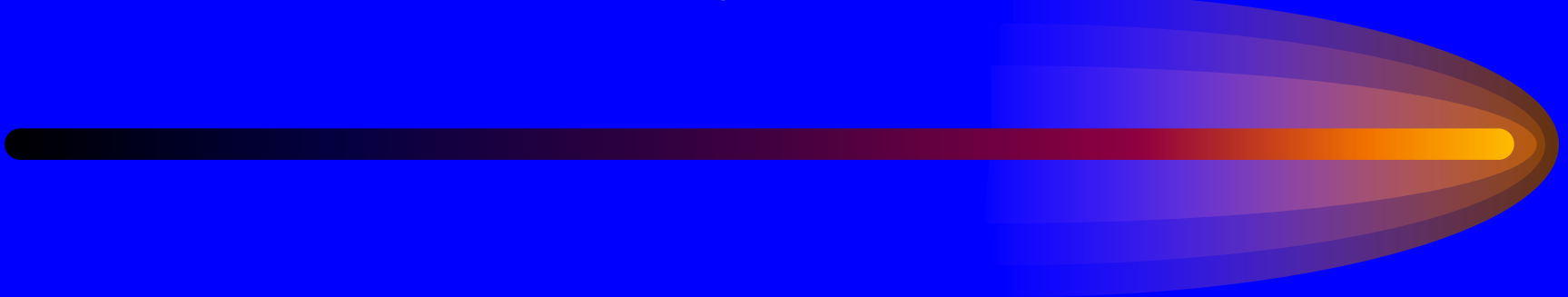


Power Control & Fuel Management Monthly Statistics

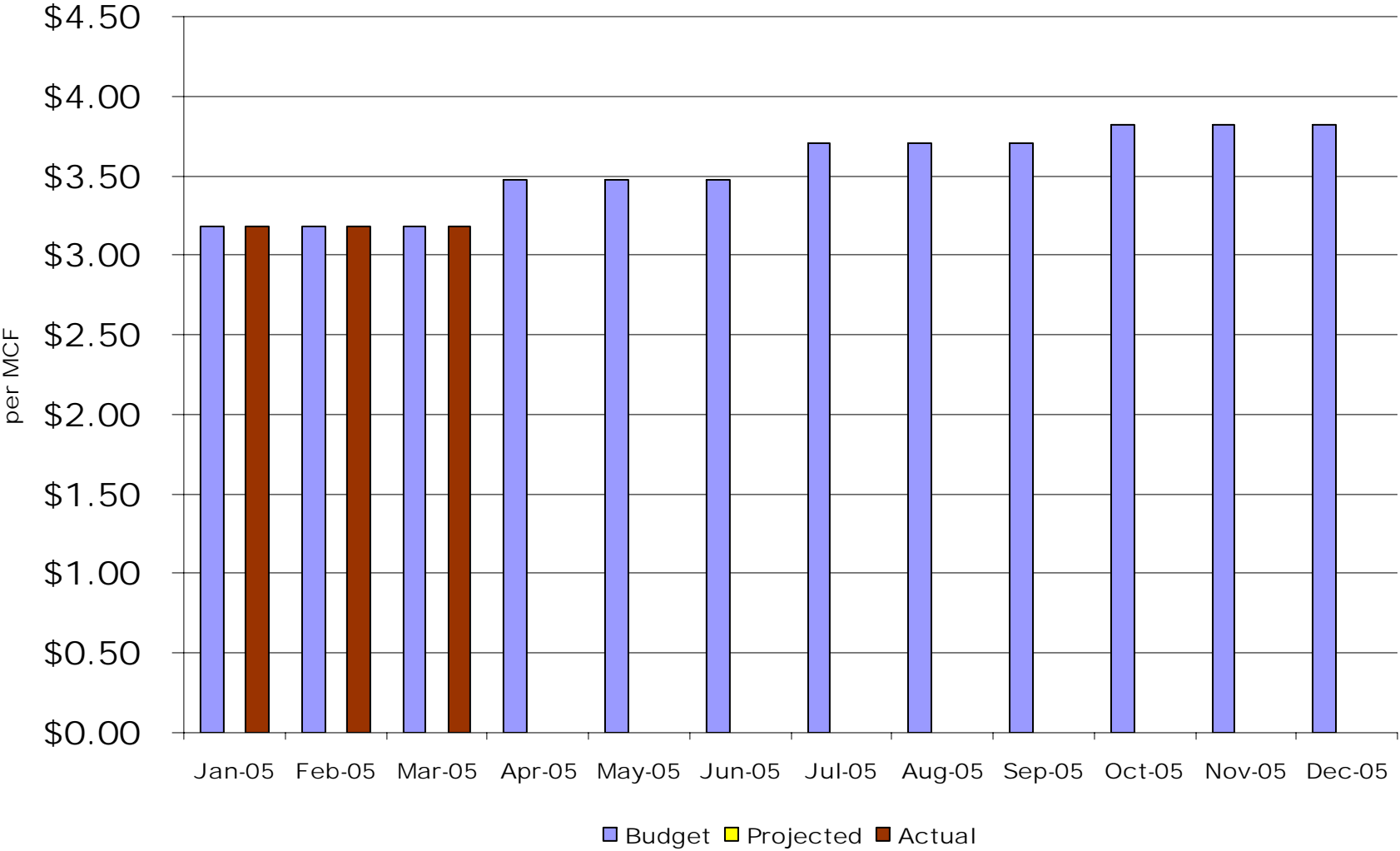


Presented to BOD

