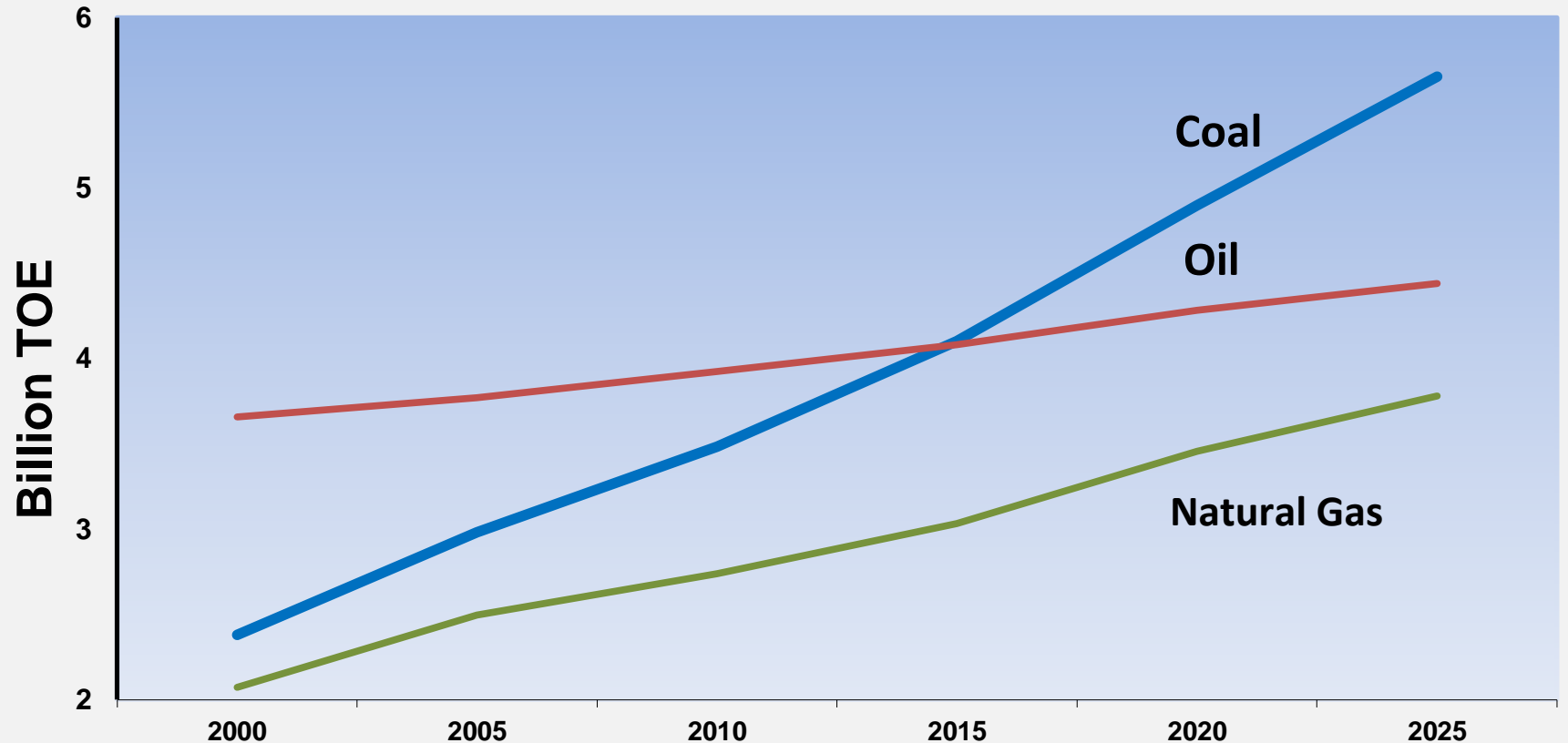


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**Hal Quinn**  
**President & CEO**  
**National Mining Association**  
January 16, 2013  
National Press Club

