

DOCKET

11-IEP-1K

DATE _____

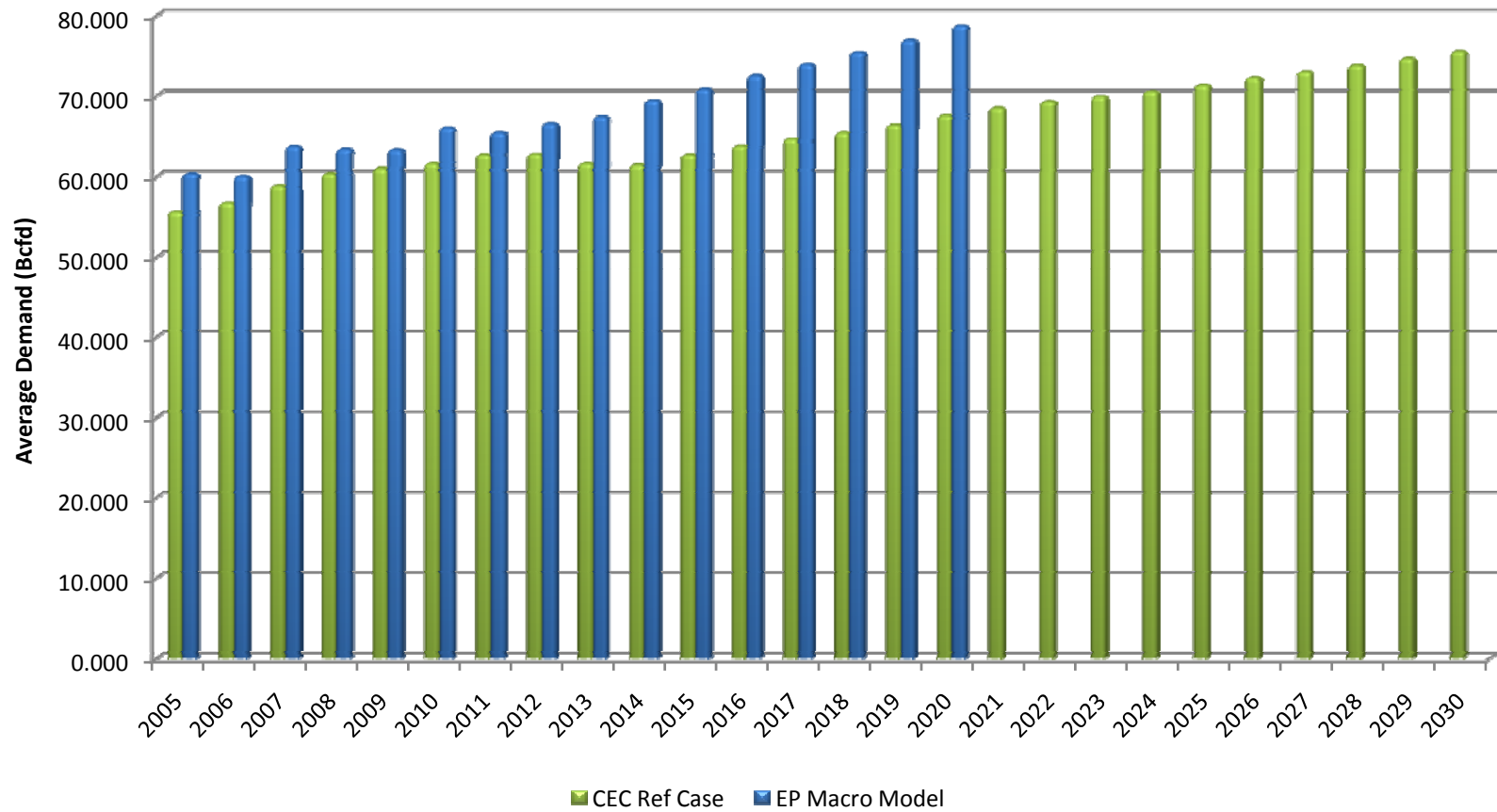
RECD. Sept 29 2011

CEC Workshop

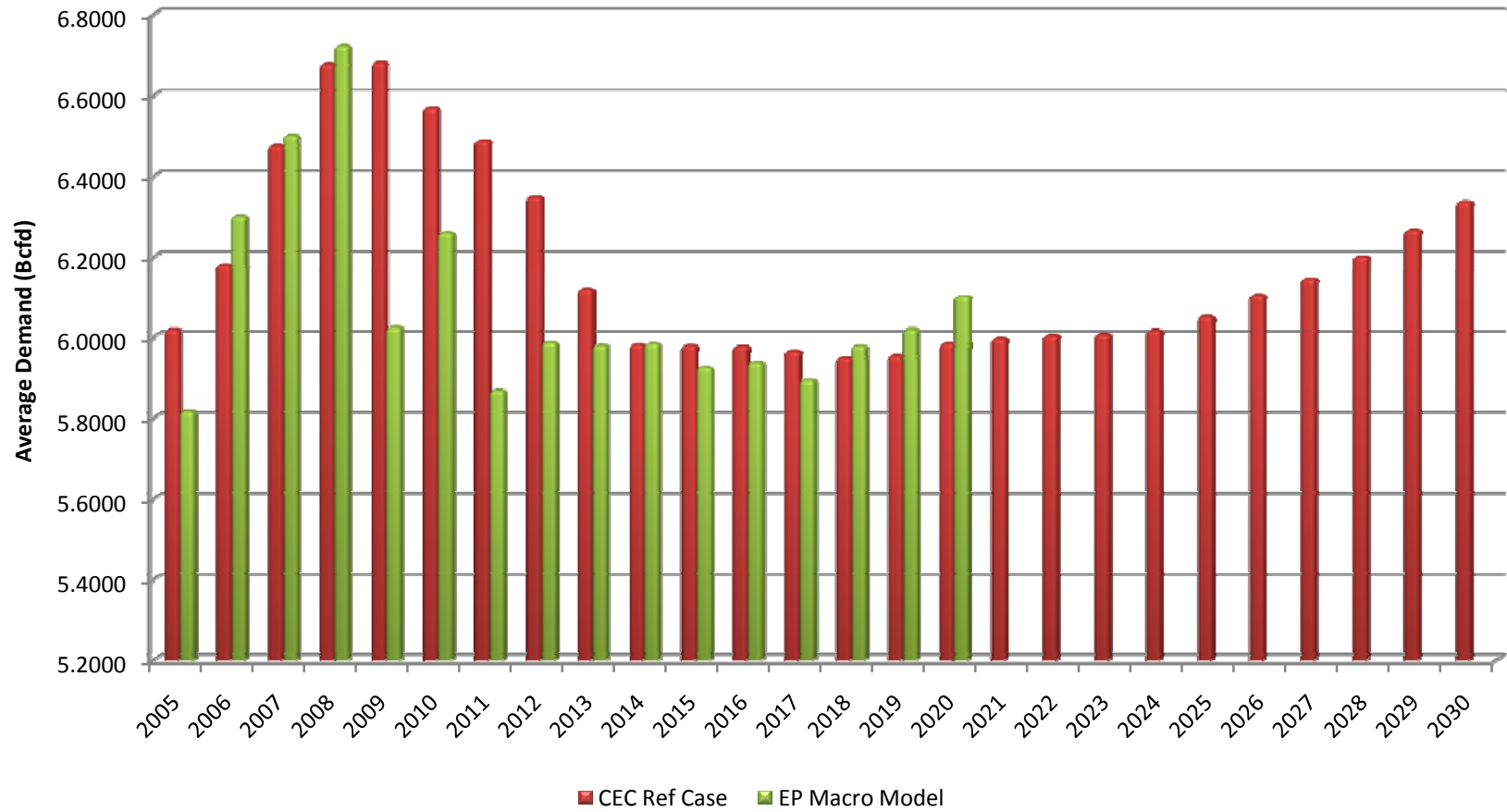
El Paso Macro Model Comparisons

9-26-11

Total US Natural Gas Demand



