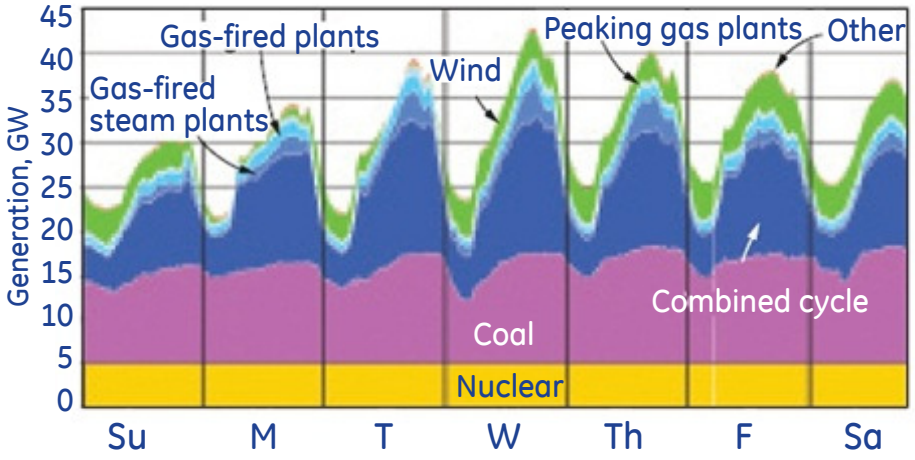
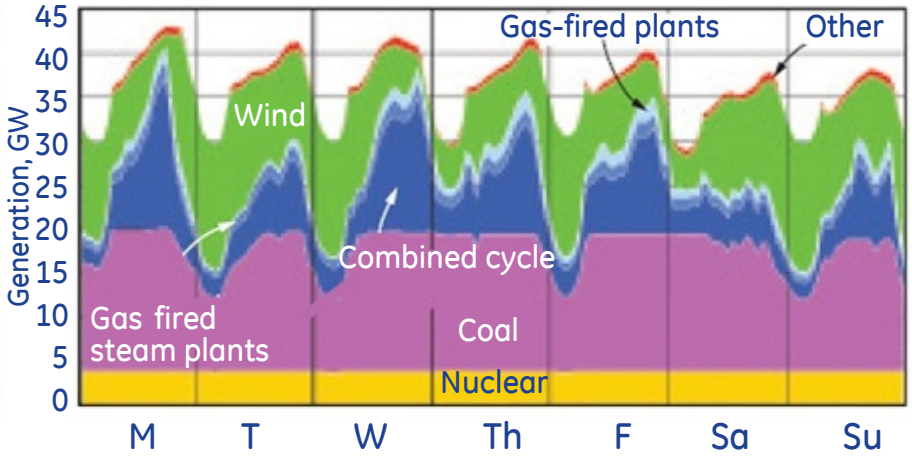
Gas turbines are critical to today's operating environment…

Dispatch model of generation assets

Actual - April 2009



Projected – March 2013



Source: Ercot generation assets

Typical week in April '09 (left) compared to a modeled windy week in March '13 (right)

…CO2 standard must accommodate operational flexibility

- Increasing renewable generation … primarily wind and solar…drive need for reliable, dispatchable, flexible power supply
- Introduces significant variability to the power supply
- Need for both simple cycle and combined cycle plants

imagination at work

The Right Standard is Critical

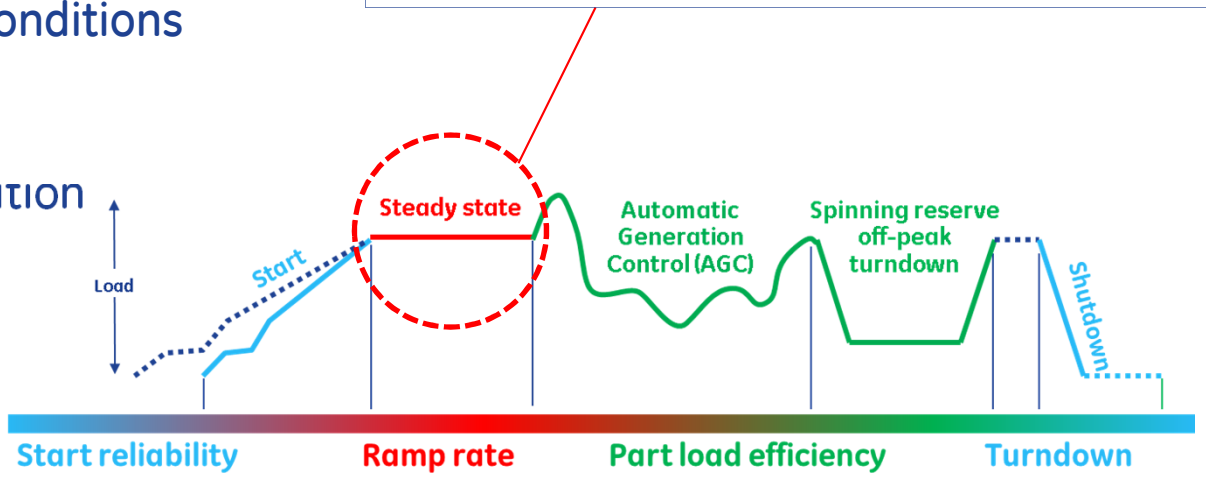
Standard for gas must reflect operational reality

Higher Efficiency = Lower CO2 per MW Generated

Key factors that must be considered in setting standard:

- Different plant sizes… need to accommodate both small and large GT's
- Start and stop operation
- Part load
- Range of ambient conditions
- Site specific conditions
- Duct burners
- Back-up fuel
- Plant degradation

Because of increasing renewable deployment and variable grid demands, units do not often run at designed highest efficiency



April 2012 proposal considered range of 950 – 1100 lbs CO2/MWh
Industry comments support **1,100 lbs CO2/MWh**

imagination at work

Simple cycle applications

Flexible combined cycle and simple cycle plants are both essential for grid reliability—each serves specific grid requirements

Used for peaking and short term fluctuation (not baseload) to ensure grid reliability

Key simple cycle plant requirements:

- Multiple starts per day
- Fast starts
- Fast ramping
- Wide load range

As a result Simple Cycle Units cannot meet standard and should be exempted

LMS100*

100MW @ 44% in SC

- New DLE 2.0 technology
- Global acceptance
- >98% reliability; 100k op hrs

* Trademark of General Electric Company.

Potential unintended consequences of overly stringent gas standards

Decreased operational flexibility of gas turbine based generation

Could restrict deployment of renewables

May result in greater overall emissions and decreased demand respond and grid reliability