# Coal Becomes World's Primary Energy Source



Sources: Wood Mackenzie, IEA

# BTU-Hungry World

## ***Developing Economies***

*Will account for 80% Global GDP  
by 2050*

## ***Energy Intensities***

*Remain just a fraction of developed  
economies*

## ***China***

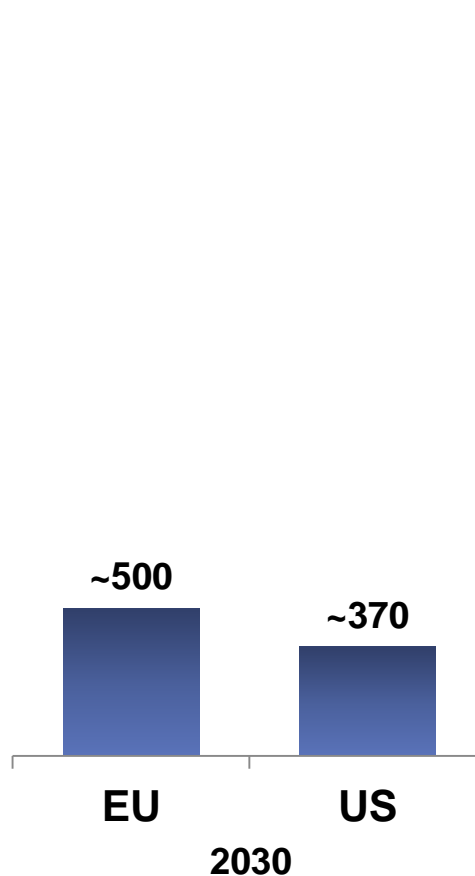
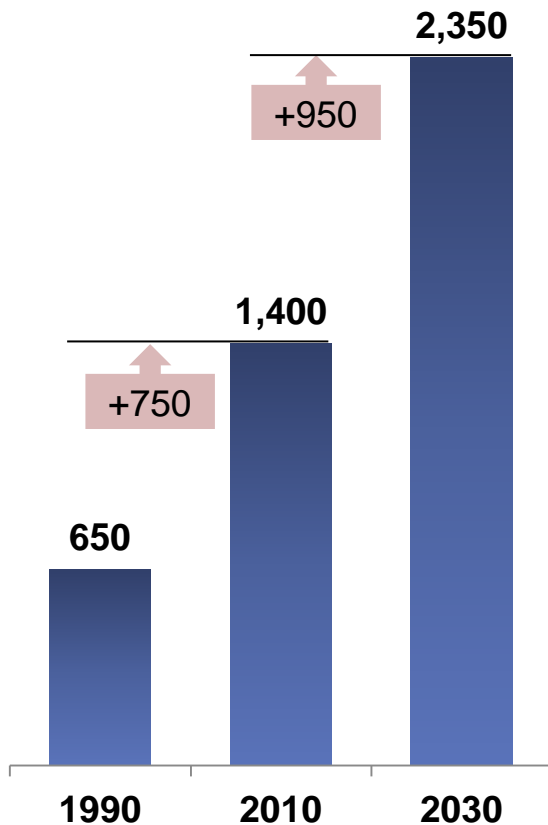
*Only part of the story unfolding*



# Scale and Pace of Developing World Urbanization

Total Urban Population in China, India and Africa (million)

Total Population in Developed Countries (million)