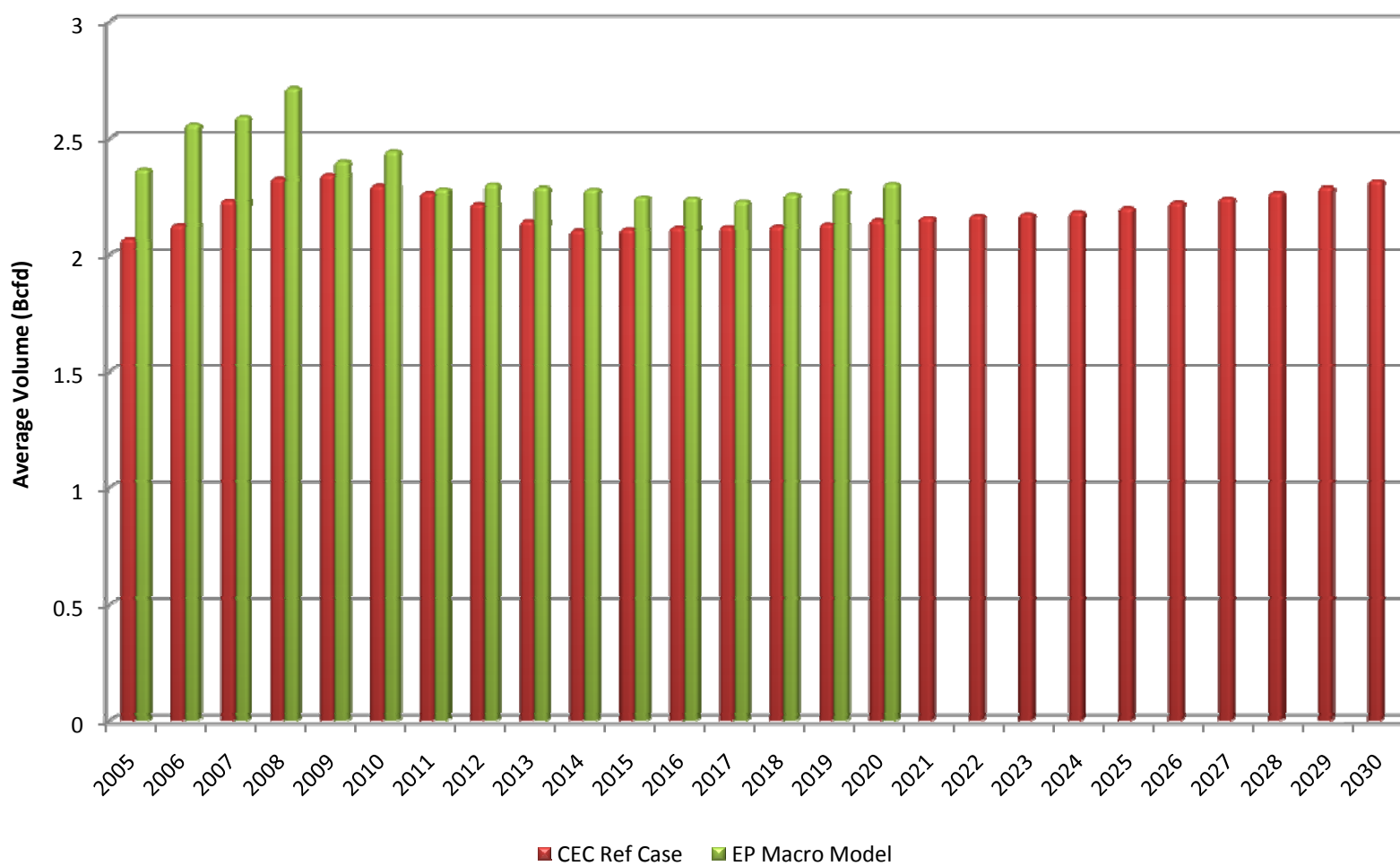
Total California Demand



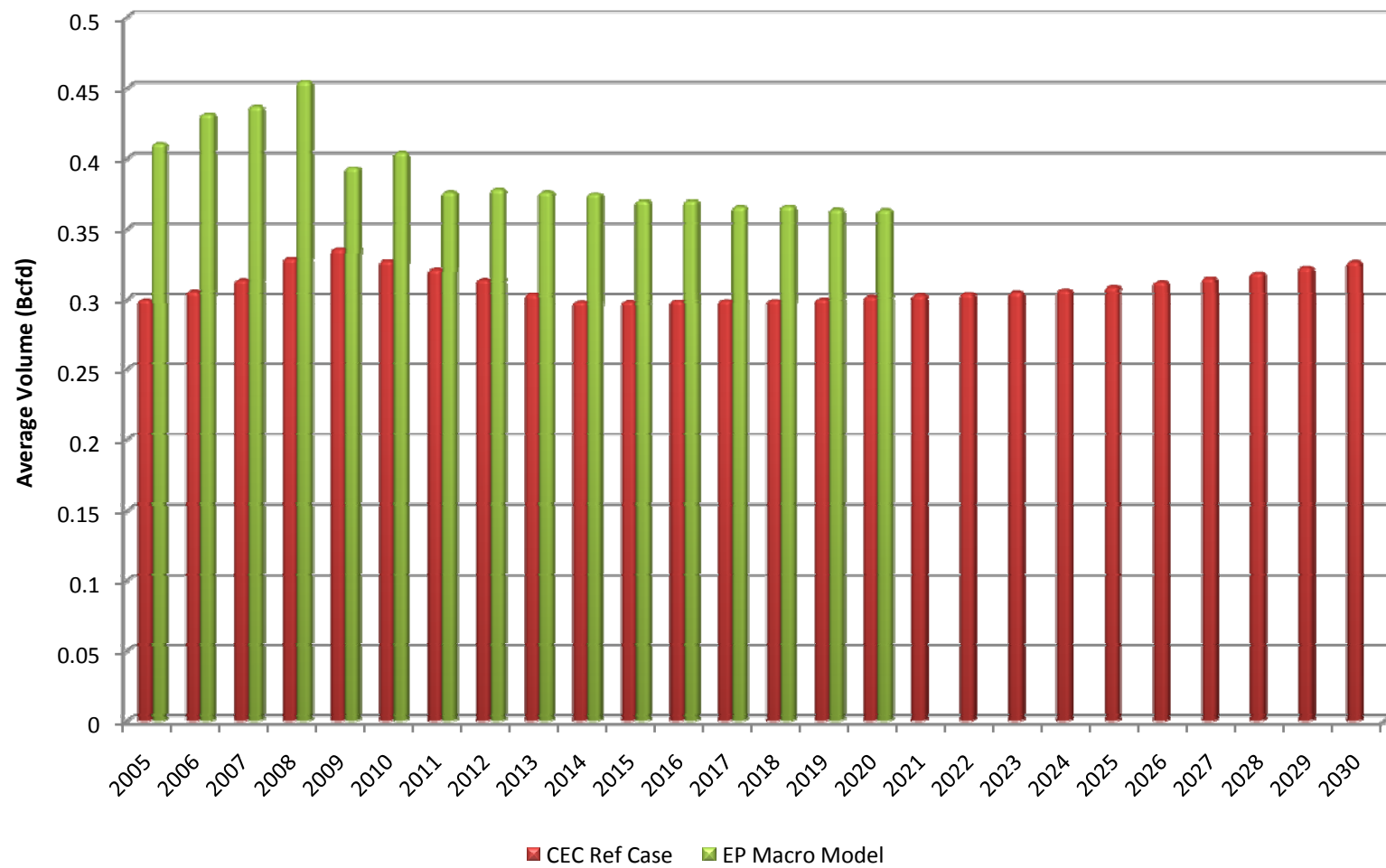
Total PG&E Natural Gas Demand



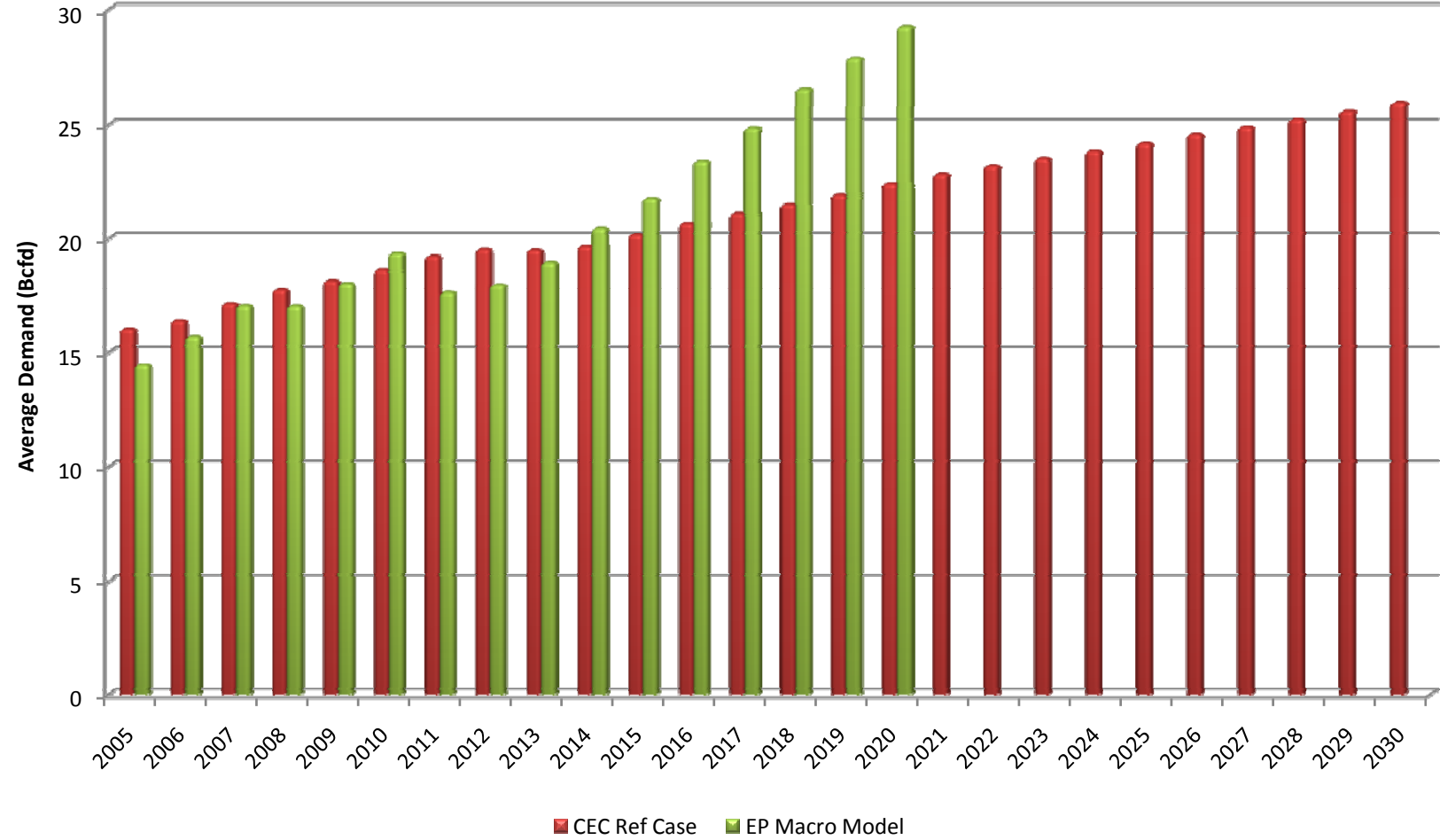
Total SoCal Natural Gas Demand



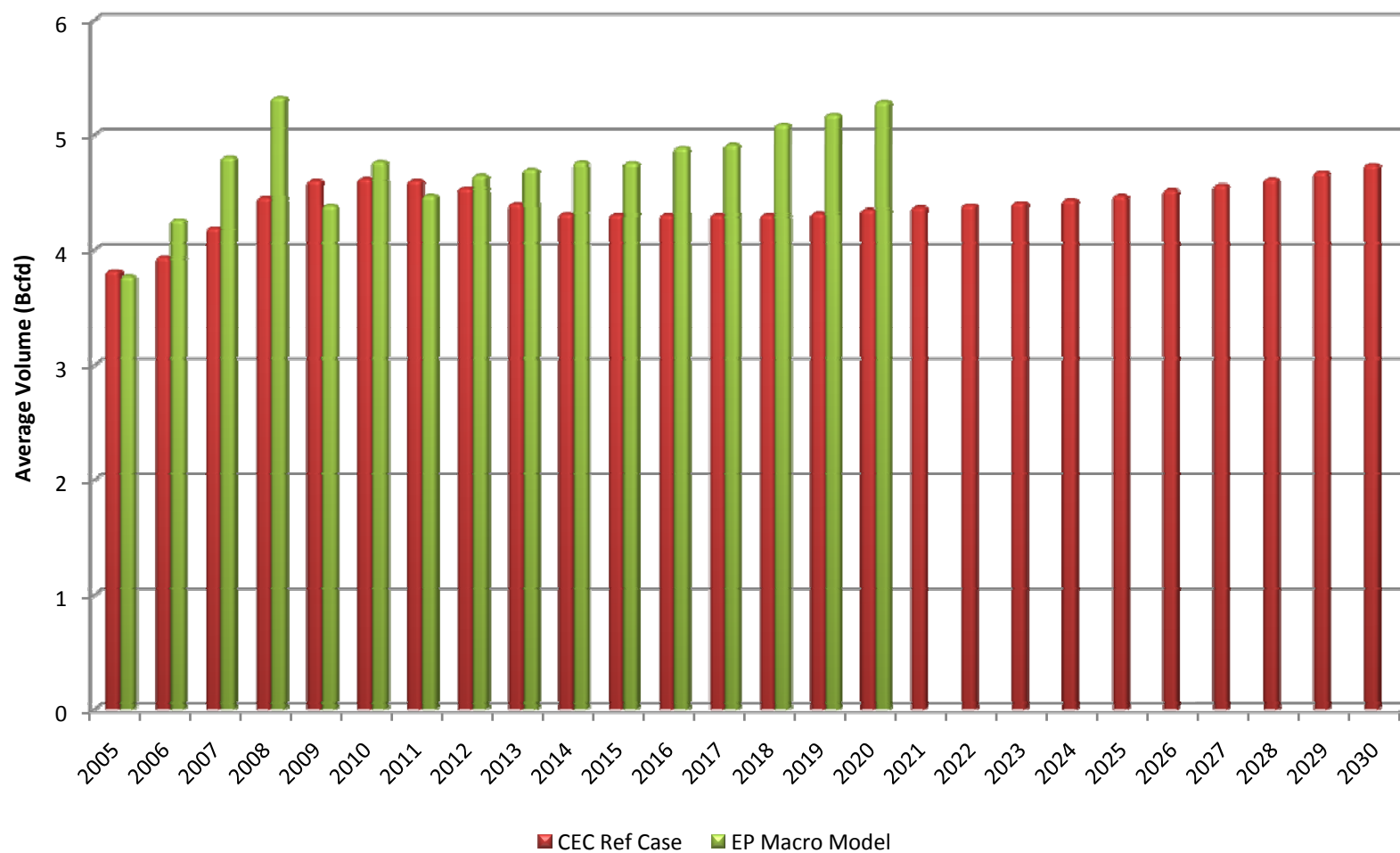