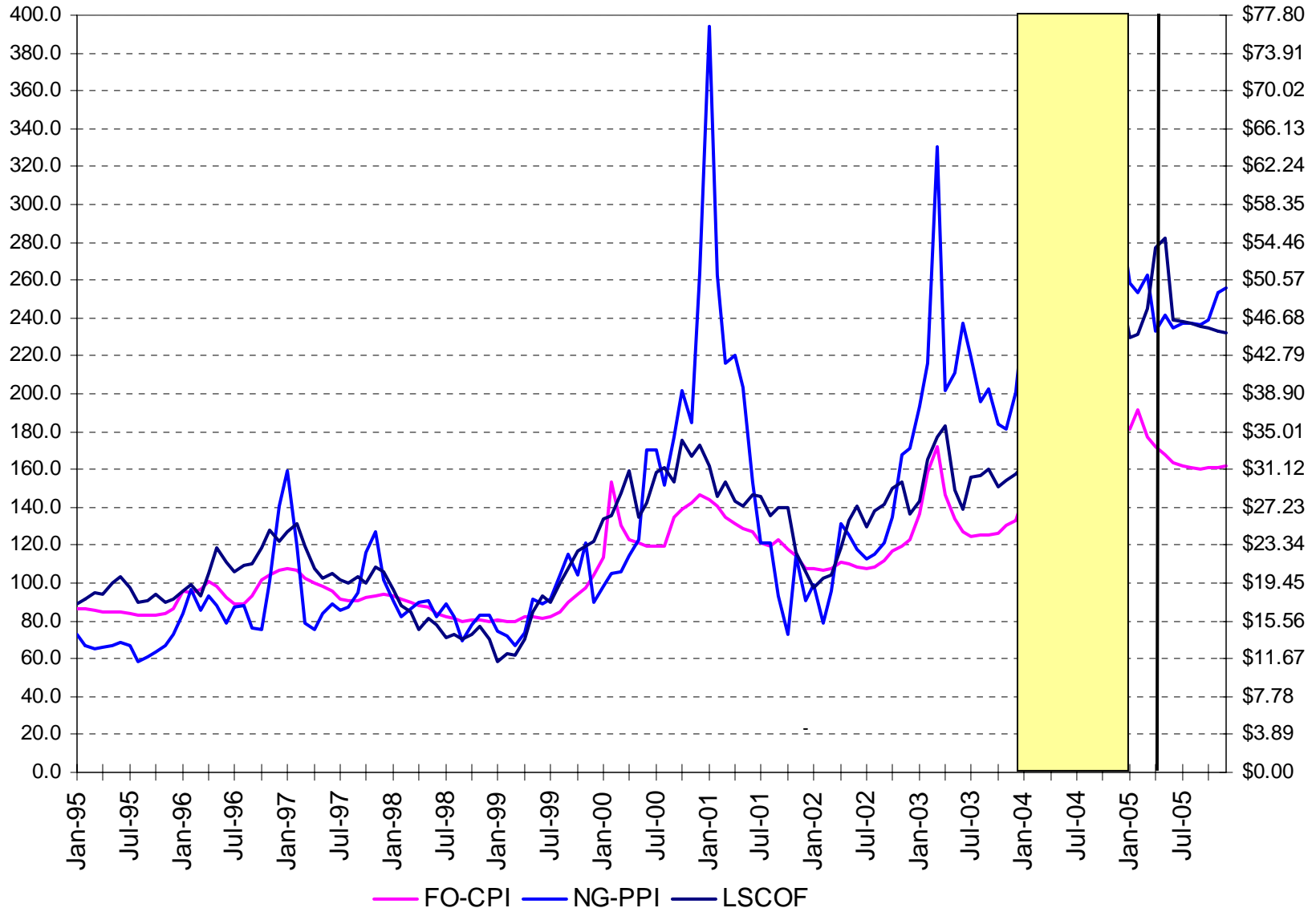
April 20, 2005

John S. Cooley, PE

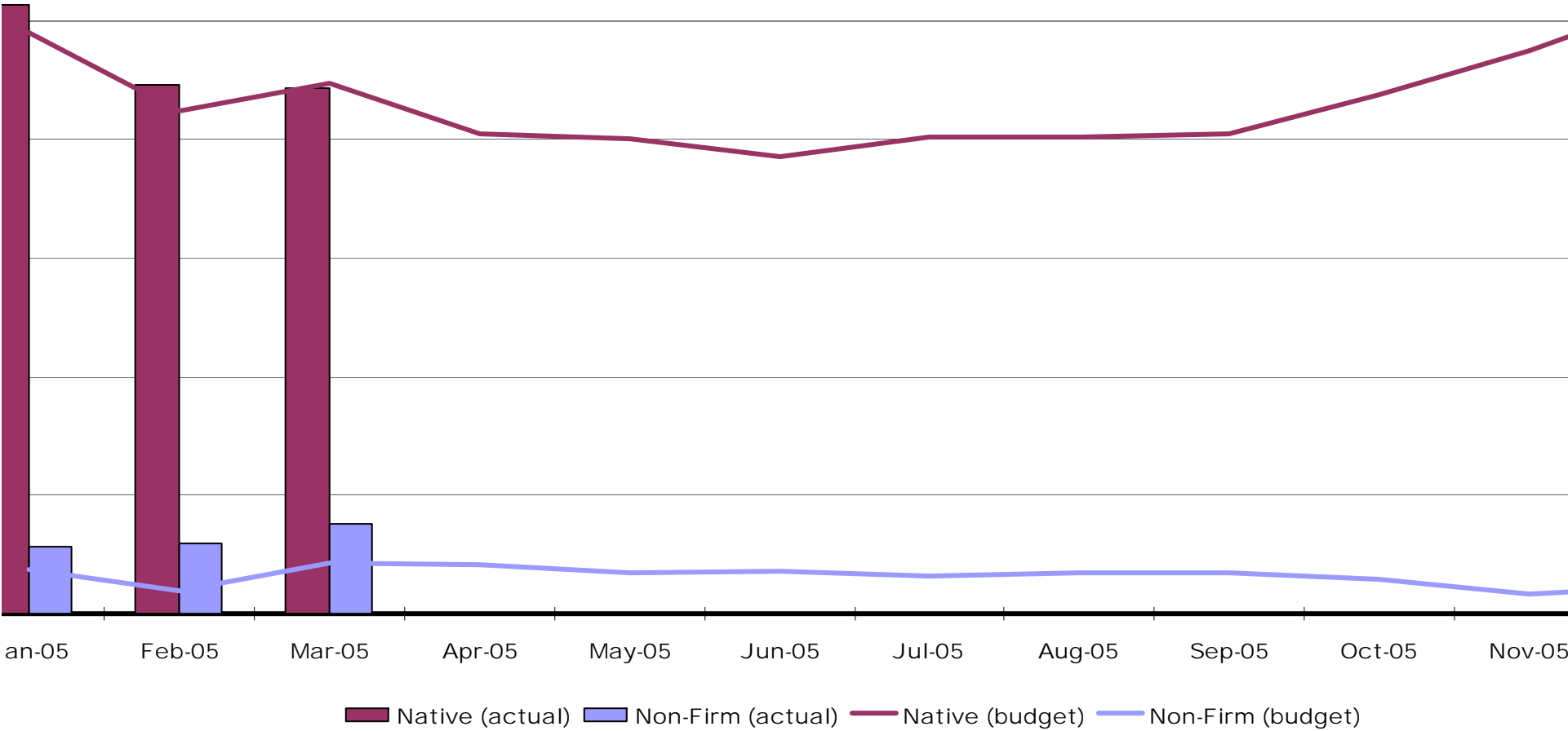
Chugach Gas Price (Marathon with taxes)



