

Summary Statistics of Future Uncertainties

Prepared by
The OMS Modeling Workgroup

Third CARP Meeting
Chicago, IL
March 27, 2009

Responses: Seven respondent spreadsheets were included in this summary

Completeness: Not all respondents filled all the cells in the spreadsheet

Summary Statistics: For each of the parameters considered, the average reference, the lowest low and the highest high were computed.

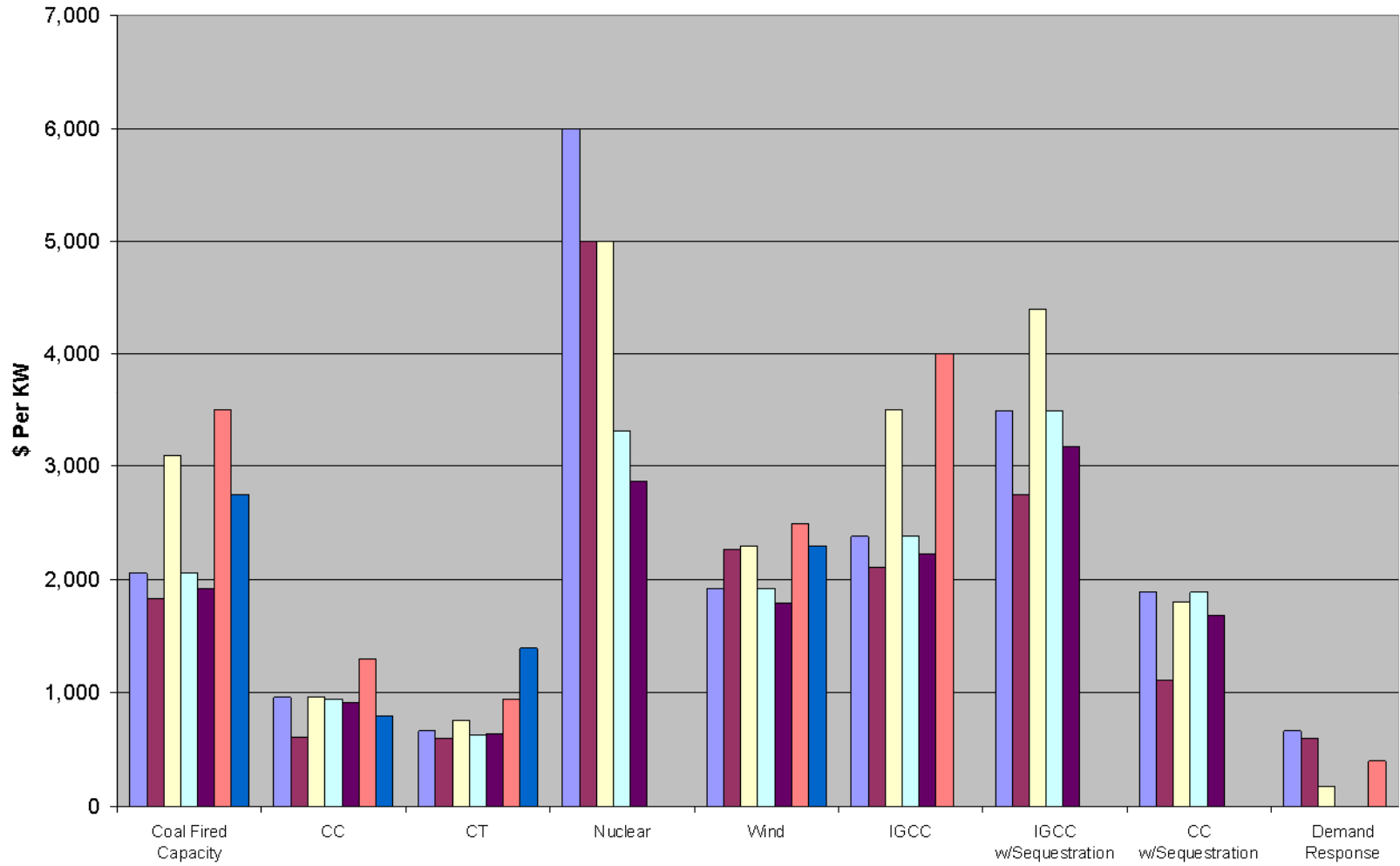
Discussion points: Outliers and inconsistencies among the responses

Next step: Extracting alternative scenarios from the summary statistics spreadsheet for MISO to run.

