

Comments on:

“Improving the Contribution of Economic Models in Evaluating Energy and Climate Change Policies”

by John A. “Skip” Laitner

ACEE Workshop

Energy and Economic Policy Models: A Reexamination of Some Fundamentals

Discussant

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(1) Technology characterization that is often limited or even inappropriate – for both the demand and the supply-side of the equation

- “Compared to the year 1970, both technology and changes in market structure accelerated the rate of decline in the nation’s energy intensity such that energy efficiency now provides 75 percent of all U.S. energy service demands (Laitner 2006). Despite the significant contributions from past efficiency gains, there is a tendency in economic models and conventional policy analyses to assume that new energy efficiency investments can make only a limited and “not always cost-effective” contribution to our nation’s energy future. The operative assumption is that we’ve pushed the efficiency frontier as far and as fast as it can reasonably go.”

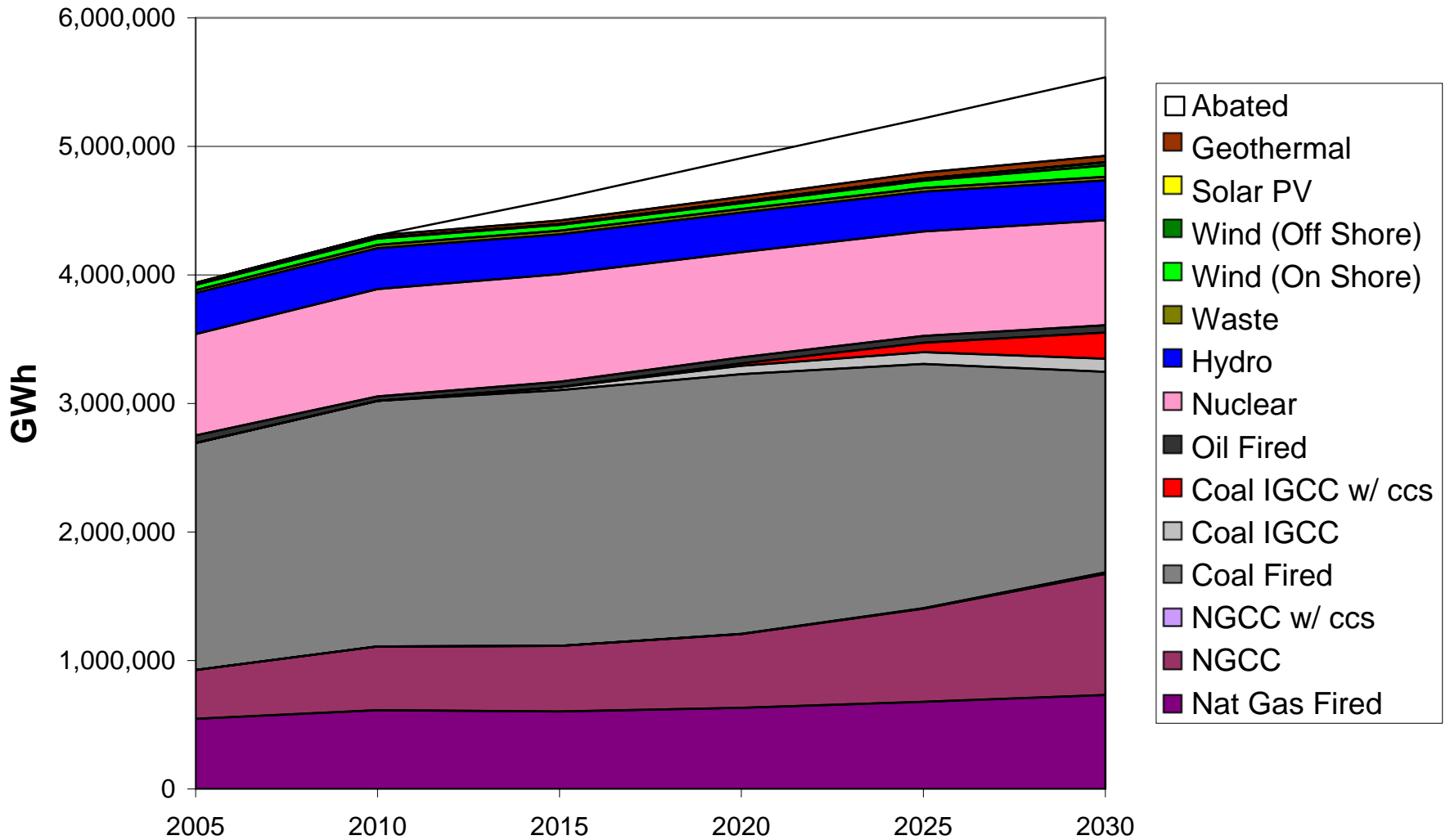
	GDP (Trillions of chained (2000) Dollars)	Energy Consumption (Quads)		<u>Growth</u>		New Demand met by Energy Efficiency
				GDP	Energy Consumption	
1970	3.8	68	1970 - 2005	195%	47%	76%
1980	5.2	78	1980 - 2005	116%	28%	76%
2005	11.1	100	2005 - 2030	108%	34%	68%
2030	23.1	134				

source: EIA's AER 2005 and AEO 2006

SGM 2005 - 2030 Policy: \$25/tCO₂ starting in 2015
increasing at 5% per year

Reference	105%	42%	60%
Policy	104%	24%	77%

SGM - \$25 Rising Price - Electricity Generation



SGM - \$25 Rising Price - Primary Energy Use