Total SDG&E Natural Gas Demand



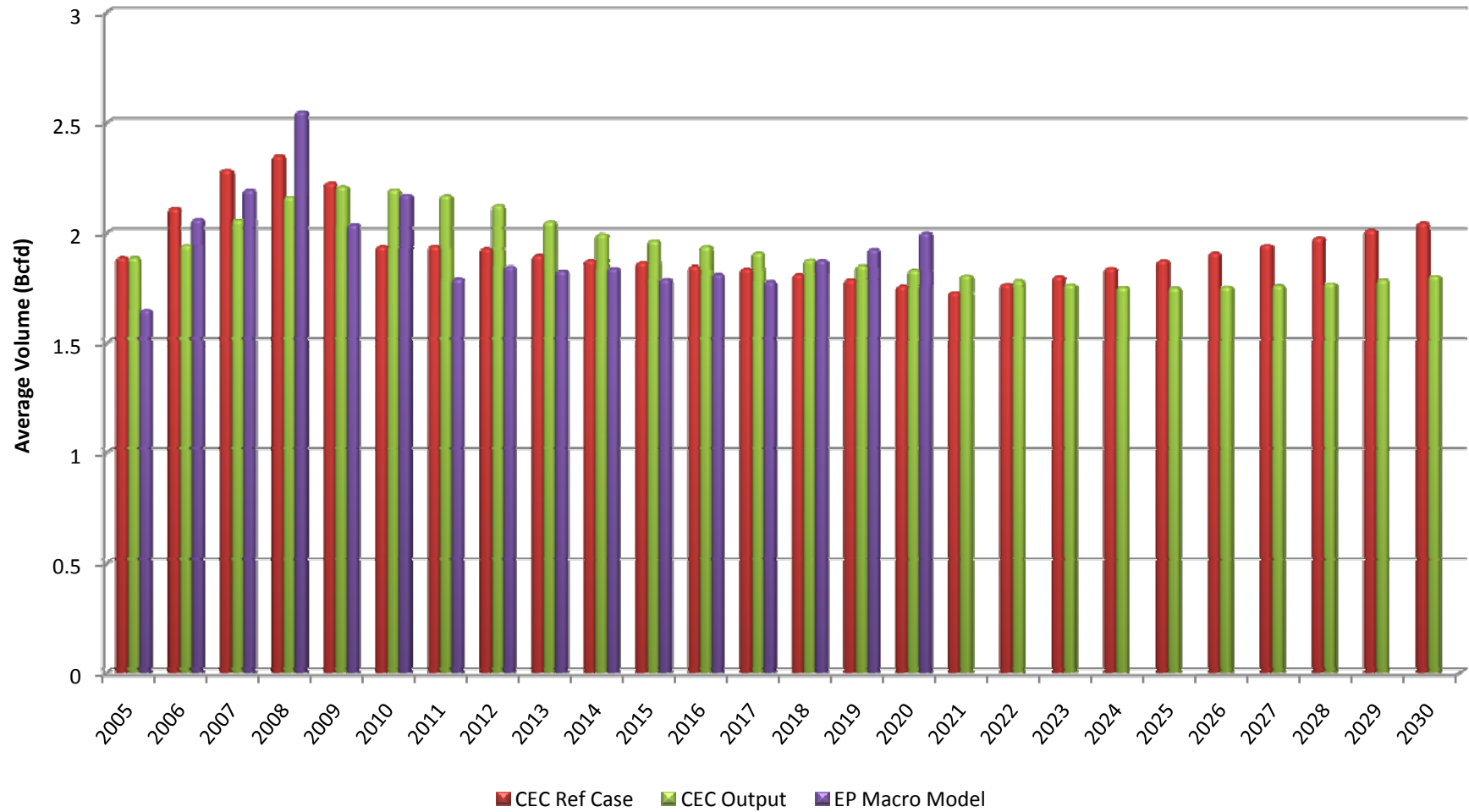
Total U.S. Power Generation Equivalent Gas Demand



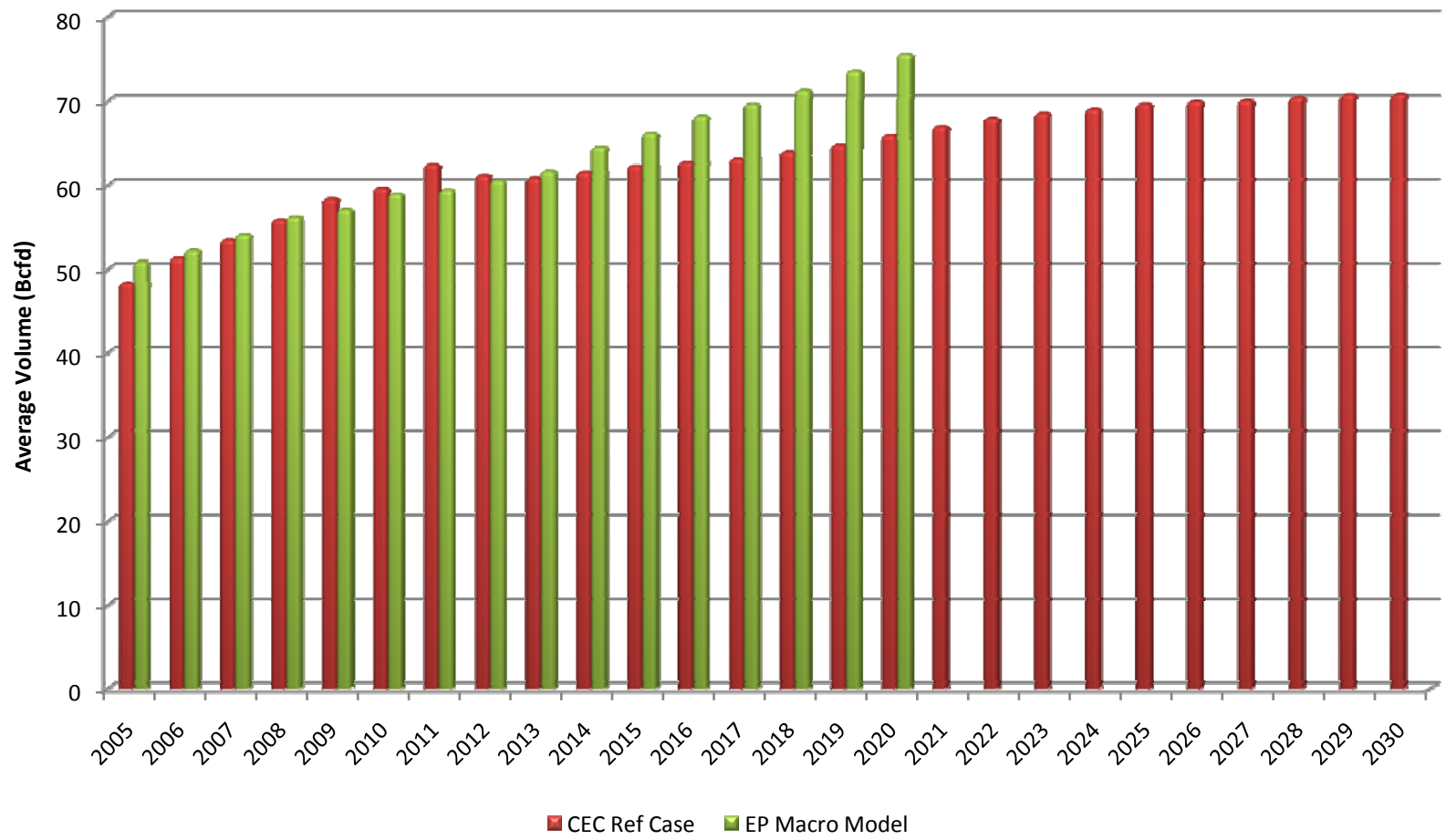
WECC Power Generation Gas Equivalent Demand