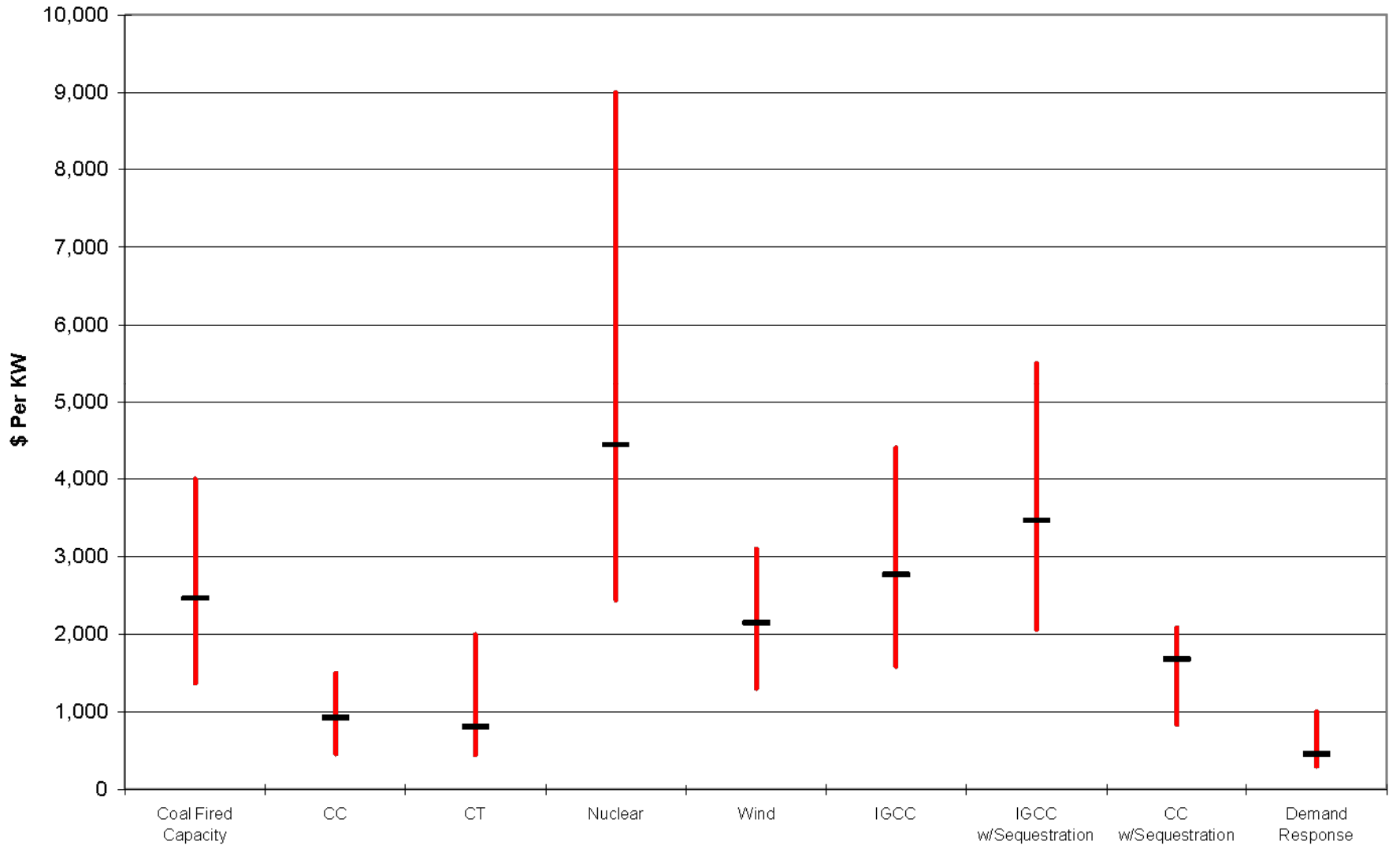
Summary Statistics

Uncertainty	Unit	Lowest Low	Average Reference	Highest High	Uncertainty	Unit	Lowest Low	Average Reference	Highest High
Capital Costs					Fuel Prices				
Coal Fired Capacity	(\$/KW)	1,375	2,460	4,000	Gas	(\$/MMBtu)	3.75	7.42	20.00
CC	(\$/KW)	454	928	1,500	Oil	(\$/MMBtu)	6.25	10.48	15.37
CT	(\$/KW)	448	808	2,000	Coal	(\$/MMBtu)	1.50	2.25	5.00
Nuclear	(\$/KW)	2,442	4,438	9,000	Uranium	(\$/MMBtu)	0.40	0.74	2.00
Wind	(\$/KW)	1,300	2,144	3,100					
IGCC	(\$/KW)	1,583	2,765	4,400					
IGCC w/Sequestration	(\$/KW)	2,061	3,462	5,500	Emissions				
CC w/Sequestration	(\$/KW)	836	1,675	2,079	SO ₂	(\$/ton)	50	329	1000
Demand Response	(\$/KW)	300	462	1,000	NOx	(\$/ton)	500	1417	7000
Storage	(\$/KW)				CO ₂	(\$/ton)	0	28	143
					Hg	(\$/ton)		63800000	
Demand and Energy					Economic Variables				
Demand Growth Rate	%	-4.00	0.89	4.00	Discount Rate	%	5.00	8.50	15.00
Energy Growth Rate	%	-2.00	1.03	3.50	Inflation Rate	%	0.00	2.82	6.50