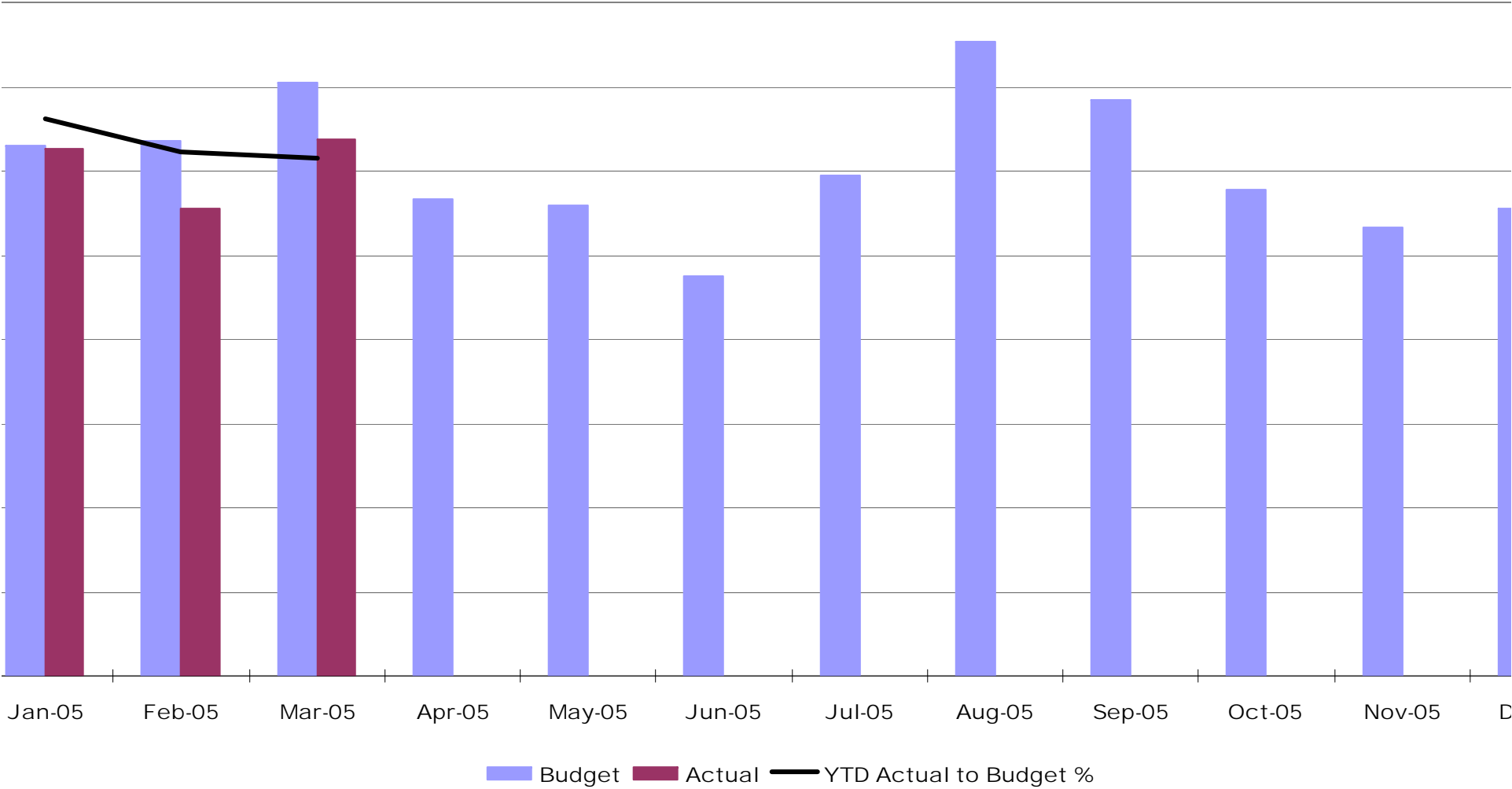
Gas Price Indices



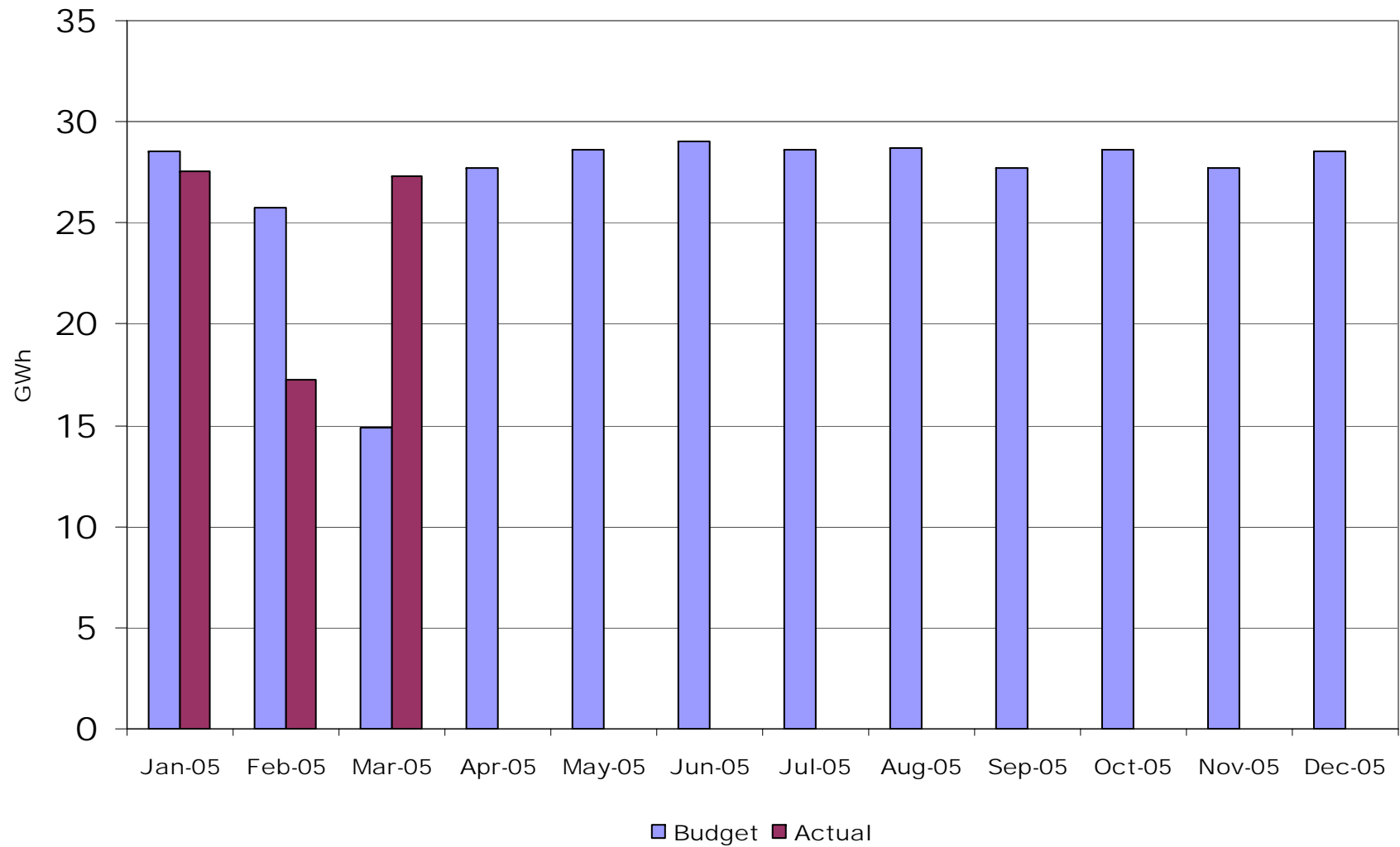
Monthly Energy Requirements