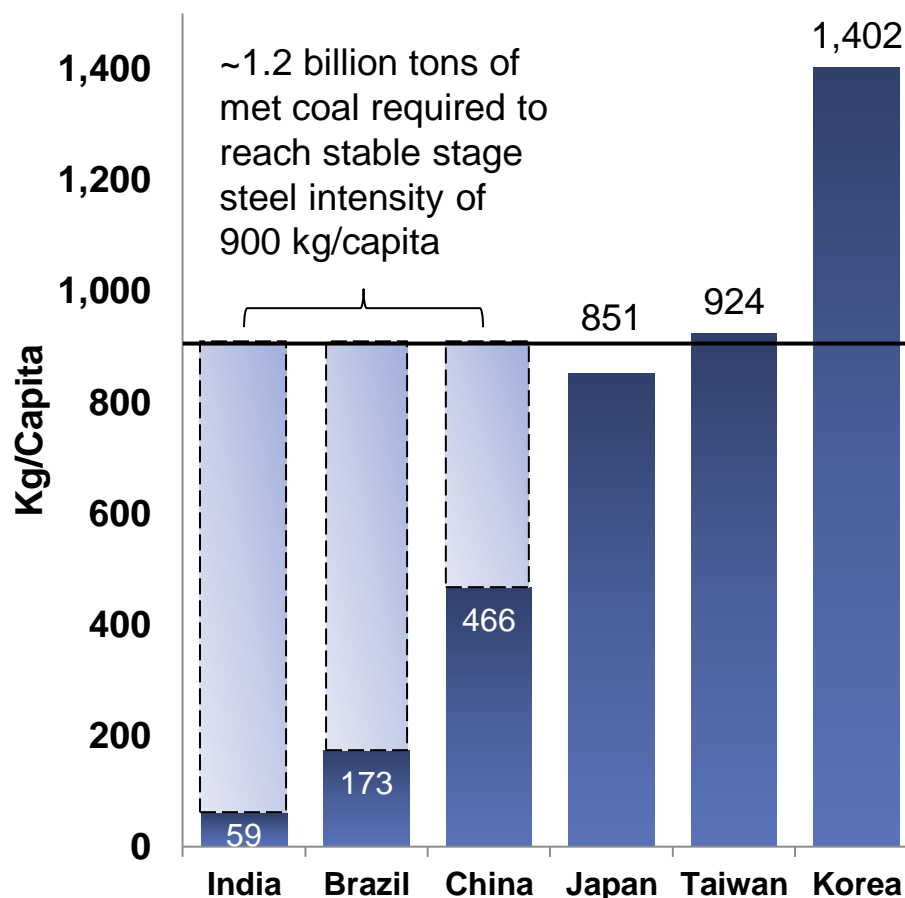
Source: McKinsey & Company

- By 2020, developing countries will account for almost 80% of the world's total urban population
- The global growth is equal to adding the population of Mumbai every second month or Shanghai every third

# Large Upside to Steel Intensity Potential Drives Met Coal

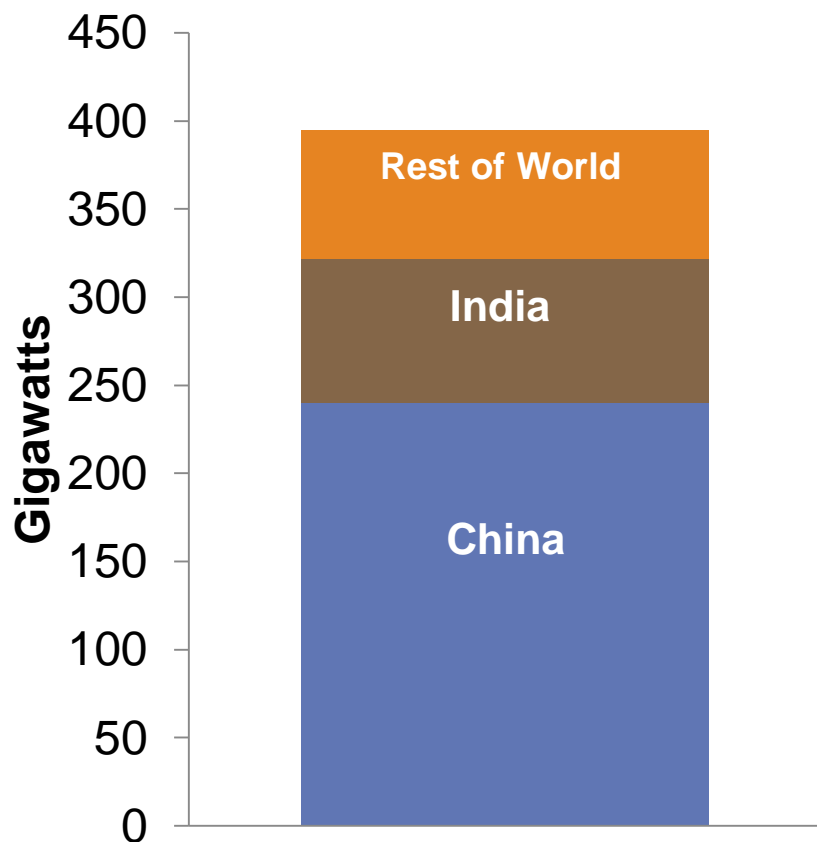
- Emerging countries driving met coal demand through greater urbanization and higher steel consumption
- Significant steel increases required to reach levels of developed Asia economies
- Stable stage intensity may take 20-40 years to reach
- Countries will rely on imports for met coal needs