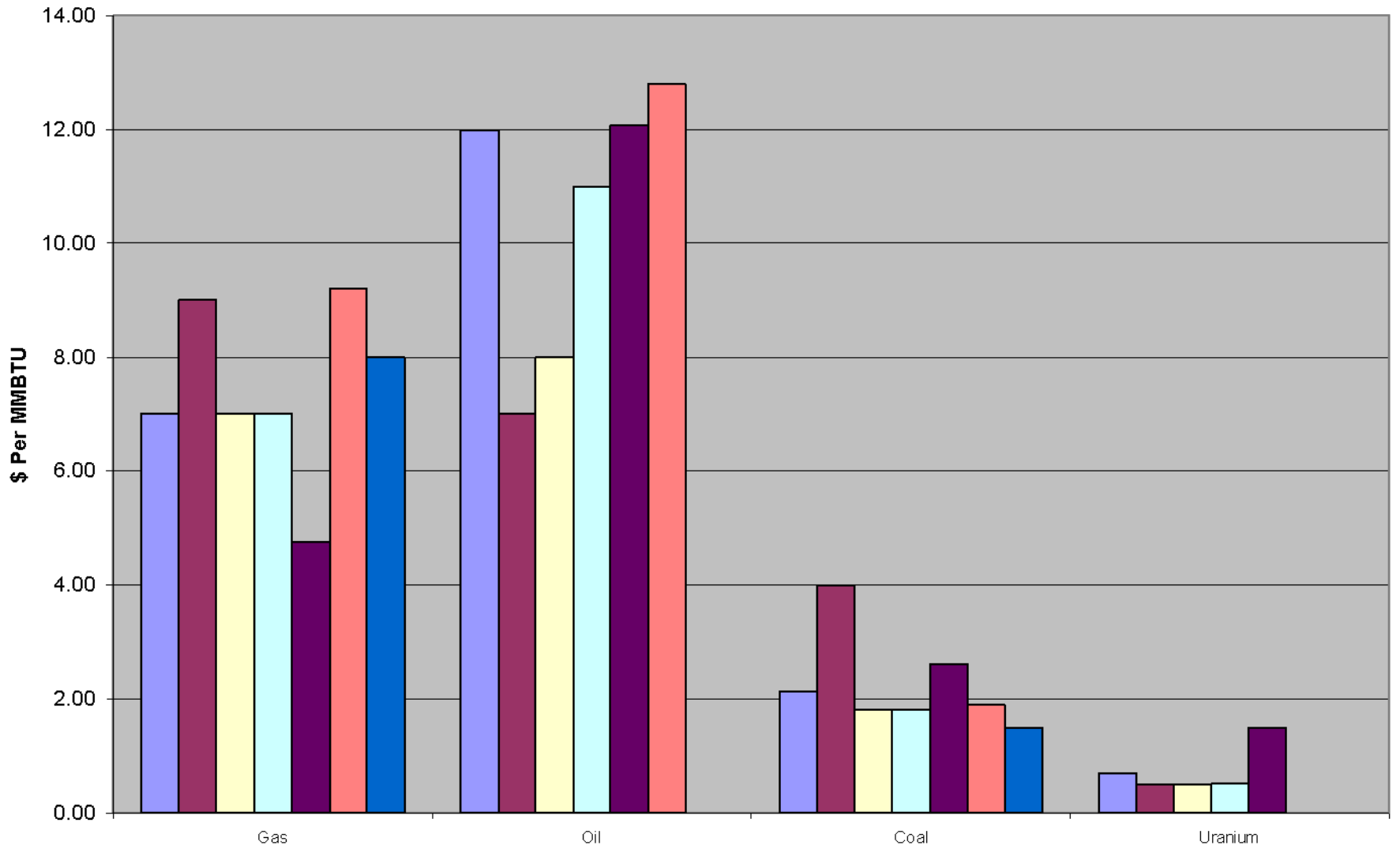
Capital Costs