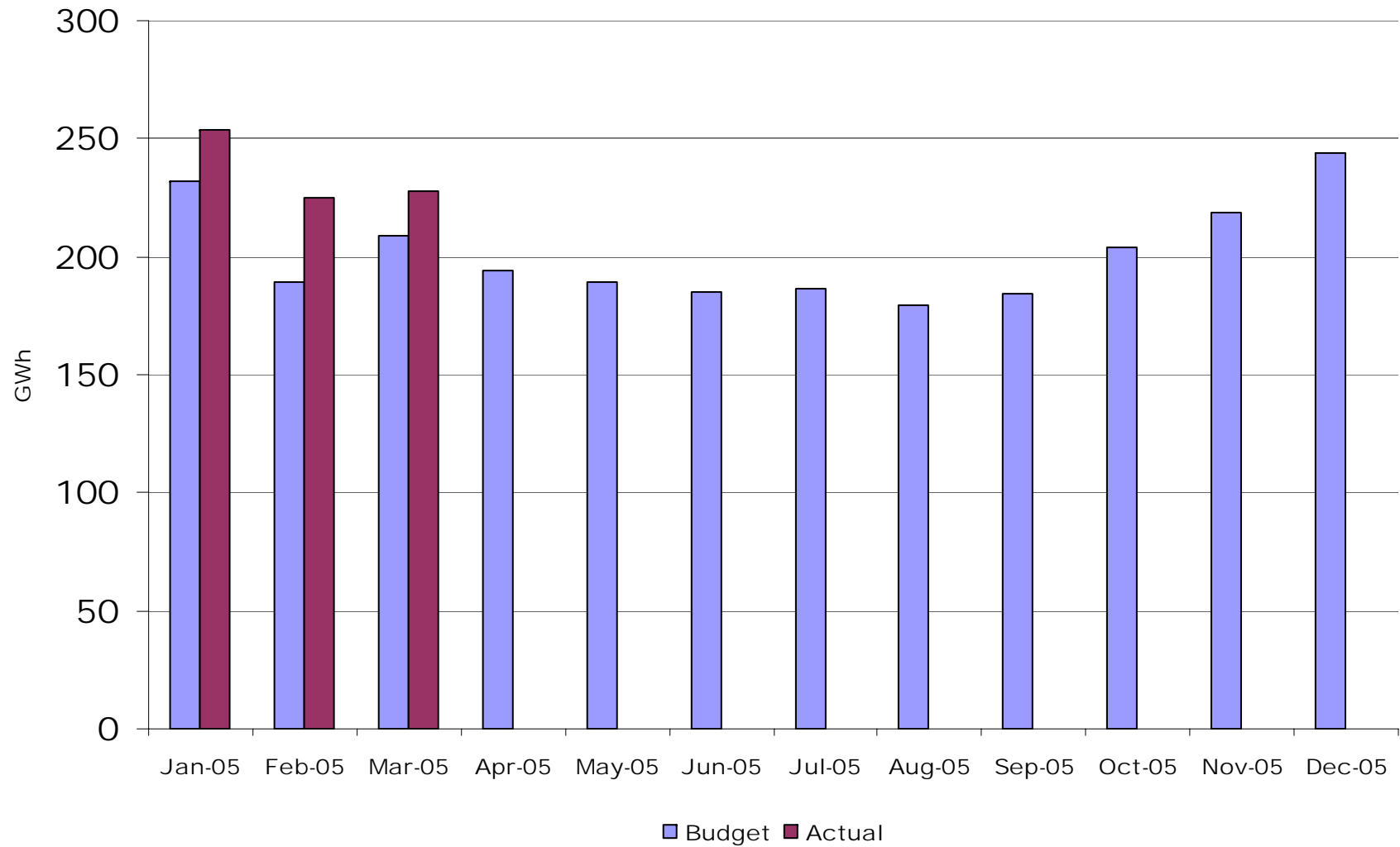
Monthly Hydro Usage



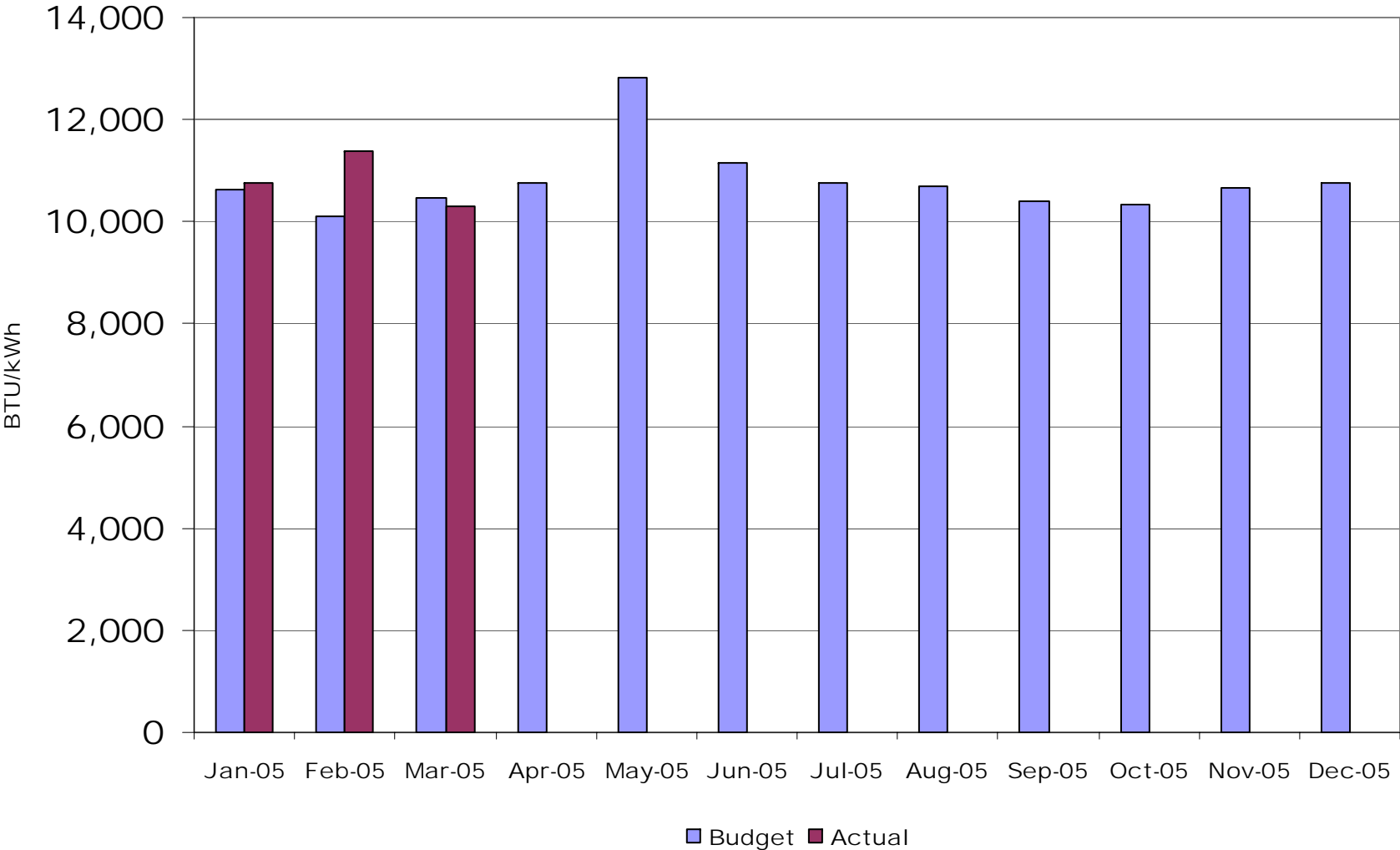
Monthly Purchased Power (excluding Bradley Lake)