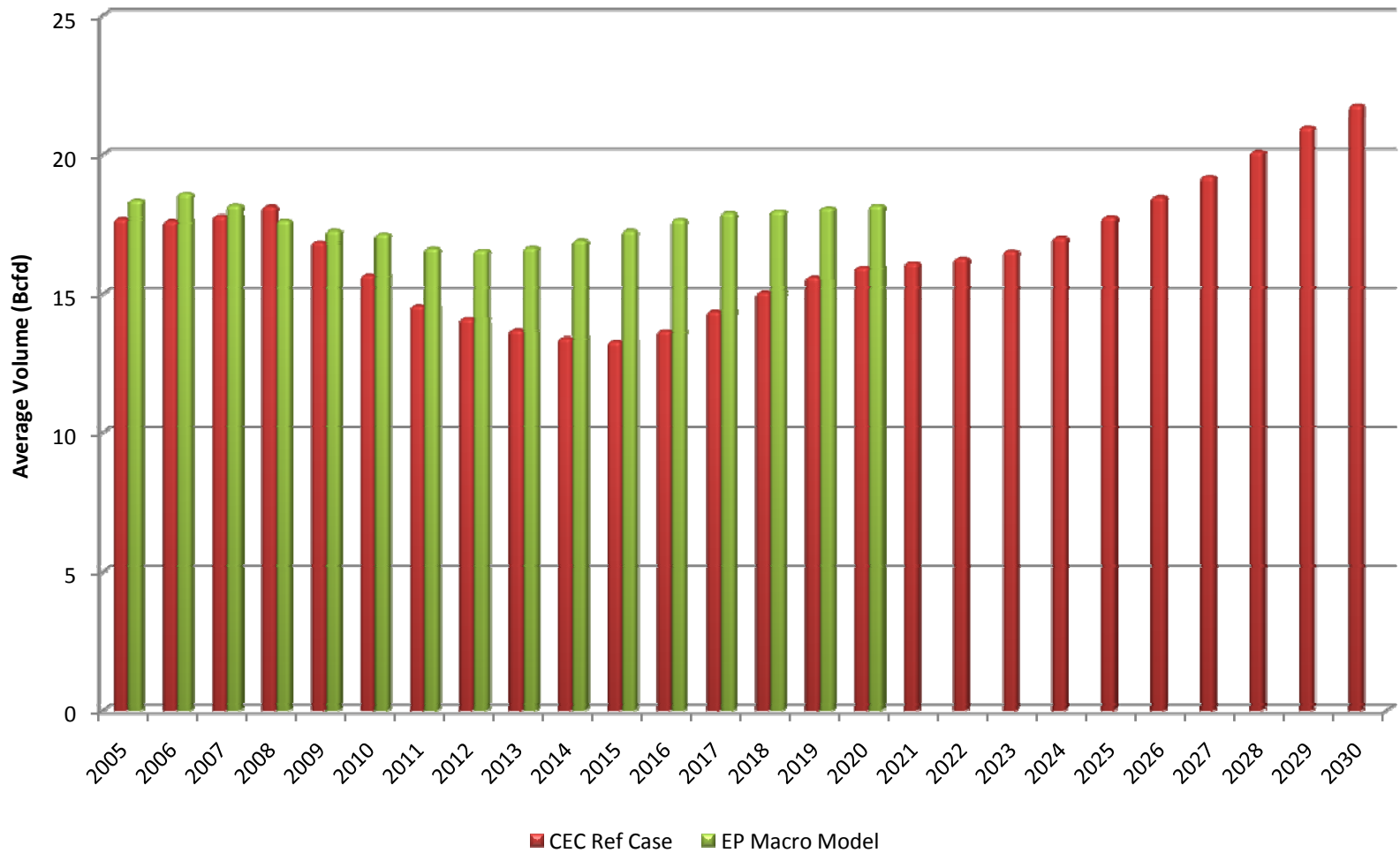
California Power Generation Equivalent Gas Demand



