



October 2013

BLACK & VEATCH EXPECTS GAS POWERED GENERATION TO DOUBLE IN THE NEXT 25 YEARS

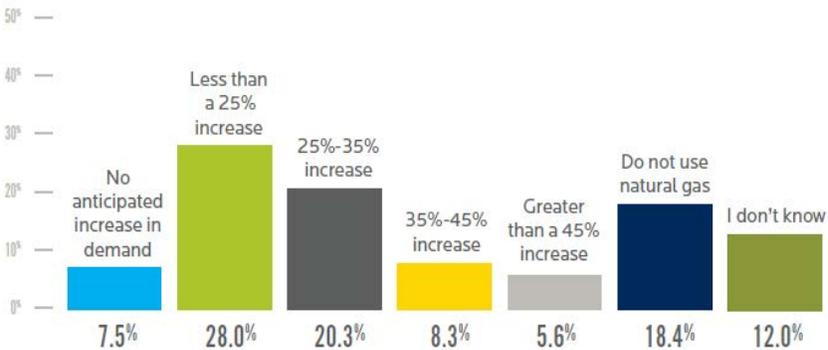
- Survey of utilities earlier this year 1/3 expect gas usage to increase by more than 25% by 2020
- Gas spot price for cold spell in Jan 2013 was \$37/MBTU NY & \$34/MBTU Boston
- Henry Hub price was \$4/MBTU
- Fuel Supply Planning



CLIENT: Reliance Power Limited
 LOCATION: Samalkot, Andhra Pradesh, India

NATURAL GAS – POWER GENERATION DYNAMICS

ANTICIPATED NATURAL GAS DEMAND INCREASES BY 2020



Category	Percentage
No anticipated increase in demand	7.5%
Less than a 25% increase	28.0%
25%-35% increase	20.3%
35%-45% increase	8.3%
Greater than a 45% increase	5.6%
Do not use natural gas	18.4%
I don't know	12.0%

Source: Black & Veatch
 Nearly one-third of utility respondents believe their organizations will have significantly greater (more than 25 percent) demand for natural gas to fuel power generation facilities by 2020.

To ensure high levels of electric service reliability and price stability, utilities must begin planning


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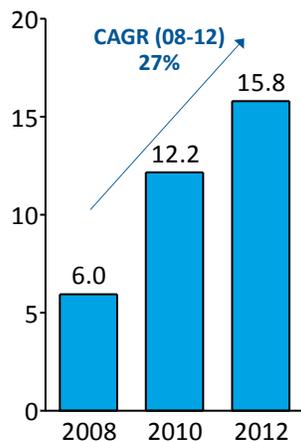
EXPORTING THE AMERICAN RENAISSANCE: GLOBAL IMPACTS OF LNG EXPORTS FROM THE UNITED STATES (DELOITTE, JANUARY 2013)

“The impact of U.S. LNG exports on U.S. citygate prices is projected to be minimal, only an average \$0.15/MMBtu from 2016 through 2030. Abundant North American gas resources mitigate the impact of demand changes, including exports. Vast shale gas resources, that are now economically viable due to technological advancements in recent years, have effectively caused the aggregate U.S. supply curve to flatten, representing greater supply elasticity.” (page 12)

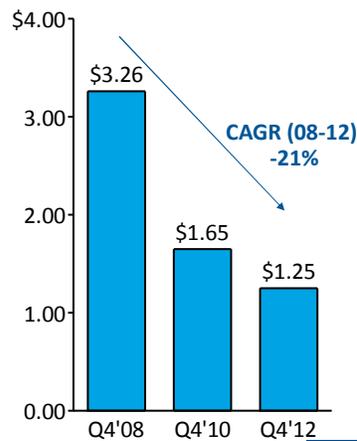


GLOBAL PV MARKET: VOLUME GROWTH COUPLED WITH DECLINING PRICES

Global PV Demand (GW)



Module Price (\$/Wp)



Source: Barclays Capital

MODULES



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DELIVERING SUSTAINABLE SOLUTIONS

- Fresh Water usage for generation will increase by 20% by 2020
- Renewable Generation 150% increase over next 25 years
- Will be 10% of all generation