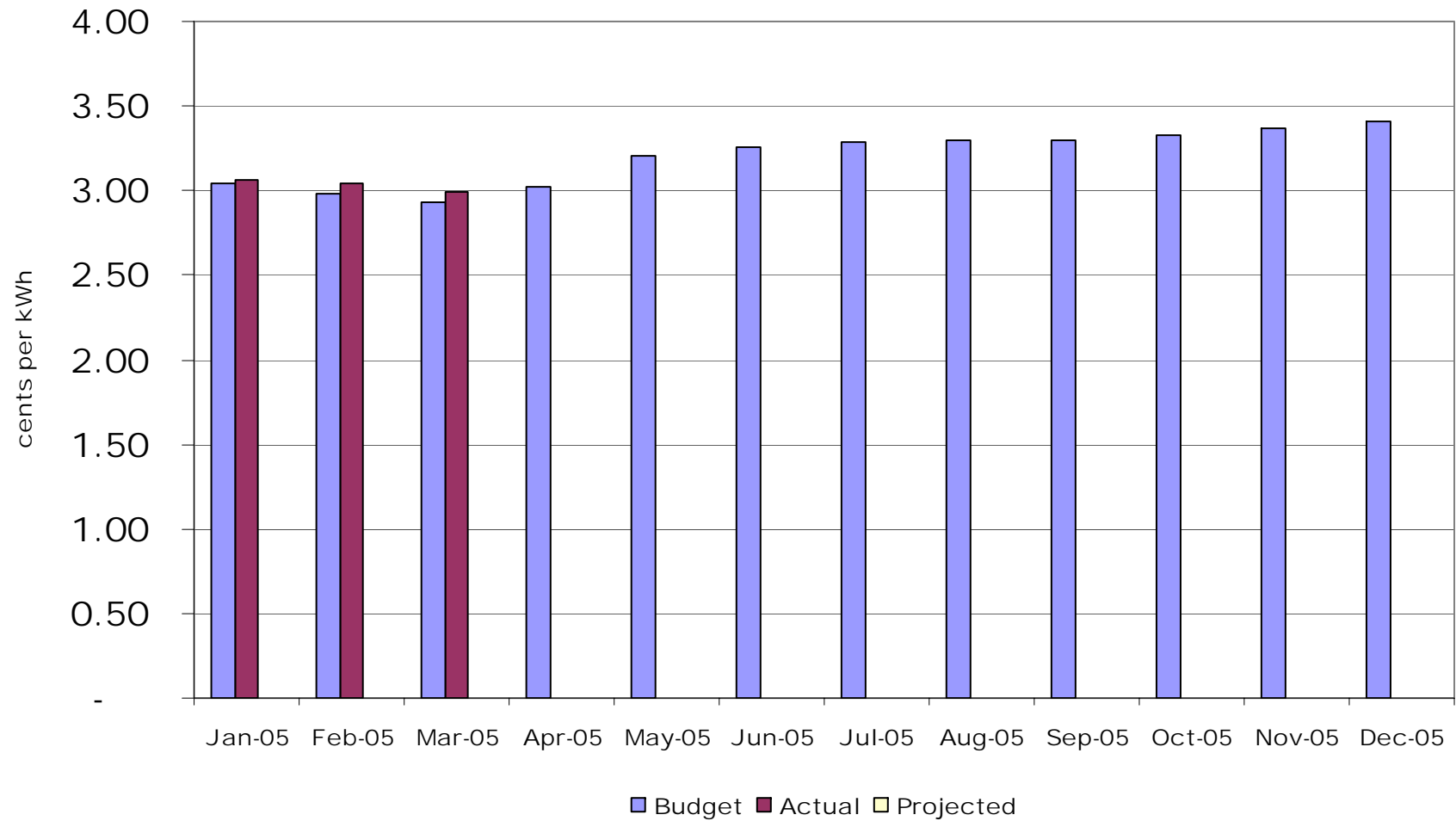
Monthly Thermal Generation



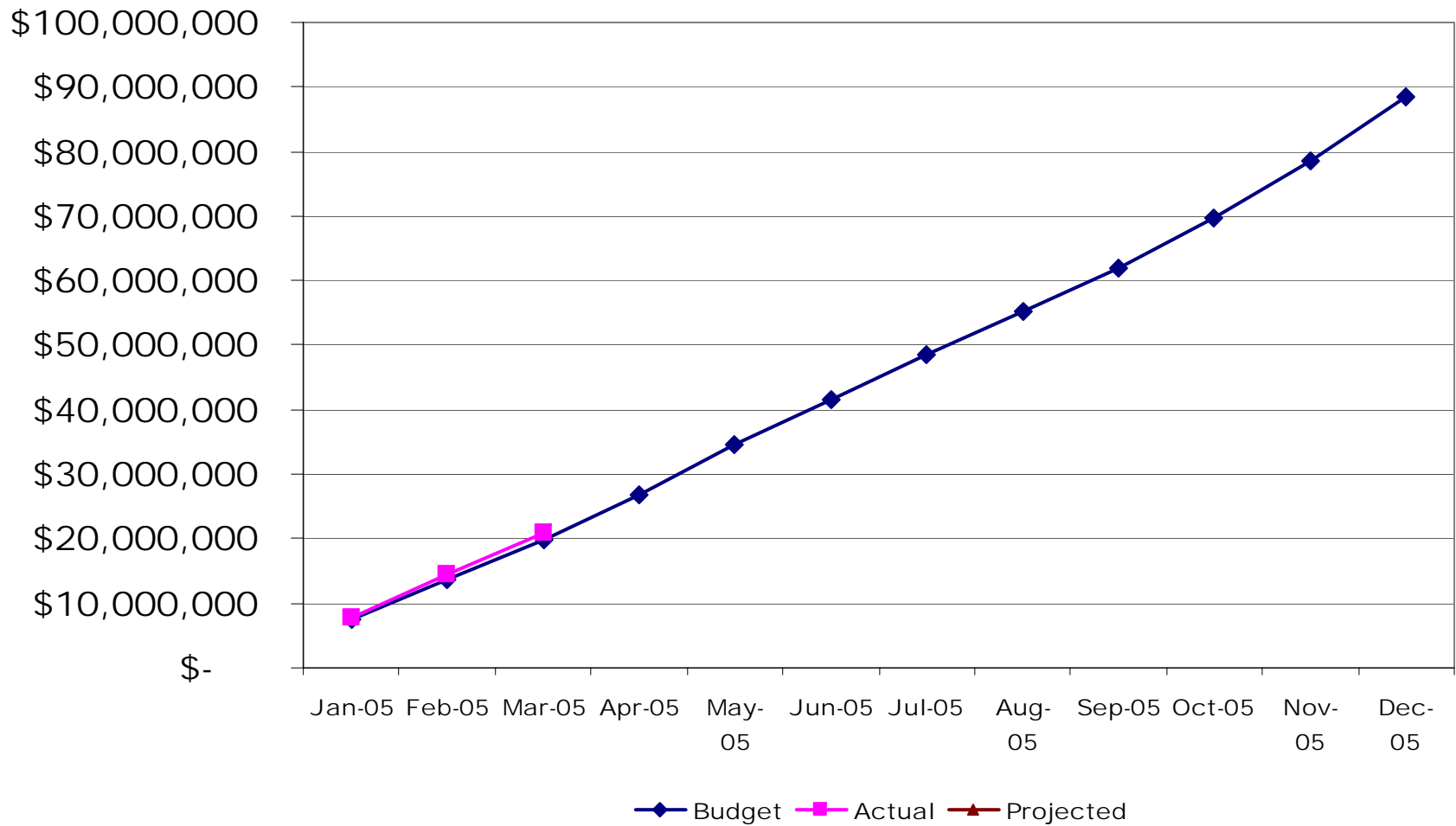
Thermal Unit Heat Rate