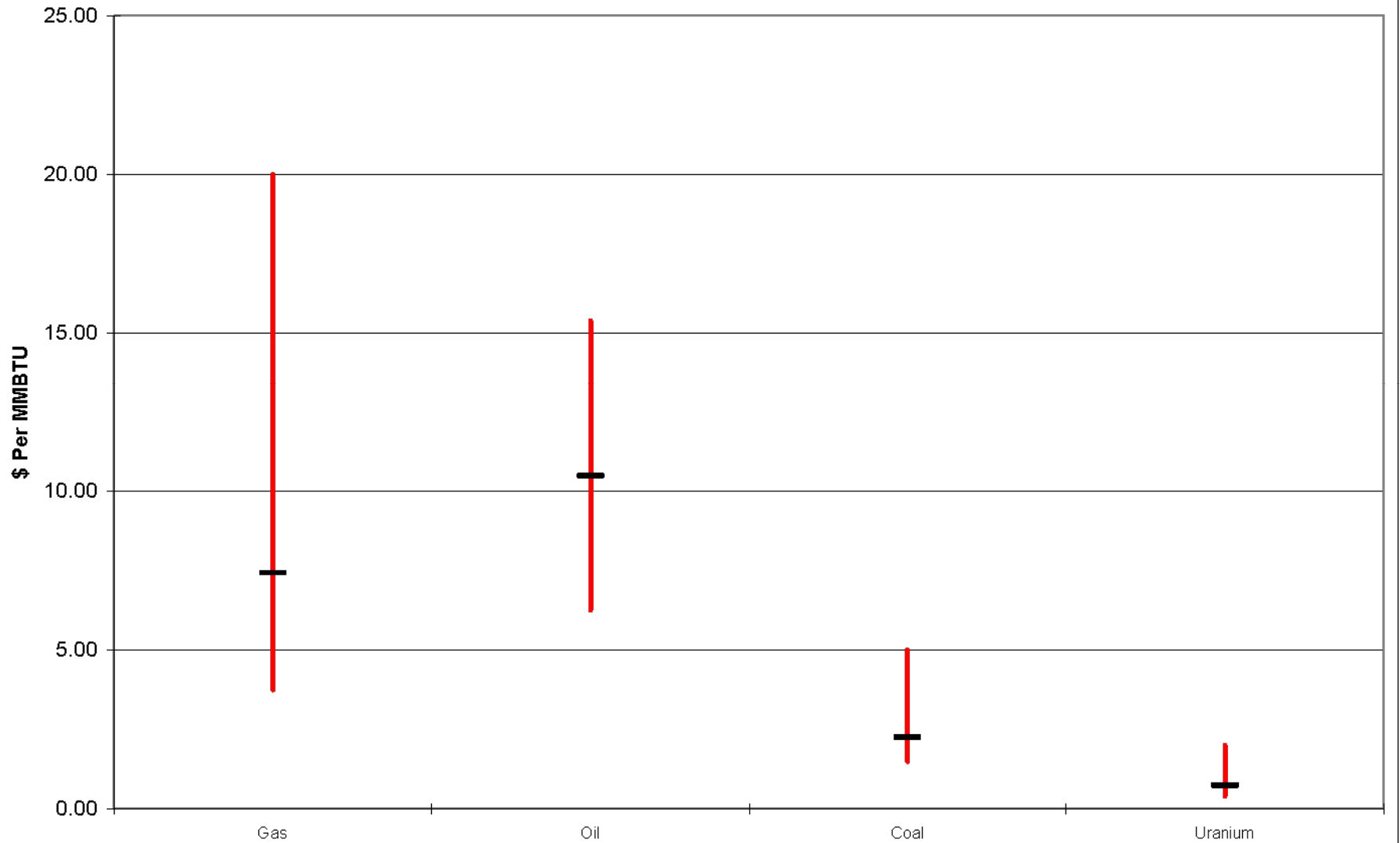
Capital Costs



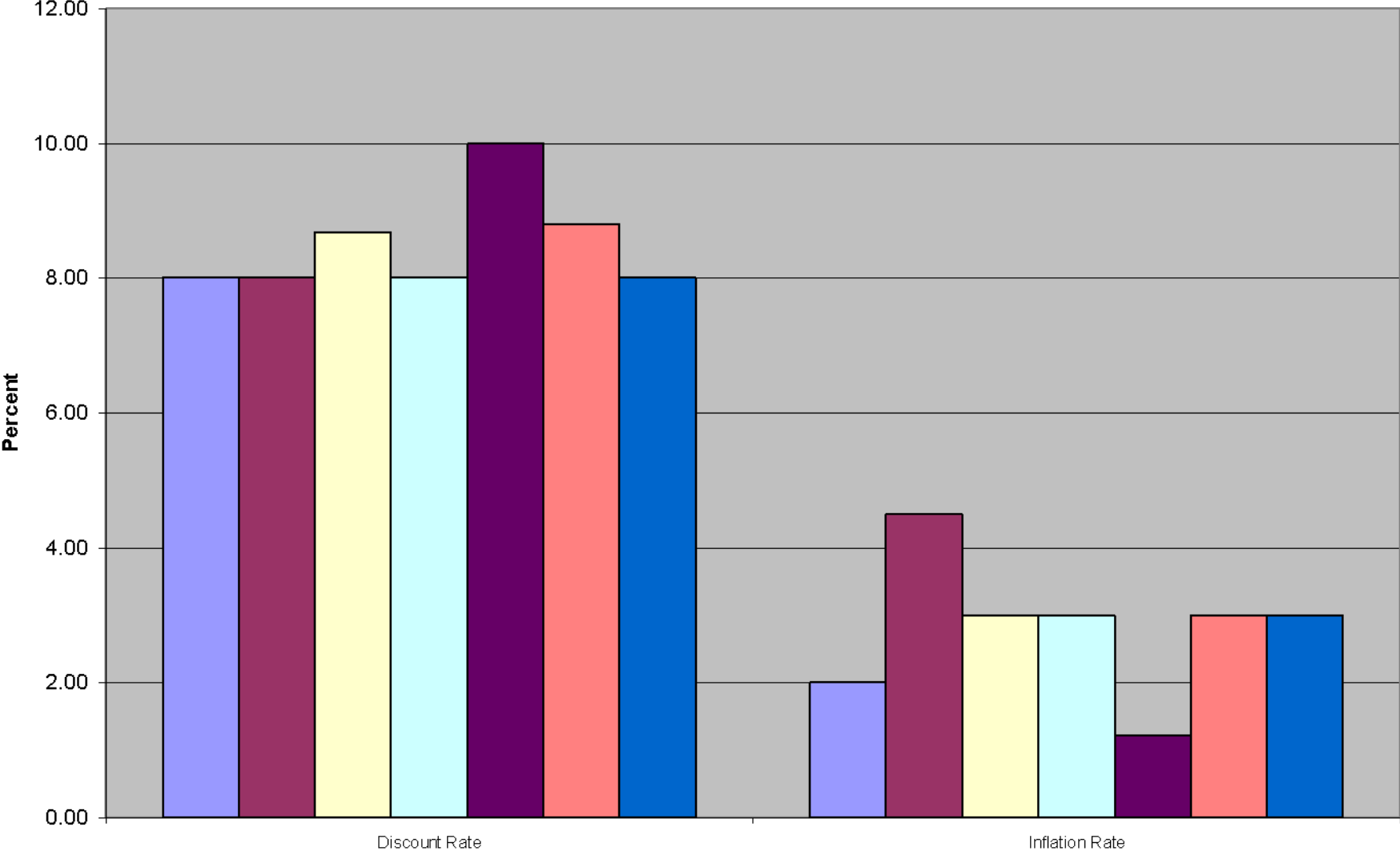