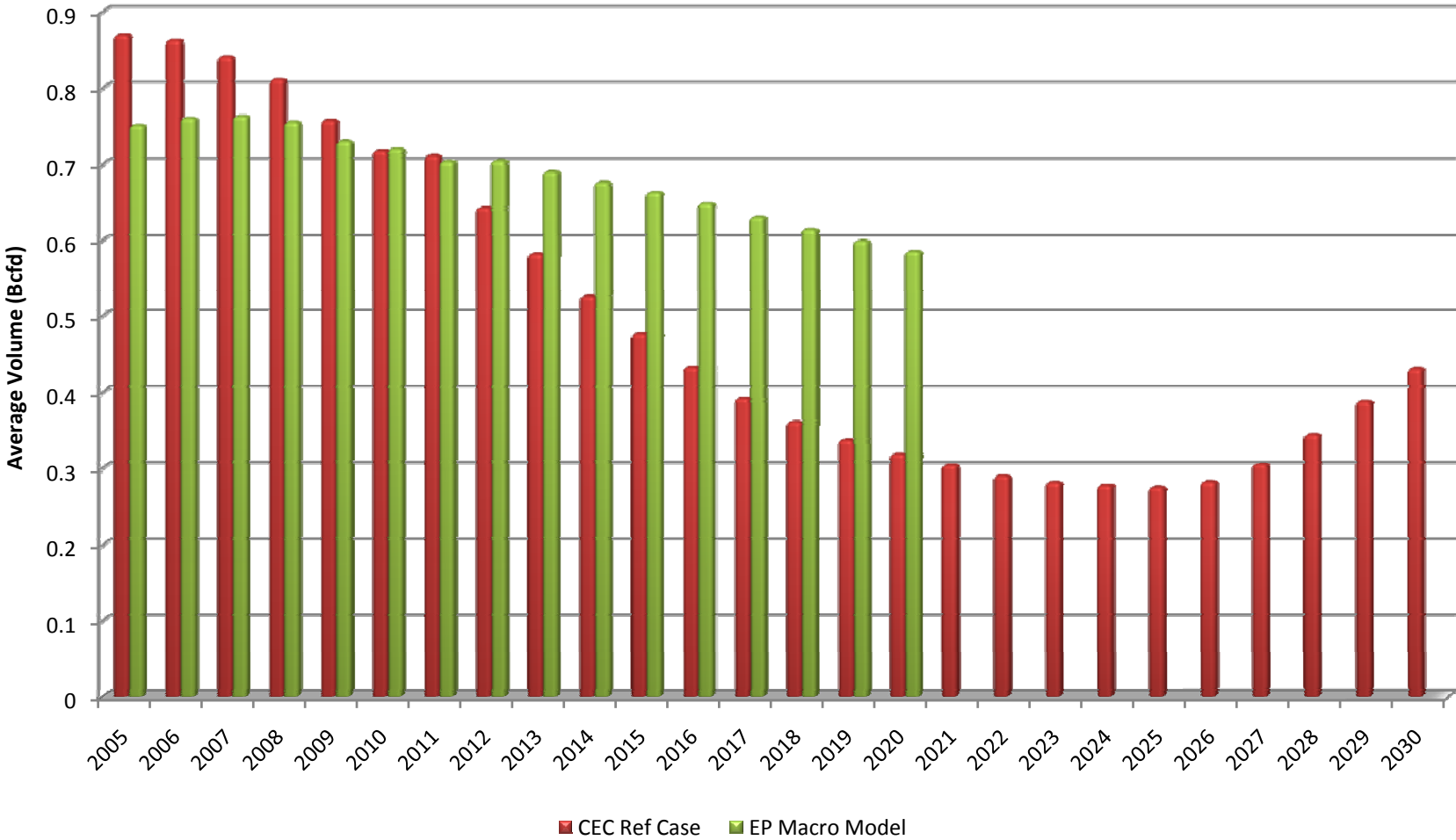
Total U.S. Natural Gas Production



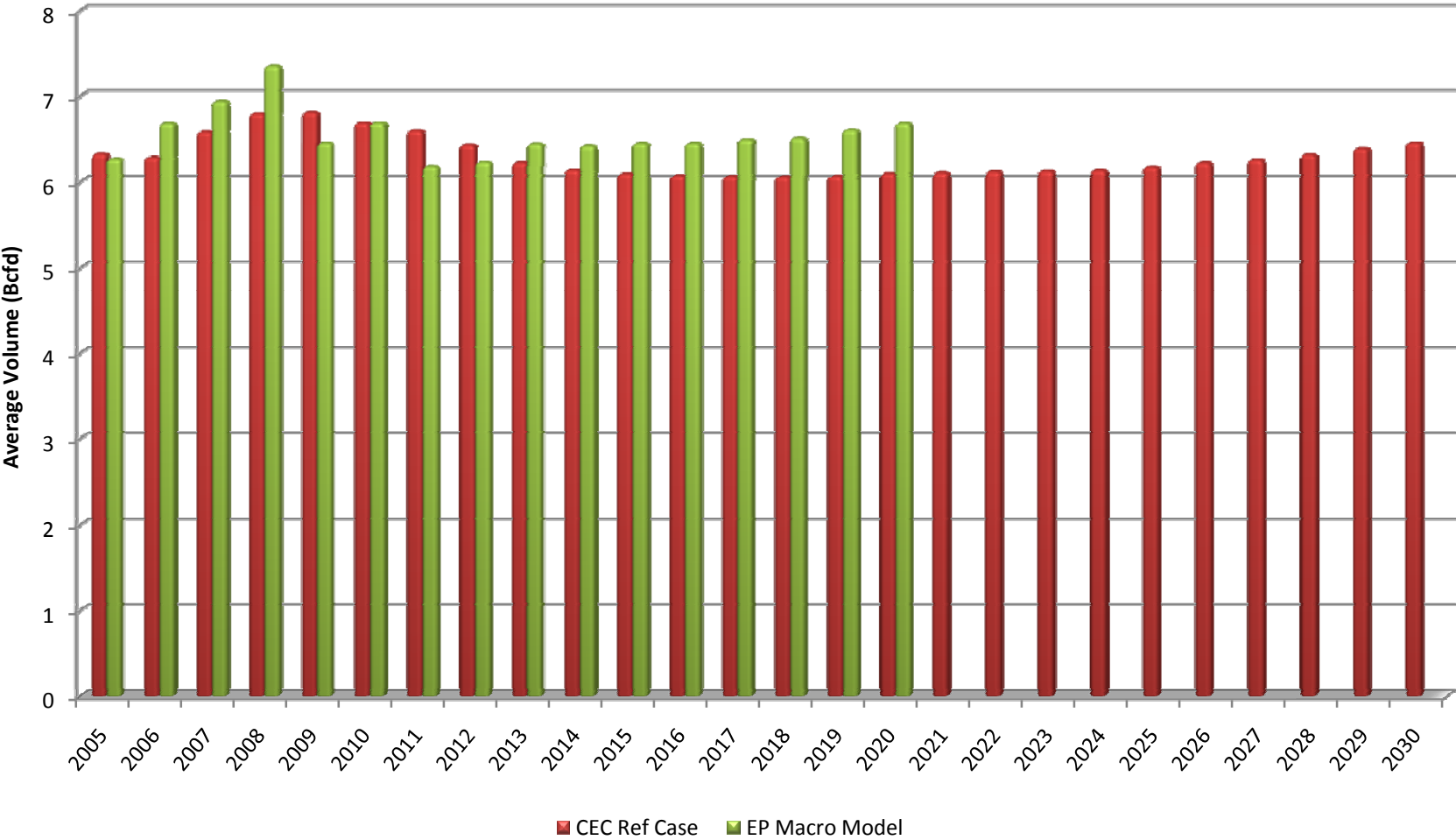
Total Canada Natural Gas Production



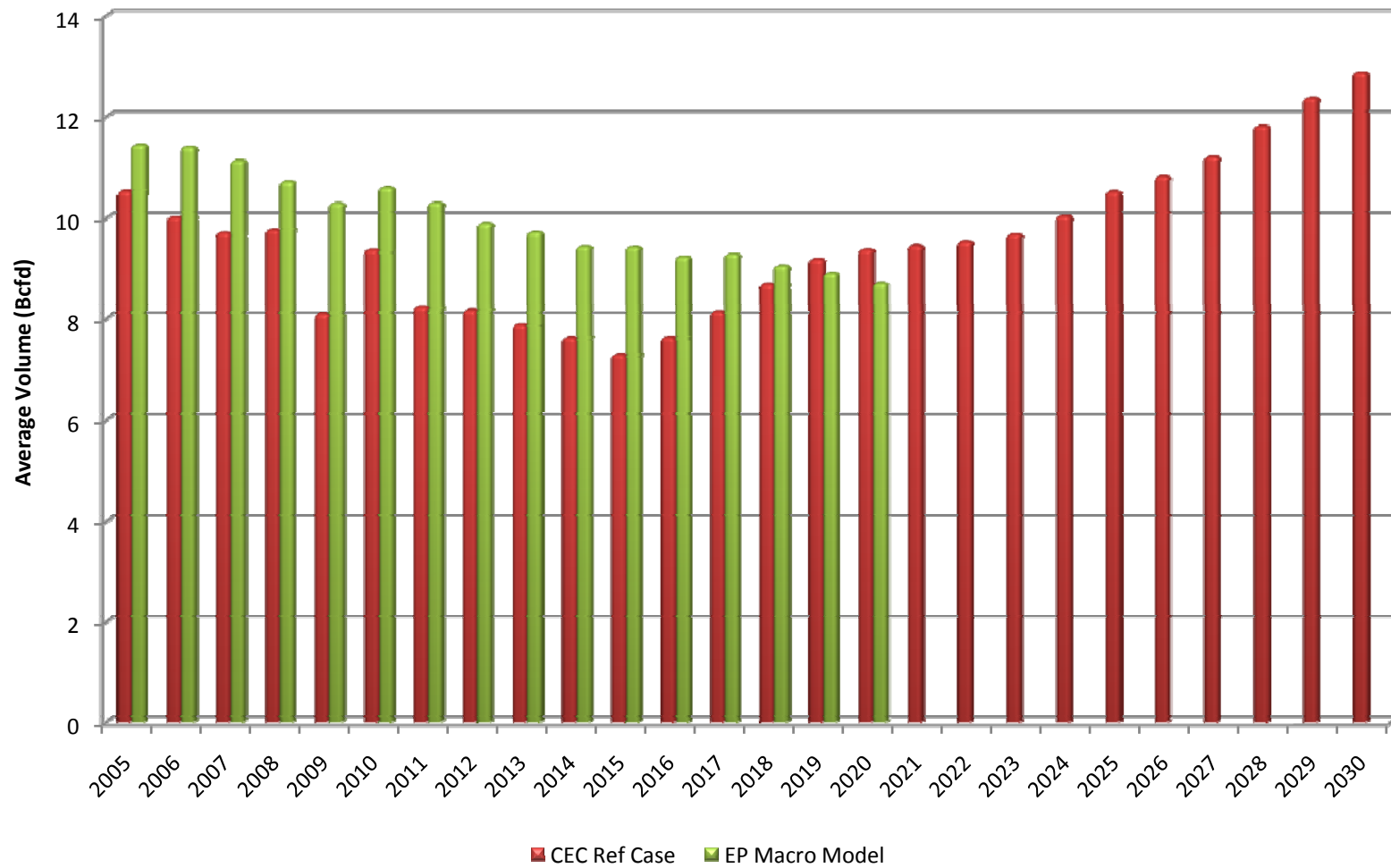