2011 Steel Consumption Per Capita



# Build Out of Coal Generation Drives Growth in Thermal Coal

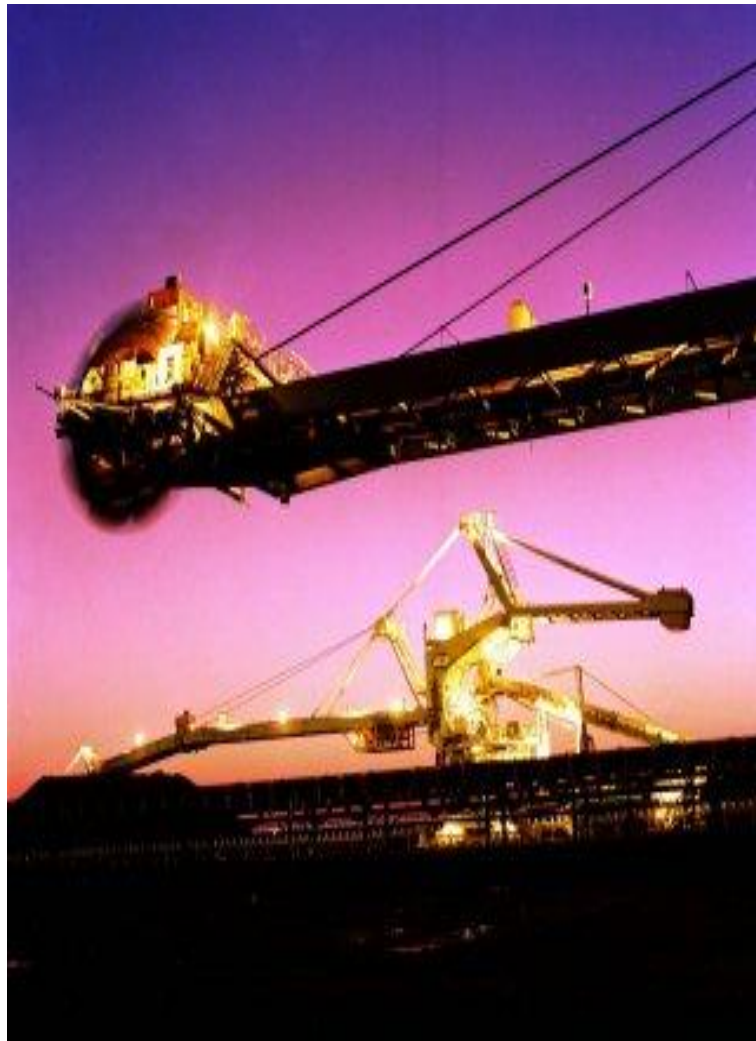
**New Coal-Based Generating Capacity, 2011-2016**



- New coal-based generation expected to grow 395 GW by 2016
- ~ 1 billion tons of additional coal demand
- Vast majority of growth in China and India, driving higher seaborne demand
- 73 GW of new coal generation in rest of world

Source: Platts Worldwide Power Plant Database and Peabody Energy analysis

# Planned Export Capacity

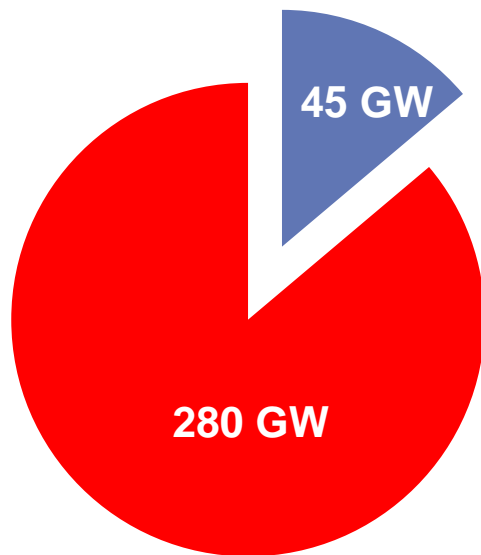


Location	Current	Planned
West Coast	6	50
Southwest	5	15
Gulf Coast	36	66
East Coast	86	100
Midwest	14	14
Southeast	10	31
<b>TOTAL</b>	<b>157</b>	<b>276</b>

Source: UBS, NMA, ACI

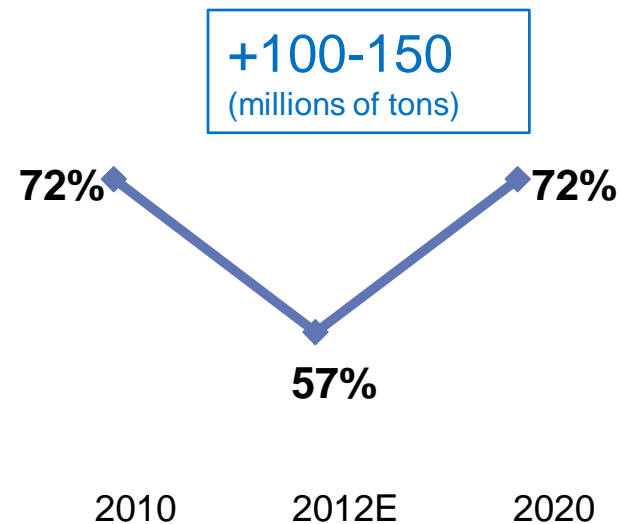
# Higher Capacity Factors for Remaining Plants Offset Retirements

