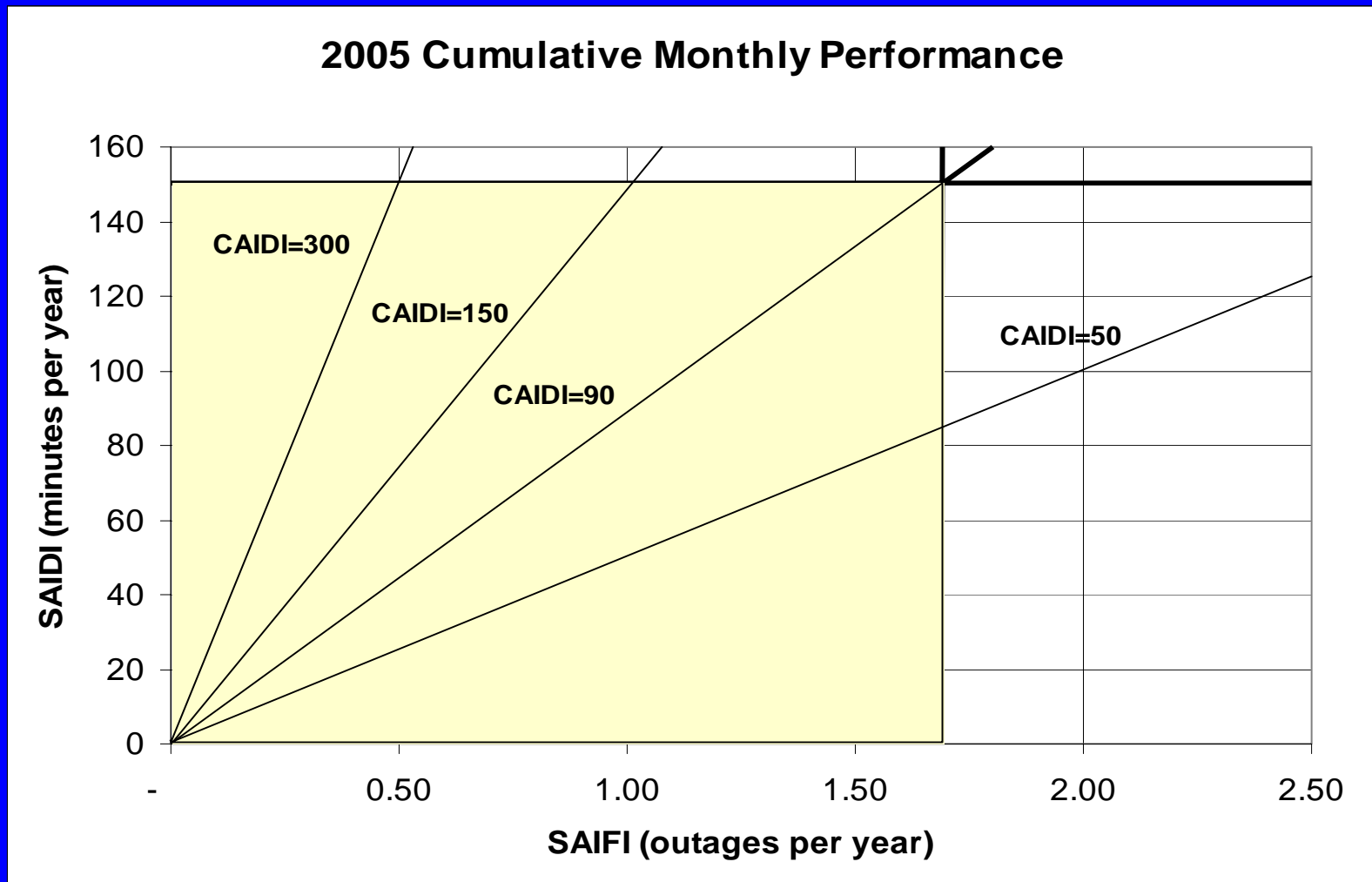


# Add SAIFI (<1.67 outages/year)

2005 Cumulative Monthly Performance



# Add CAIDI (< 90 minutes/outage)



## 2005 Cumulative Monthly Performance