California Natural Gas Production



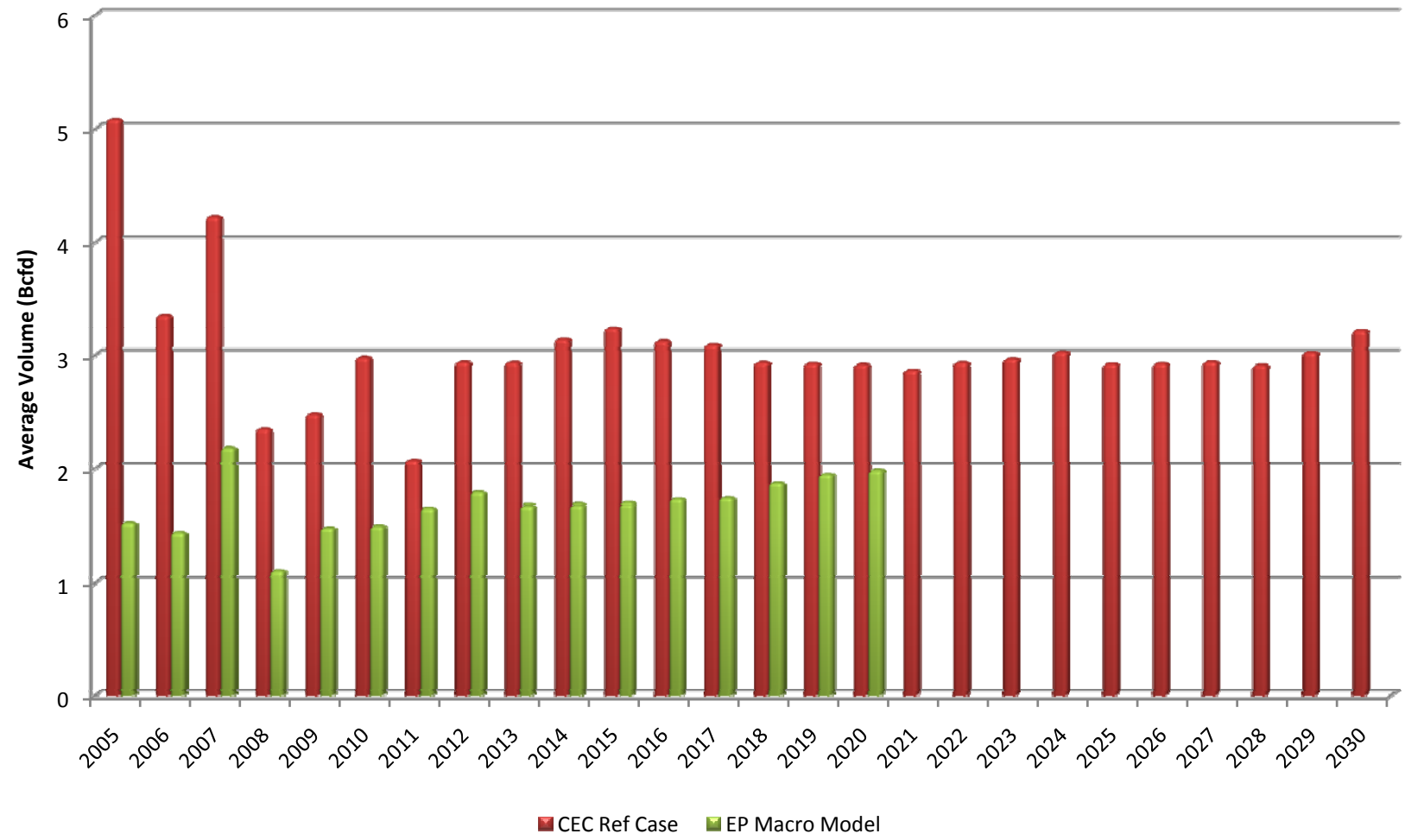
Total California Supply



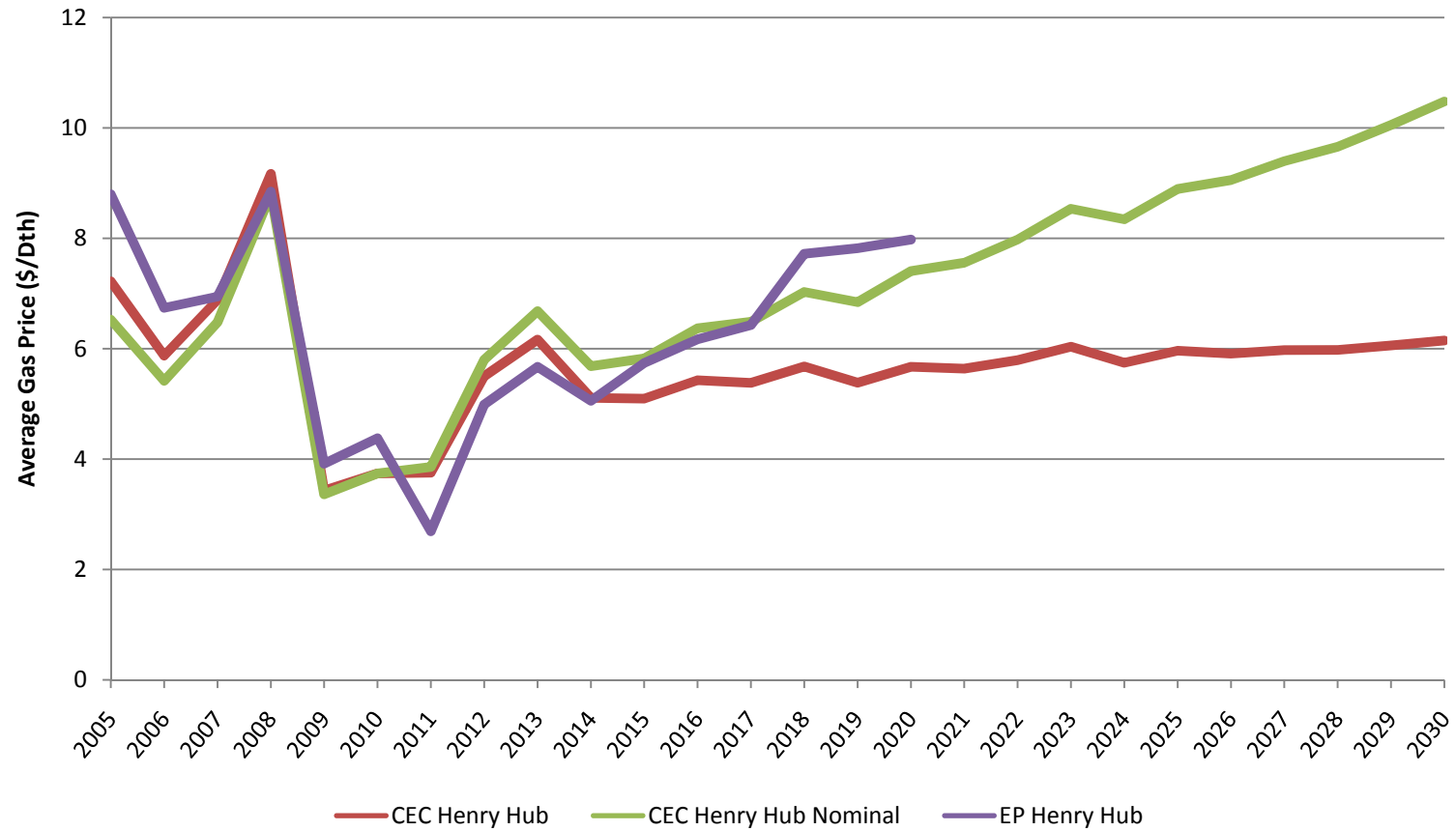
Total Canadian Gas Exports to U.S.