Fuel Prices



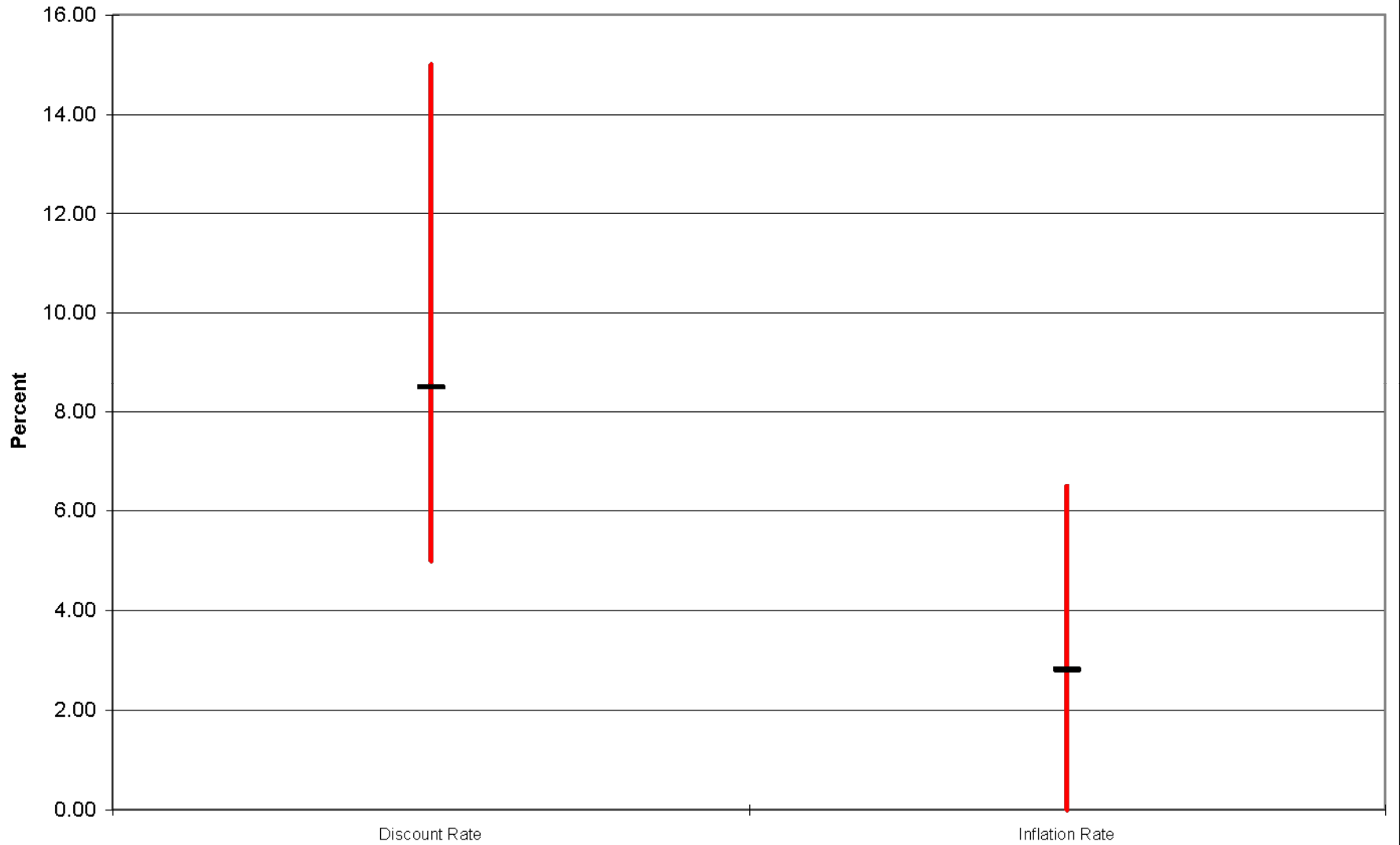
Fuel Prices



