



# USEA 11<sup>th</sup> Annual State of the Energy Industry Forum

Hal Quinn

President & CEO

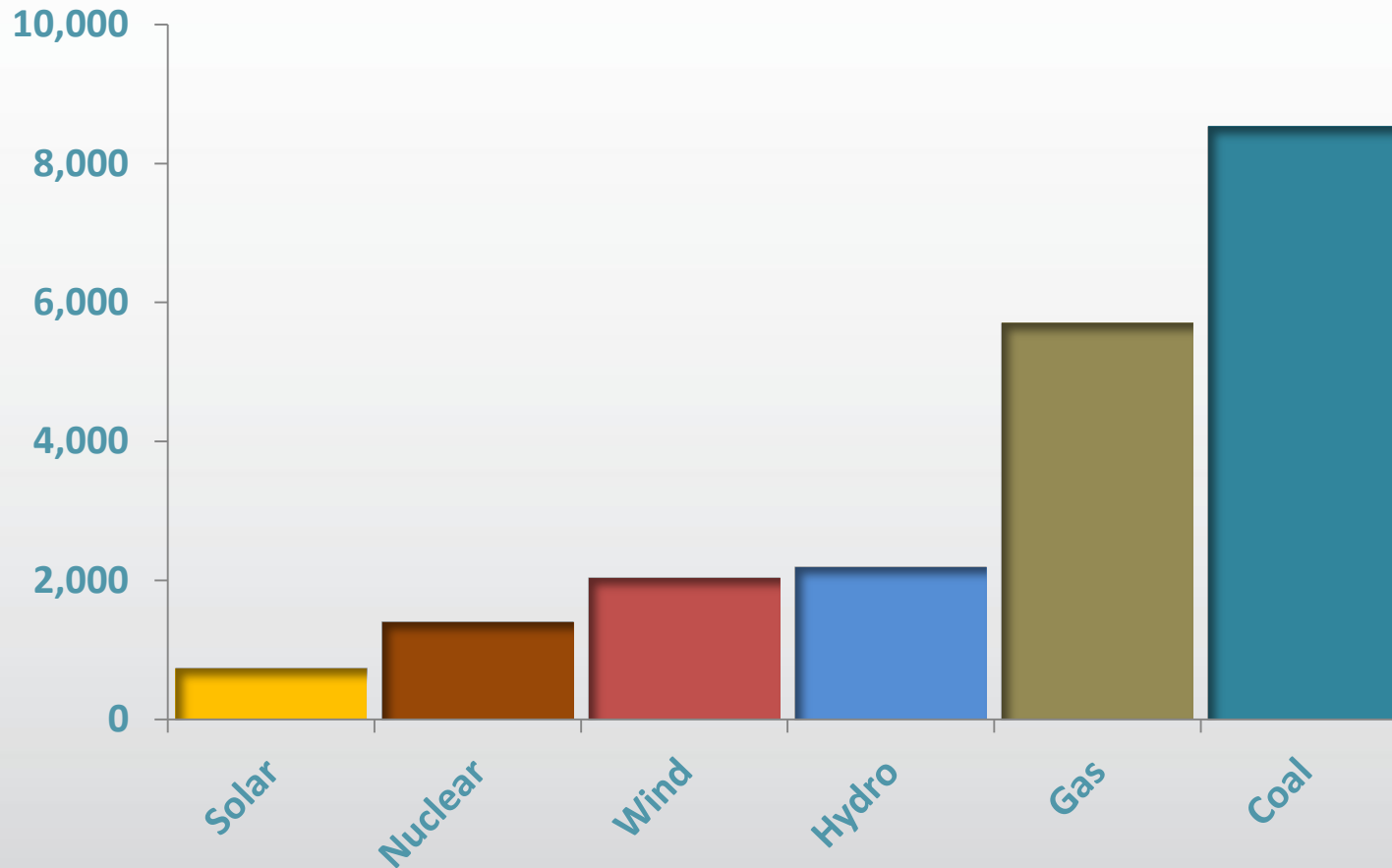
National Mining Association

Washington, DC

January 21, 2015



# Fossil Fuels Will Supply Two-Thirds of World Incremental Power Generation: 2012-2040 (TWh)

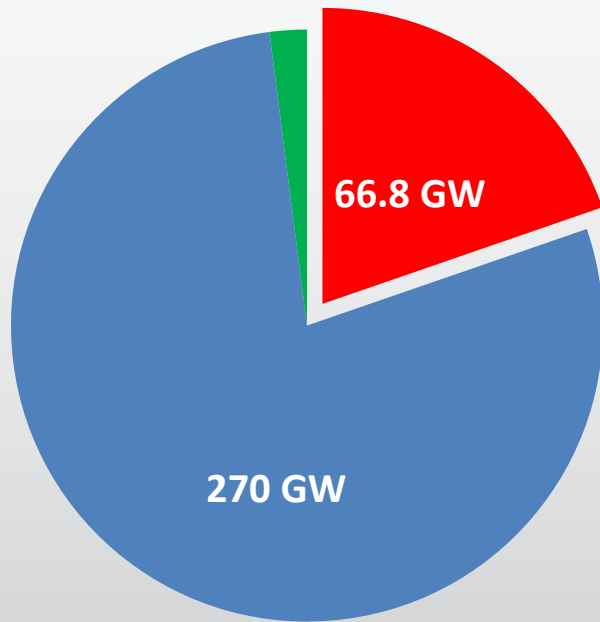


Source: IEA, World Energy Outlook 2014 "Current Policies Forecast"