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

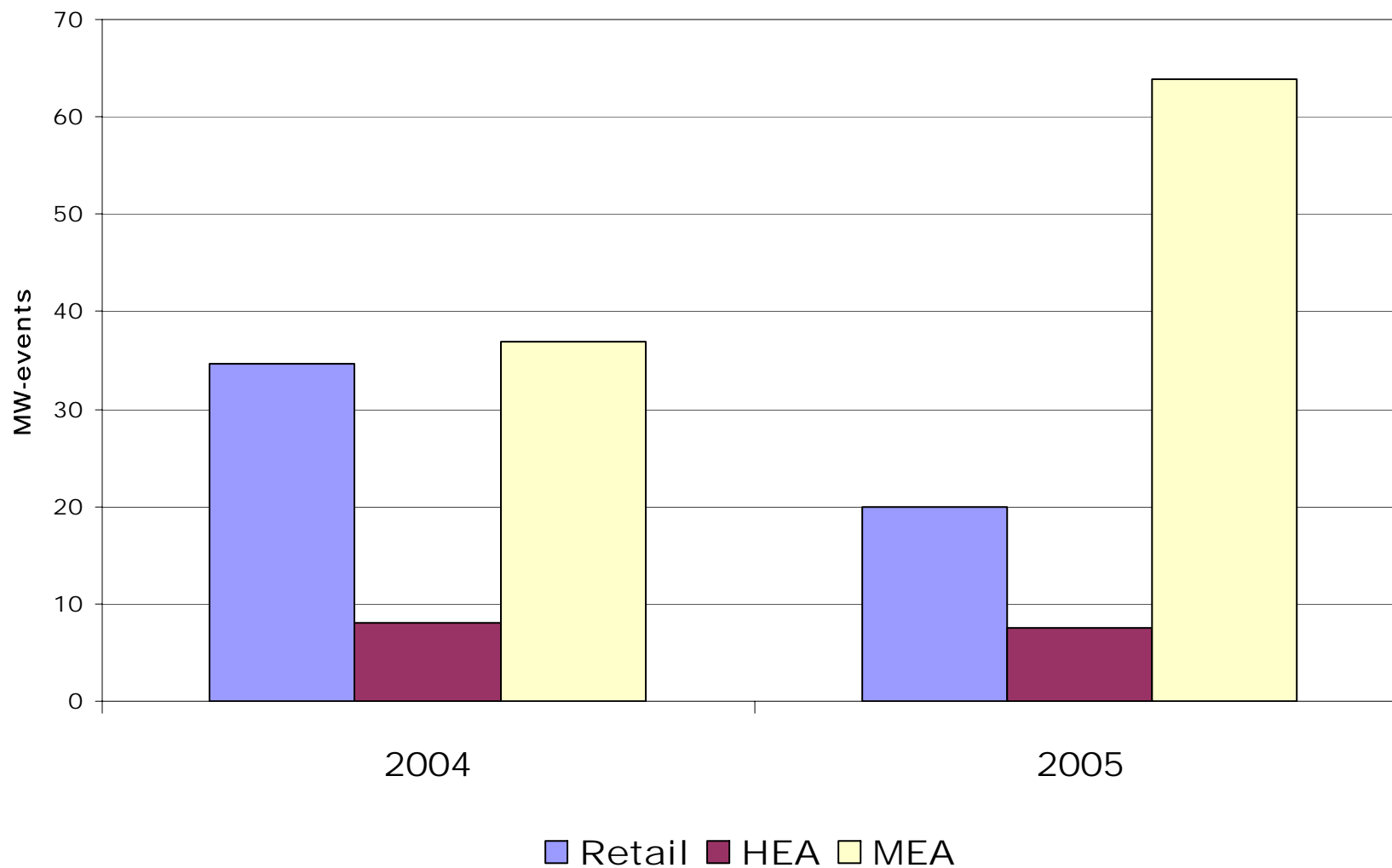


Net Fuel & Purchased Power Cost (F&PP