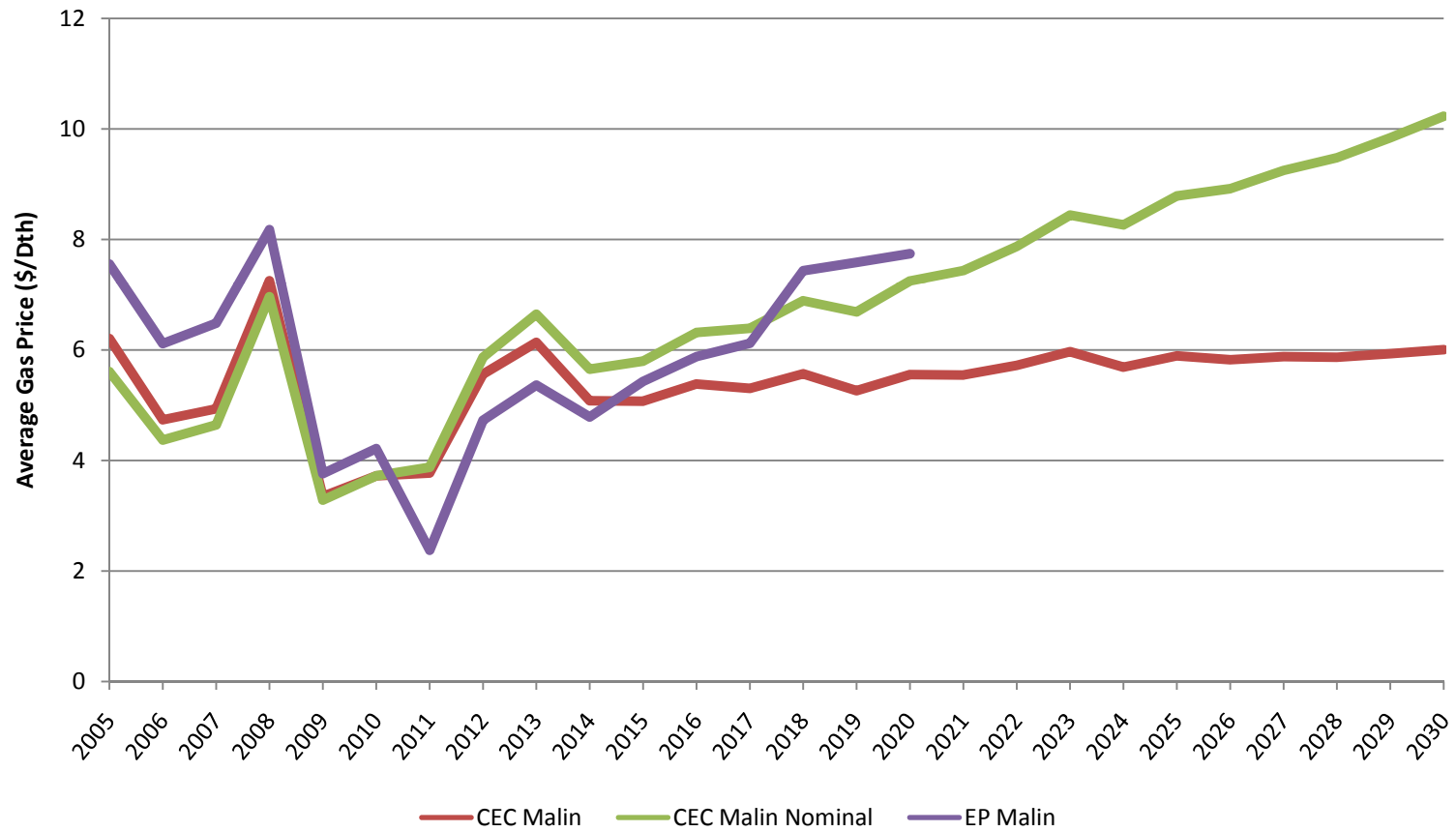
Total U.S. LNG Imports



Henry Hub Gas Price



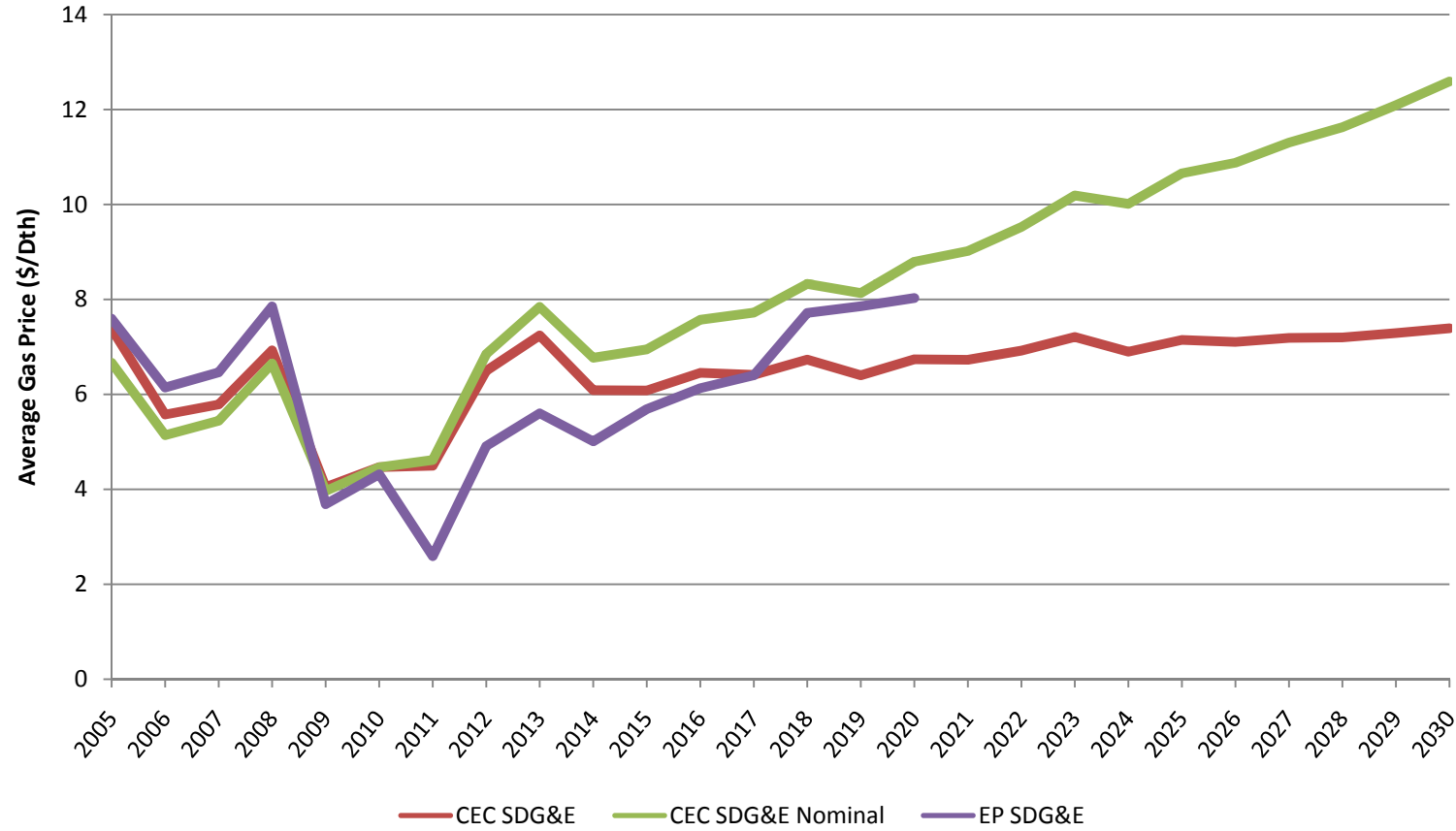
Malin Gas Price



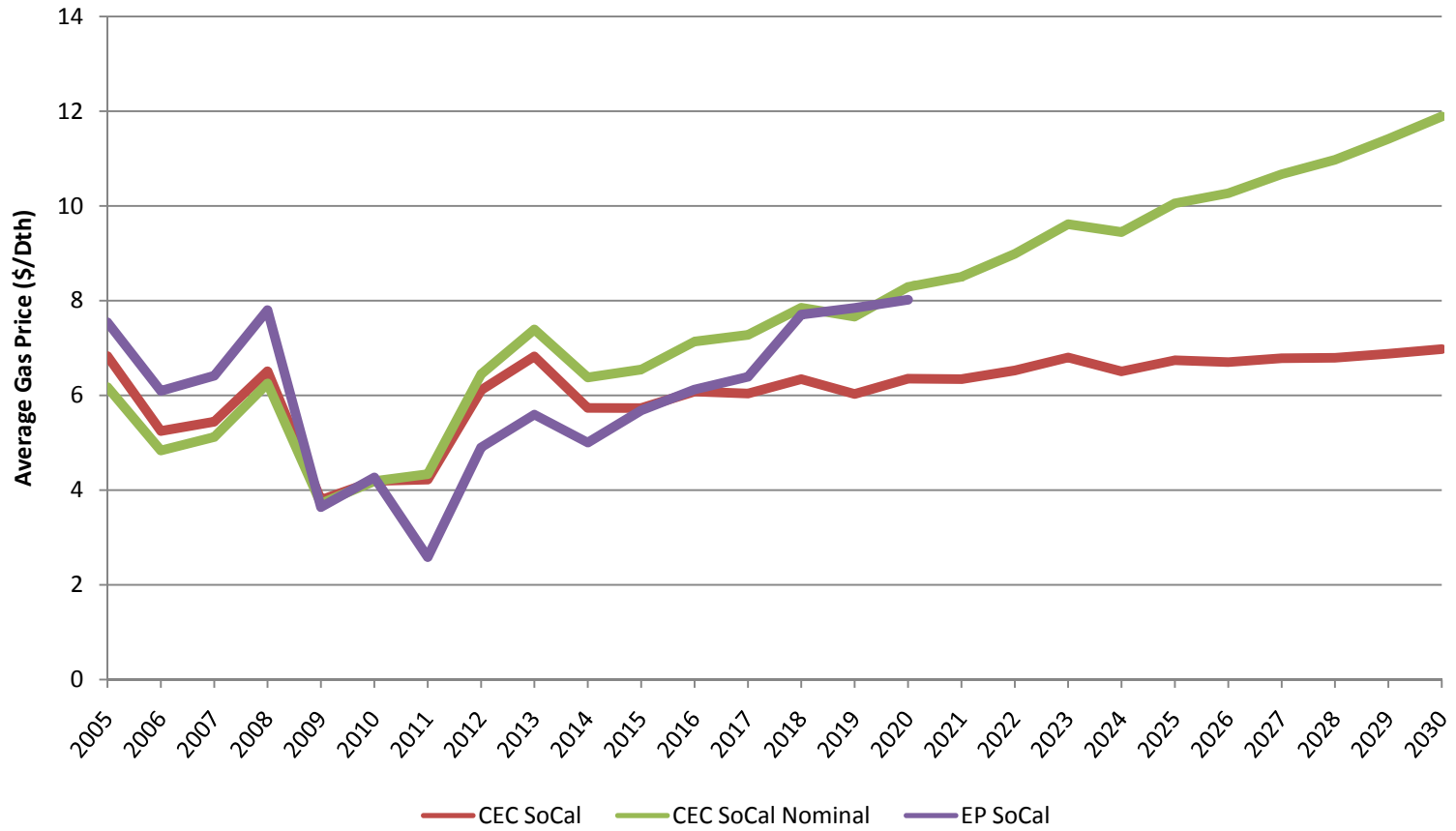
Topock Gas Price



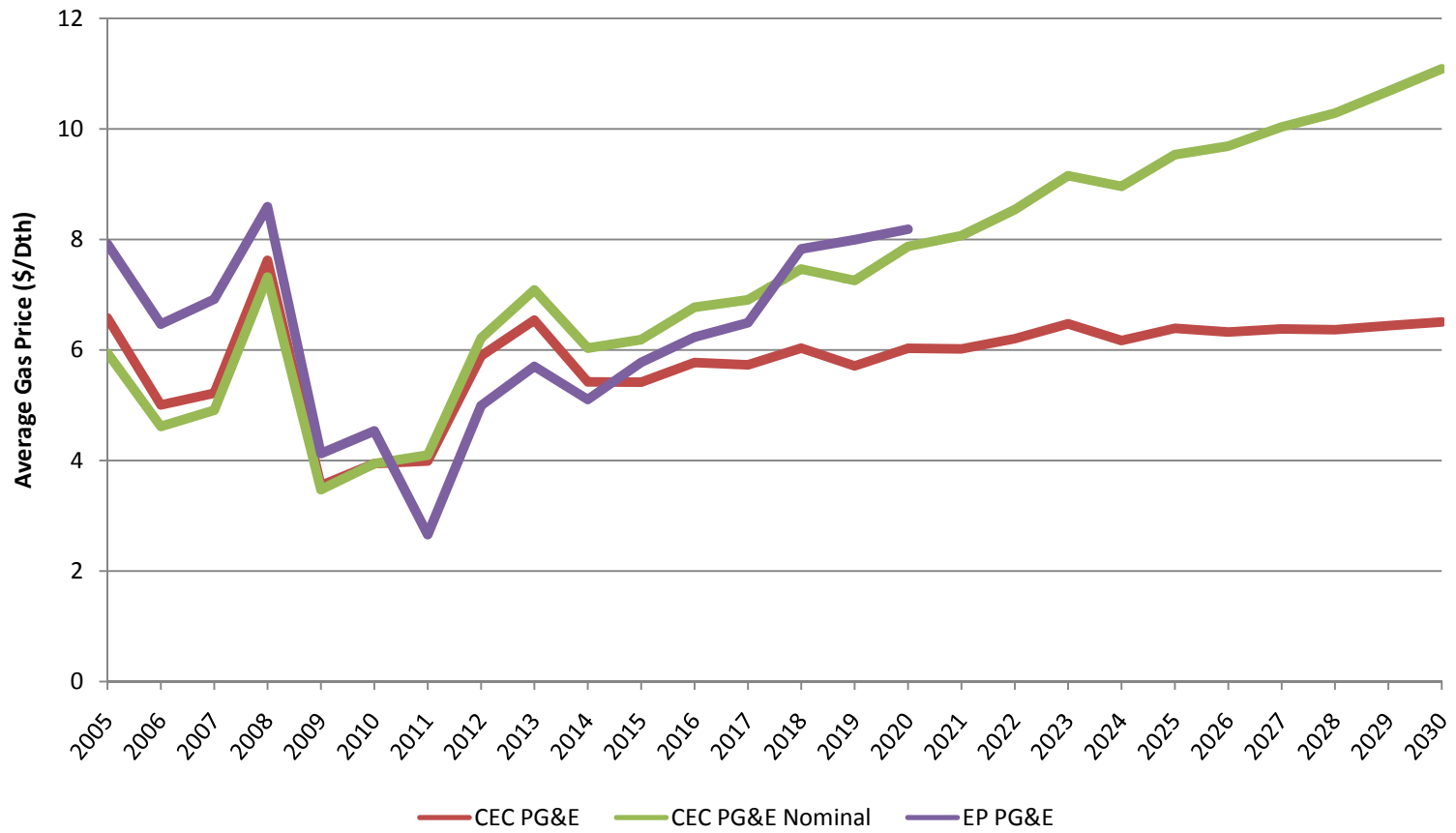
SDG&E City Gate Gas Price



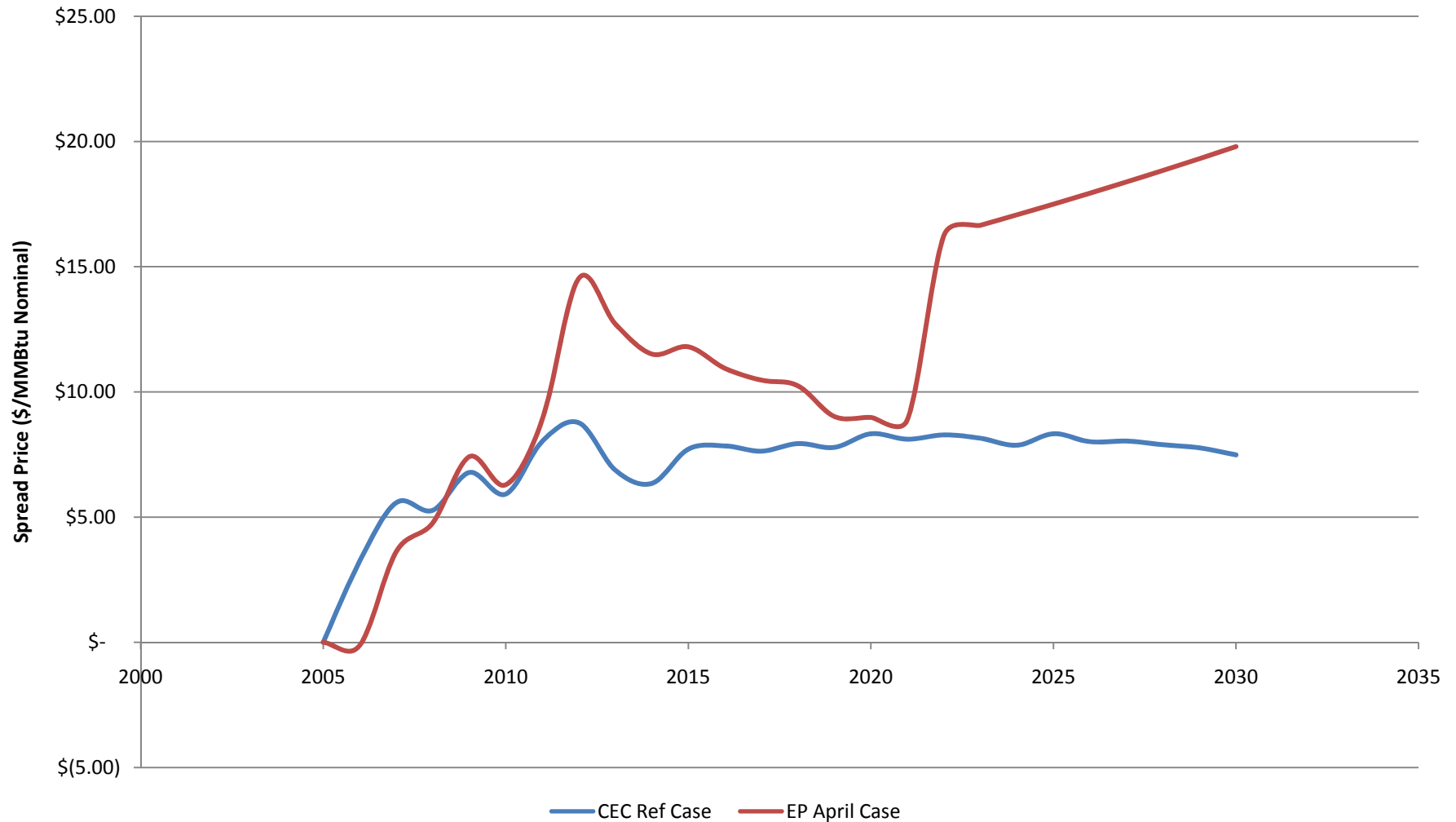
SoCal City Gate Gas Price



PG&E City Gate Gas Price



Oil-Gas Spread Price (Model Comparison)



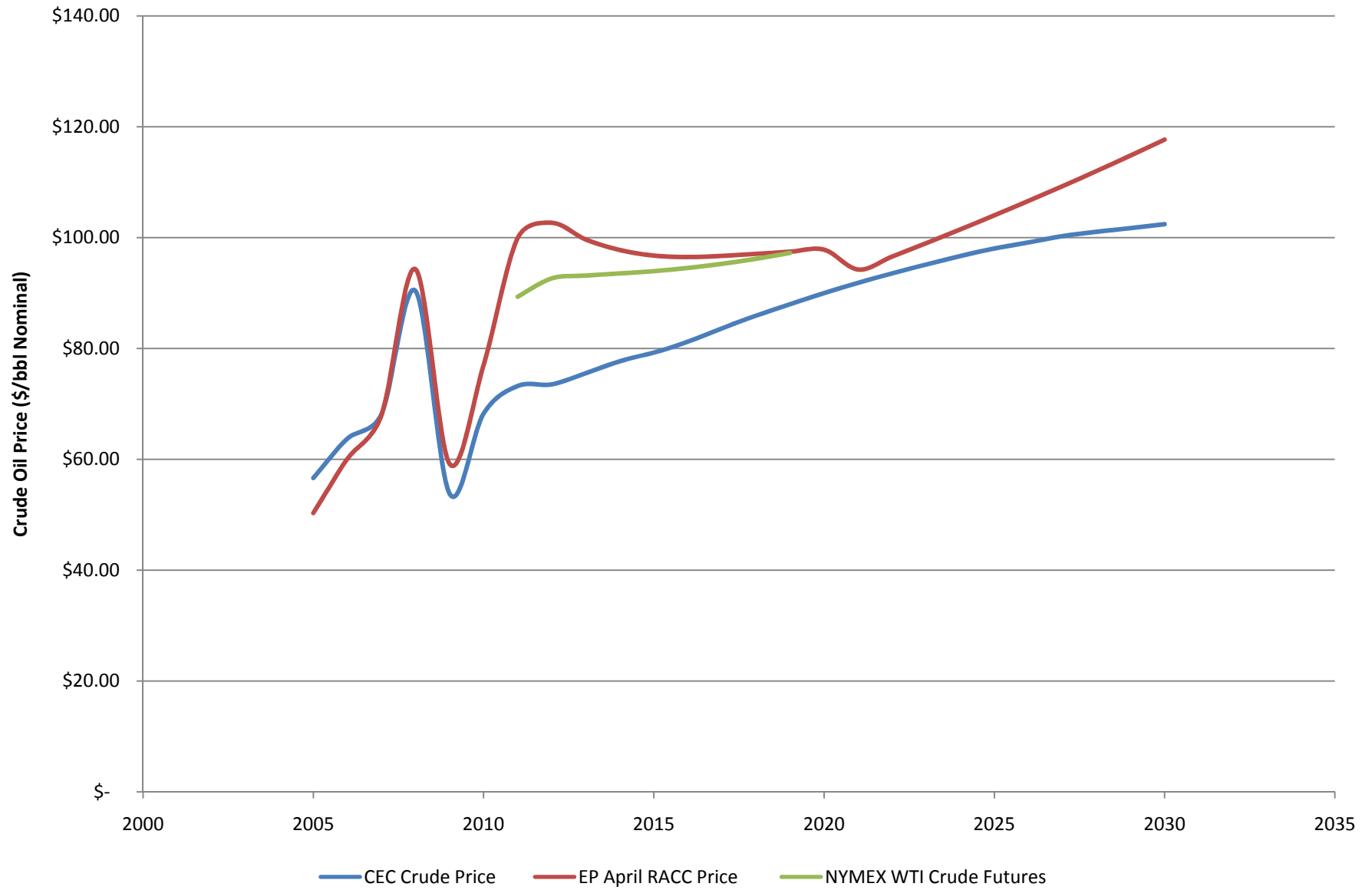
October 2011 NYMEX Prices:

WTI Crude: 87.27 \$/bbl

Henry Hub Gas: 3.83 \$/MMBtu

Oil-Gas Spread: 11.22 \$/MMBtu

Crude Oil Price (Model Comparison)



	El Paso Macro	CEC Reference Case
Results in 2022	Results in 2020	
DEMAND		
US Tcf/yr	28.74	27.30
US Gas-Fired Electricity Generation Tcf/yr	10.68	8.47
CA Tcf/yr	2.23	2.19
CA Gas-Fired Electricity Generation Tcf/yr	0.73	0.65
SUPPLY		
US Natural Gas Dry Production Tcf/yr	27.58	24.78