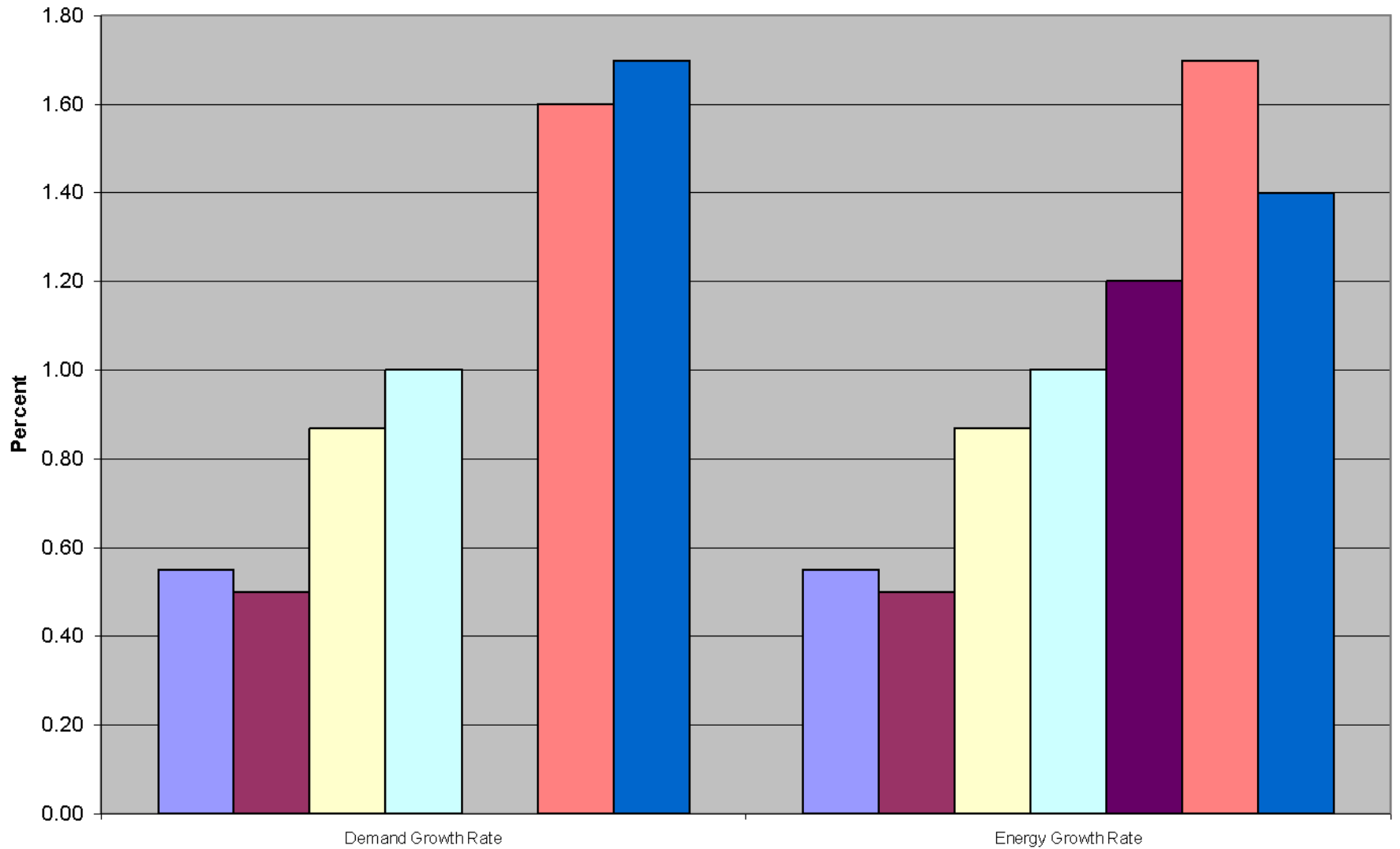
Economic Variables