minus economy & wheeling)



Wholesale Outage Statistics

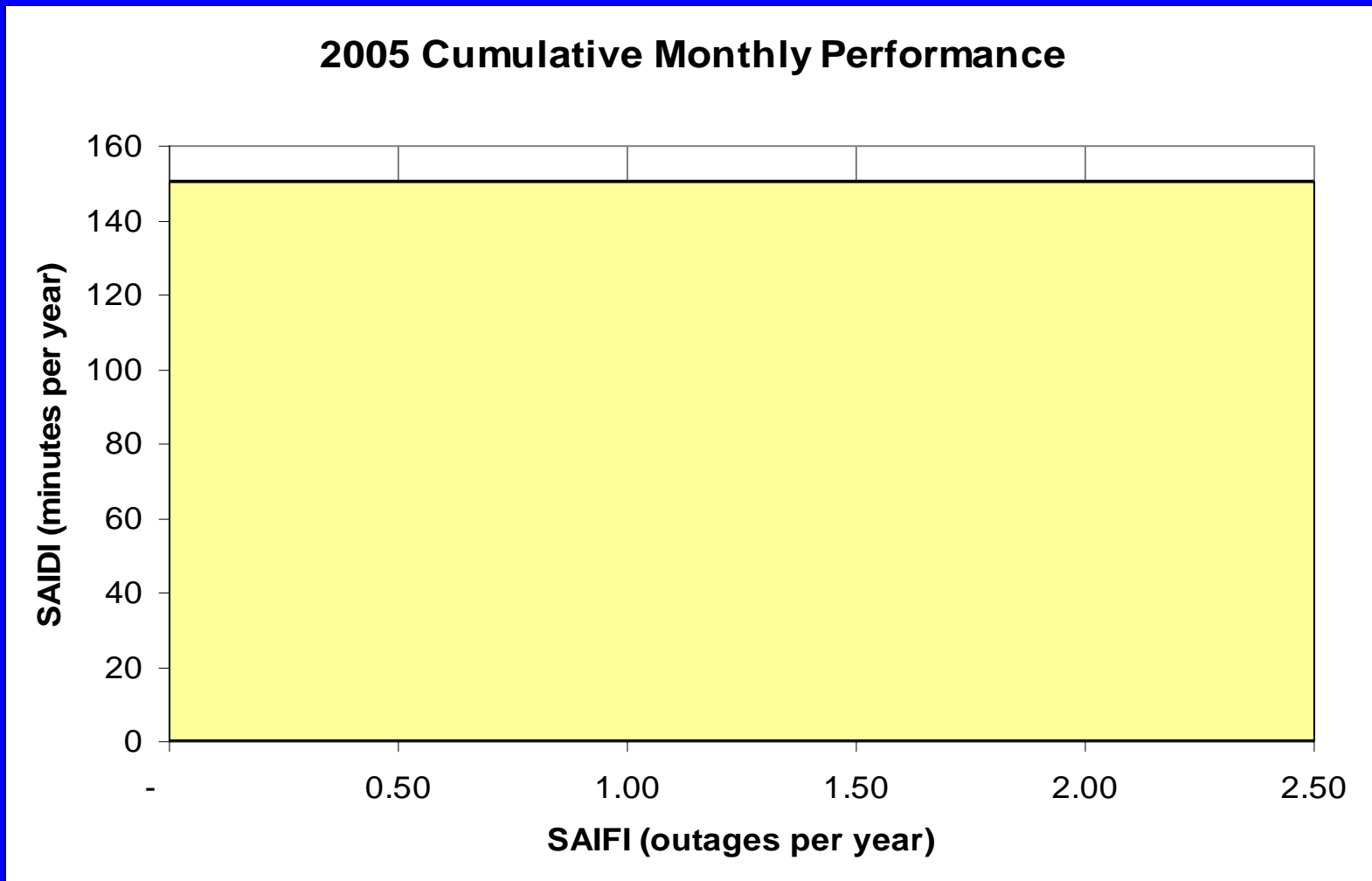
(running 12 months through March)