# Higher Capacity Factors for Remaining Plants Offset Some Retirements

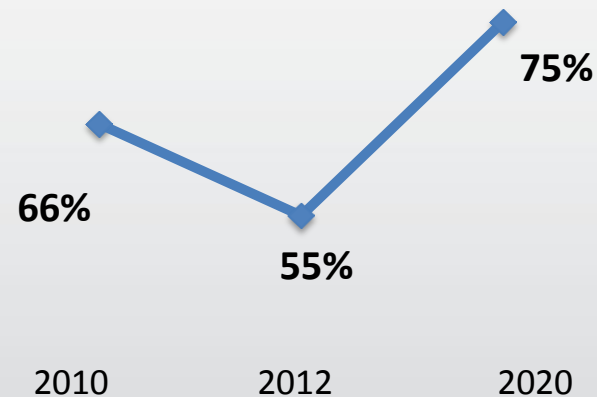
## U.S. Coal Fleet

(In gigawatts of net summer capacity)



- Capacity at risk of retiring by 2020
- Expected capacity to remain online
- Includes 7 GW New Capacity

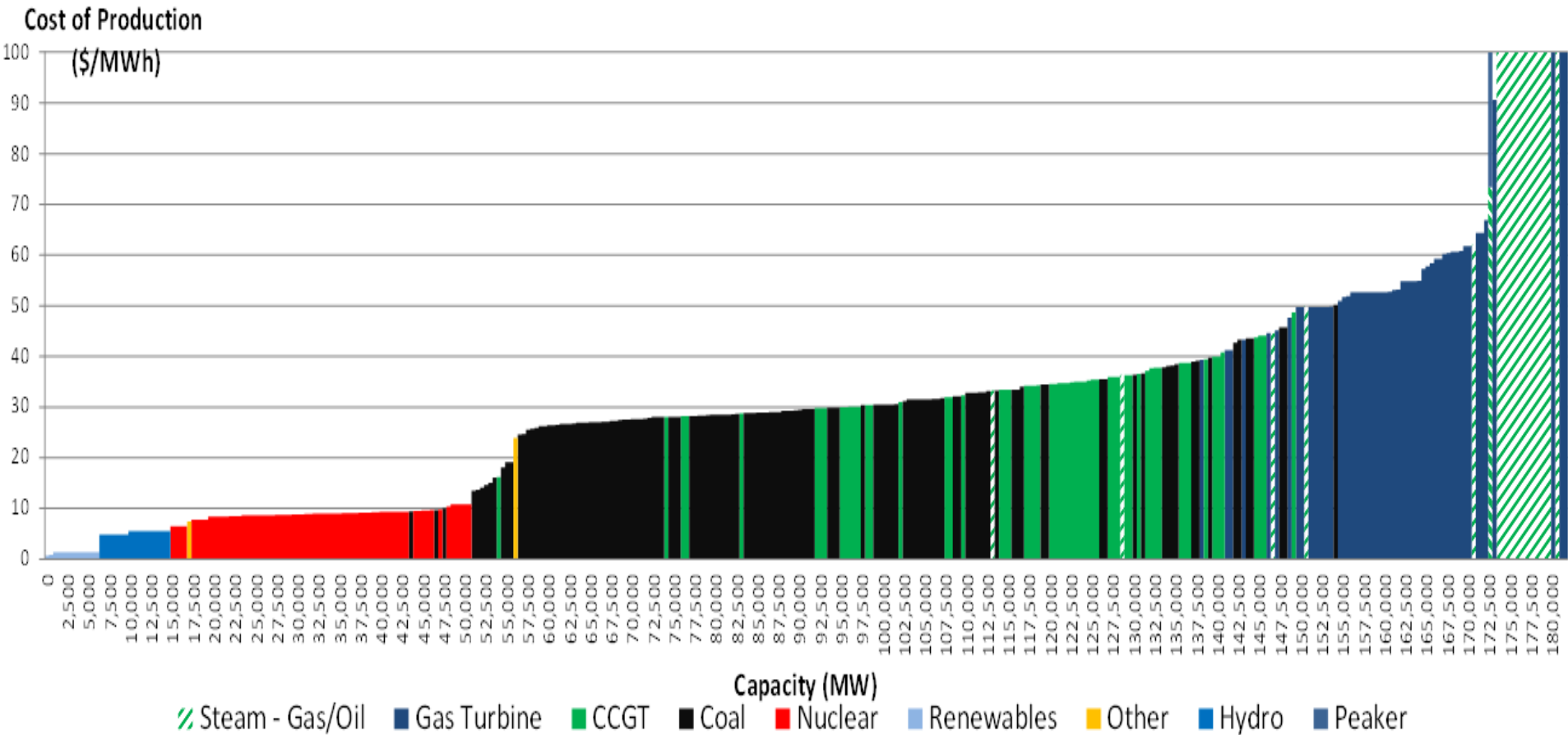
## U.S. Coal Plant Utilization (Remaining 270 gigawatts)