## U.S. Coal Fleet (In gigawatts of capacity)



- Capacity at risk of retiring by 2018
- Expected capacity to remain online

## U.S. Coal Plant Utilization (Remaining 280 gigawatts)

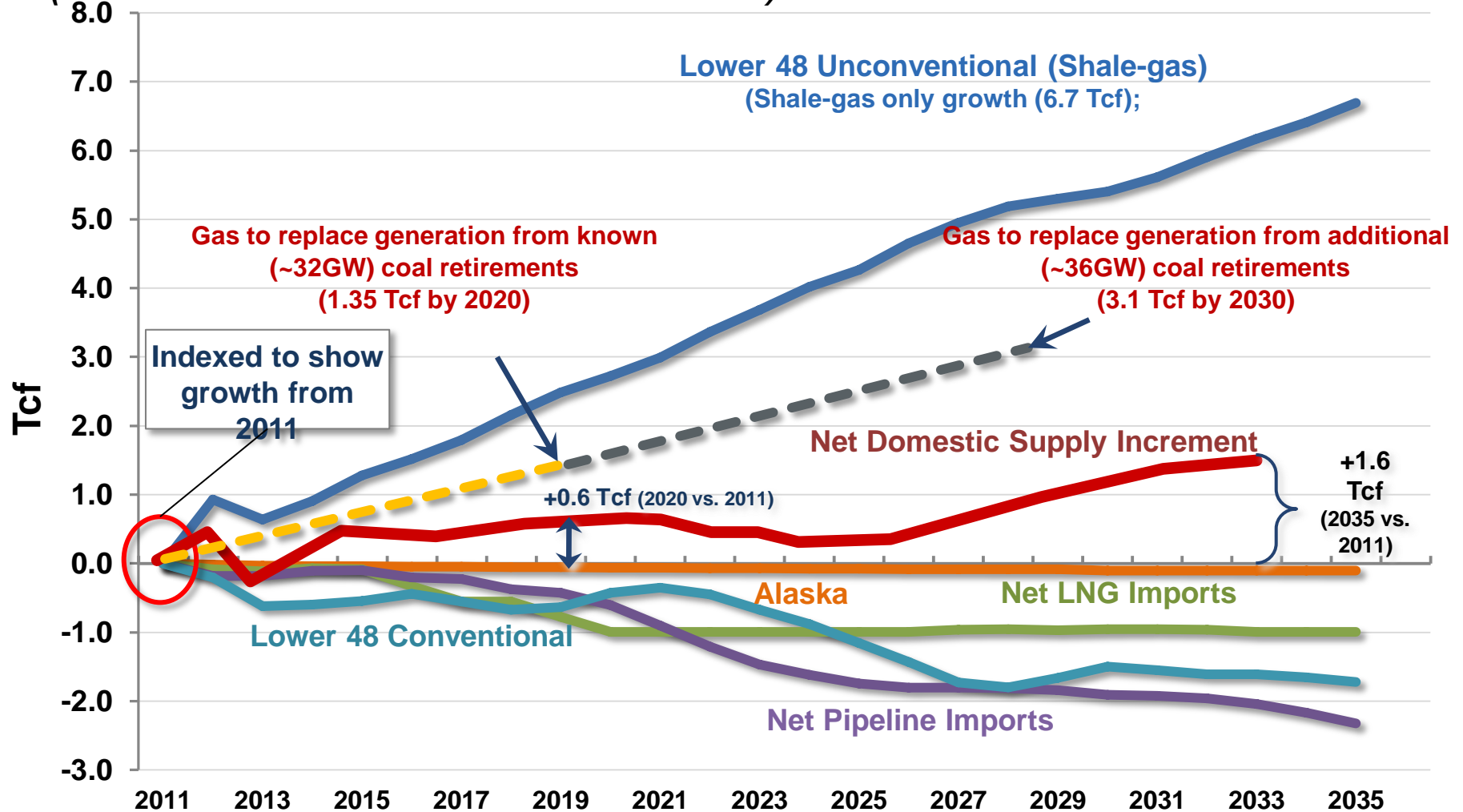


Source: ACI, NMA



# Coal Retirements & Incremental Natural Gas Supply

(AEO'12er Reference Case - Indexed to 2011)



Source: EIA, AEO'12 early release, Reference Case . Notes: Gas replacement based on 2007 (pre-recession) electricity generation from units already announced for retirement to 2020 (appx 32 GW) and an additional 36 GW of units past 2020 at high risk for retirement based on anticipated non-CO2 regulatory environment identified by NETL

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