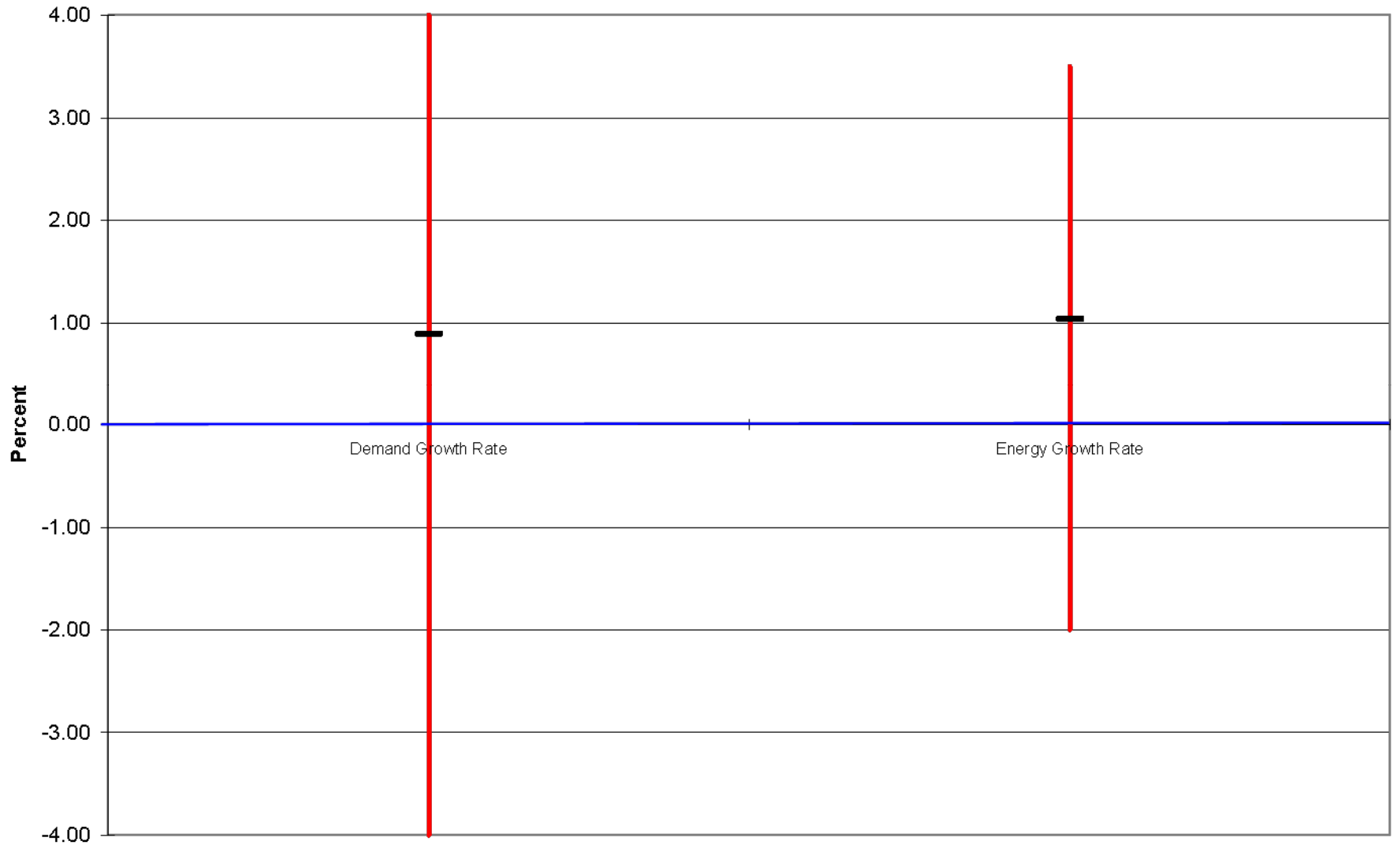
Economic Variables



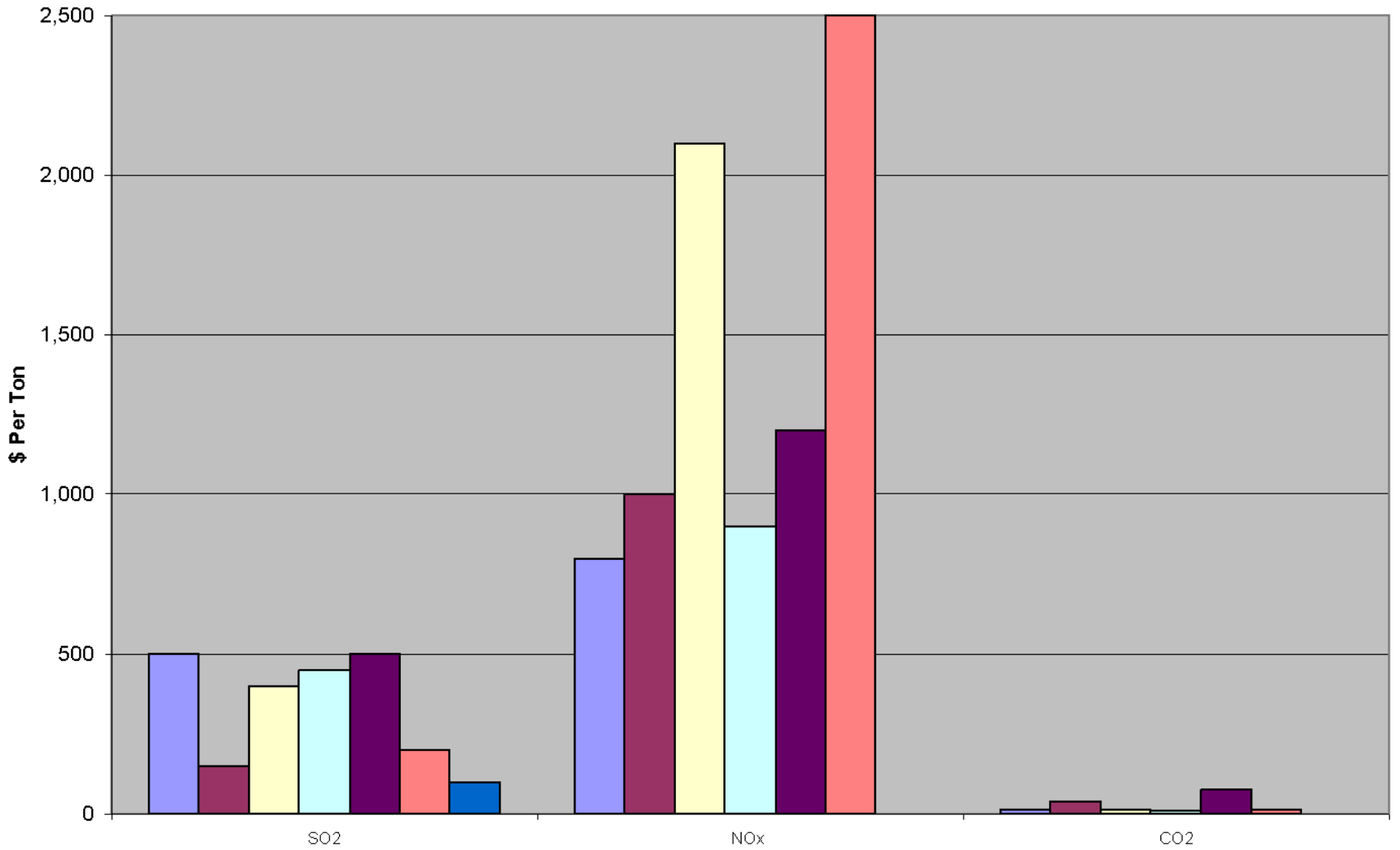
Demand & Energy



Demand & Energy



Emissions



Emissions