US Shale Tcf/yr	~11.3	12.23
US LNG Tcf/yr	0.52	1.07
Canadian Imports Tcf/yr	3.18	3.48
Exports Tcf/yr	1.06	2.5
PIPELINE CAPACITY		
Cumulative New Capacity to CA (TCF) (aggregated from 2010 to 2022)	see note	0.08
Pipeline Utilization; % of total (EPNG+TW+MJ/ GTN/ KRG/ Ruby)	63/37/78/56	36.82/68.46/72.87/47.72
PRICES		
Price at Henry Hub (\$ 2010)/Mmbtu	6.23	5.78
Basis to CA Border at Topock (\$2010)/Mmbtu	-0.039	0.282
Basis to Malin (\$2010)/Mmbtu	-0.187	-0.076
Key Assumptions		
Average Annual GDP Growth Rate	2.50%	2.7%
Gas Technology Improvement Average Annual Growth Rate	embedded in model inputs	1%
Total US Electricity Production (GWh)	4,344,177	4,766,558
US Electricity Resource Mix (% of total from Fossil/Nuclear/Hydro/Renew)	69/18/6/7	66.8/17.8/5.45/15.37
Total CA Electricity Production (GWh)	228,255	238,058
CA Electricity Resource Mix (% of total from Fossil/Nuclear/Hydro/Renew)	45/15/18/22	44.5/14.5/11.5/29.4