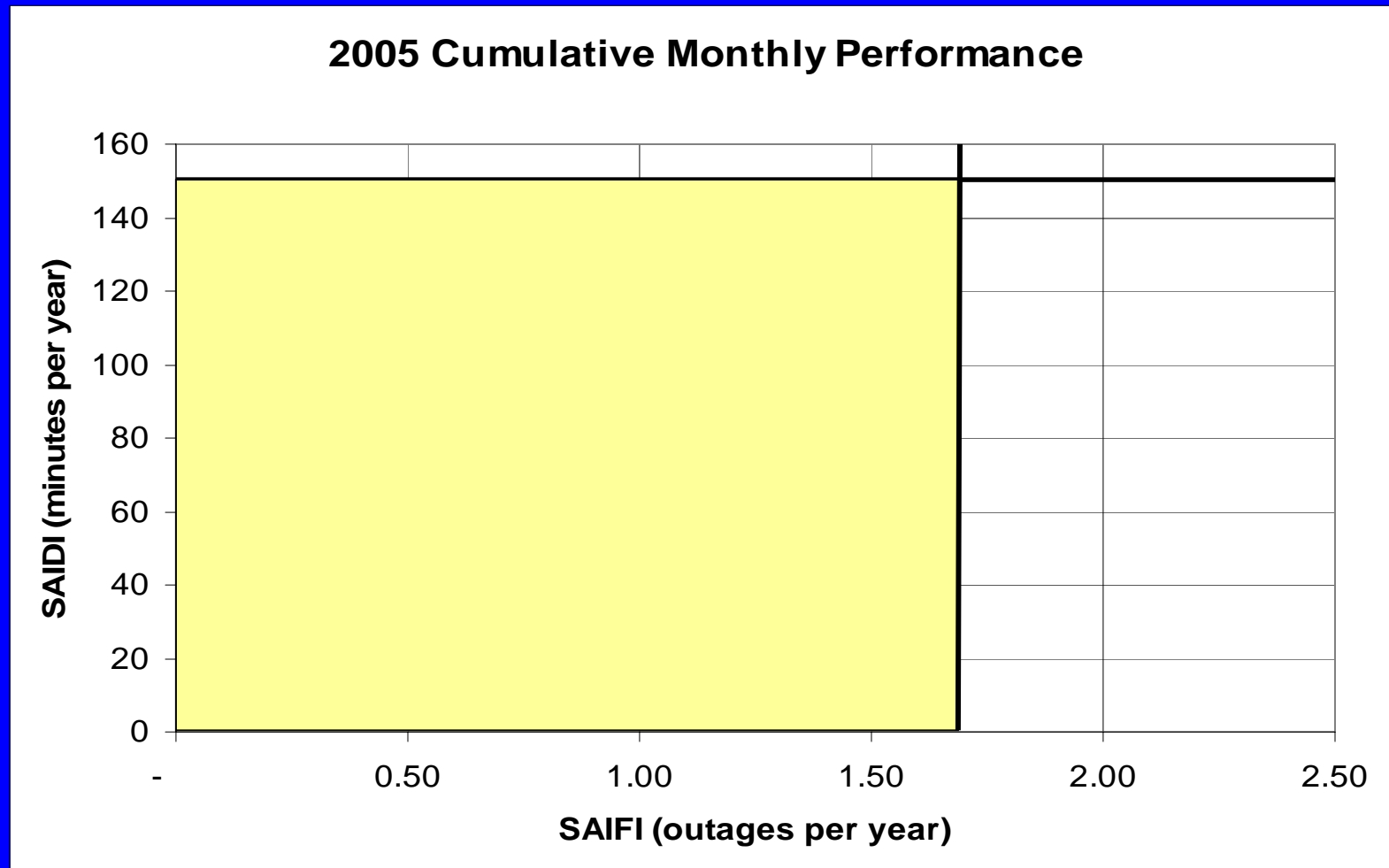
Reliability Triangle

- 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

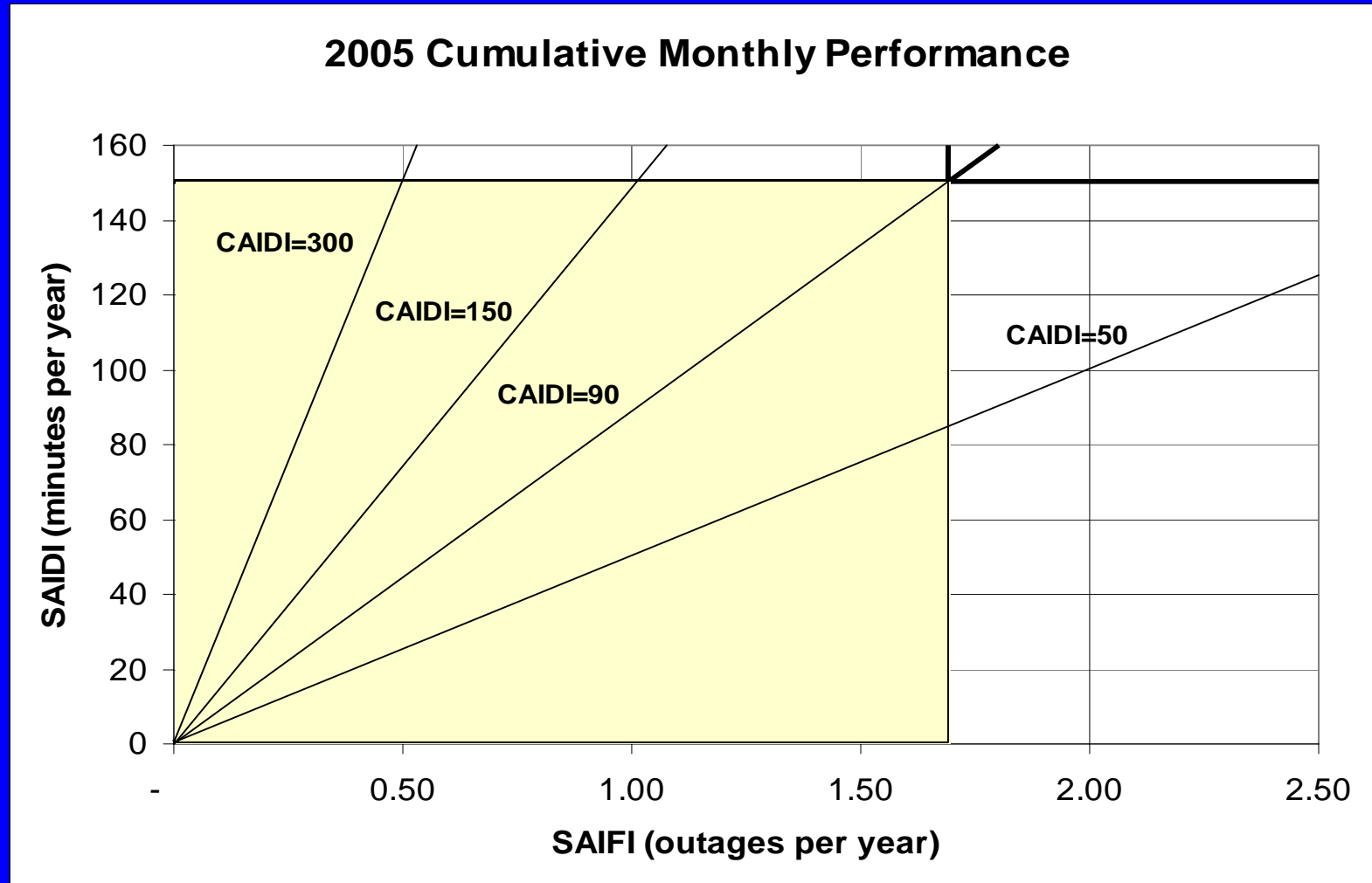
SAIDI (< 150 minutes per year)



Add SAIFI (<1.67 outages/year)



Add CAIDI (< 90 minutes/outage)



2005 Cumulative Monthly Performance