**2020: ~100 MST recovery from 2012 levels**

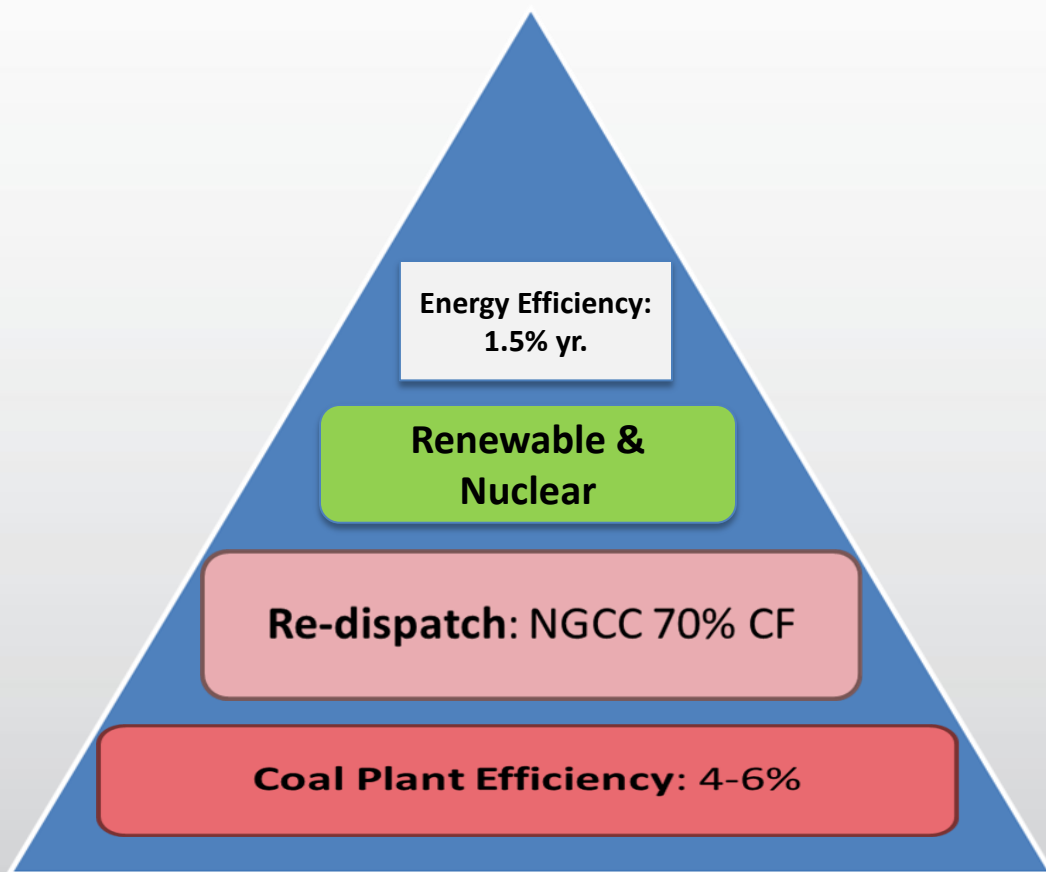
# Costly Power Plan: Restacking the Dispatch Curve

## PJM Stack Forecast 2015



# EPA Clean ('Costly') Power Plan

## Targets Firm—Building Blocks Weak



## Implausible Assumptions

- Low cost EE measures already in place; additional will be more difficult and expensive
- Renewable expansion exceeds all gov't projections and economic renewable potential in most states
- NGCC running at 70% CF exceeds historic avg.; infrastructure lags; additional pressure on NG prices
- Least efficient coal plants already retired; remaining plants operating at optimal efficiency; past rules will make plants less efficient due to retrofits.