

## Safe Harbor Statement



The presentations used during the Investor Conference contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are subject to certain risks, uncertainties and assumptions and typically can be identified by the use of words such as "expect," "estimate," "should," "anticipate," "forecast," "plan," "guidance," "believe" and similar terms. Such forward-looking statements include our future growth and financial performance, commercial operations and repowering strategy, developments in renewables and the electric vehicle, timing and benefits of the Capital Allocation Plan, retail customer base, project development, and nuclear development. Although NRG believes that its expectations are reasonable, it can give no assurance that these expectations will prove to have been correct, and actual results may vary materially. Factors that could cause actual results to differ materially from those contemplated above include, among others, general economic conditions, hazards customary in the power industry, weather conditions, competition in wholesale and retail power markets, the volatility of energy and fuel prices, failure of customers to perform under contracts, changes in the wholesale and retail power markets, changes in government regulation of markets and of environmental emissions, our ability to receive federal loan guarantees, the condition of capital markets generally, our ability to access capital markets, unanticipated outages at our generation facilities, adverse results in current and future litigation, failure to identify or successfully implement acquisitions and repowerings, our ability to maintain successful partnerships, the inability to implement value enhancing improvements to plant operations and companywide processes, our ability to realize value through our commercial operations strategy, and our ability to achieve the expected benefits of our Capital Allocation Plan and Repowering NRG projects.

NRG undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. The foregoing review of factors that could cause NRG's actual results to differ materially from those contemplated in the forward-looking statements included in this Investor Presentation should be considered in connection with information regarding risks and uncertainties that may affect NRG's future results included in NRG's filings with the Securities and Exchange Commission at www.sec.gov. Statements made in connection with the exchange offer are not subject to the safe harbor protections provided to forward-looking statements under Private Securities Litigation Reform Act.

This presentation also includes non-GAAP financial measures of the Company's operating and financial results. For complete information regarding our non-GAAP financial information, the most directly comparable GAAP measures and a quantitative reconciliation of those figures, please refer to the Reg G disclosure included with the presentation materials on our website.

## Agenda



- NRG Today- Strength through Economic Downturn
- > Future- Green Growth
  - Nuclear
  - Carbon Capture
  - Renewables: Solar
  - □ Electric Vehicle
- Summary

## NRG: A Mutually Reinforcing Dual Strategy -



## Perfecting the current competitive power generator model in our core markets

**Priorities:** 

- 1. Focus on operational excellence
- Mitigate risk through optimal hedging of baseload and retail and retain optionality on gas fleet
- 3. Pursue traditional repowering of projects on existing sites in excess of WACC
- 4. Move on cash accretive opportunistic acquisitions well below replacement cost
- 5. Drive appropriate capital allocation

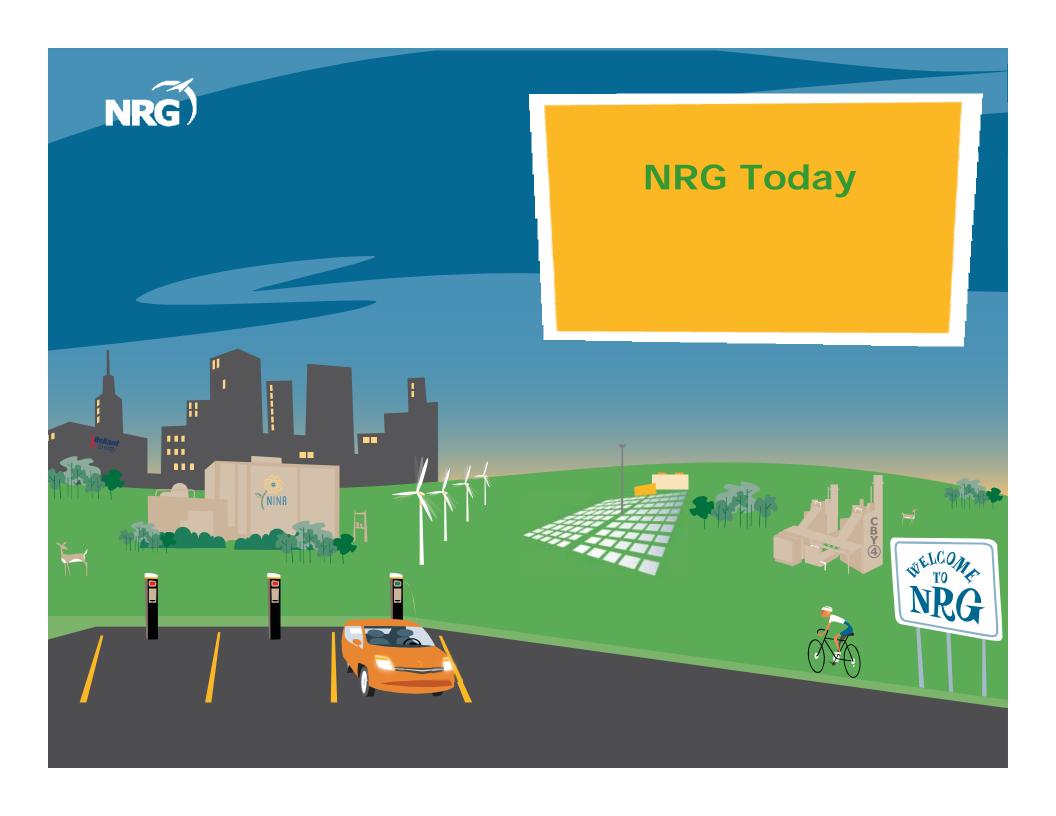
Transforming to a post-hydrocarbon provider of sustainable energy solutions ("Energizing Lifestyles")

#### **Priorities:**

- Low carbon baseload (primarily nuclear)
- Renewables... with a concentration in solar
- Fast start, high efficiency gas-fired capacities in each region
- 4. Electric Vehicle Ecosystems
- 5. Smart Grid Services

## Exploit Our Retail Advantage

NRG will perfect its core business while using the financial strength of that business springboard to become the first 21st century power company



## **NRG Financial Performance**



## **Key Financial Performance Indicators**









#### Notes

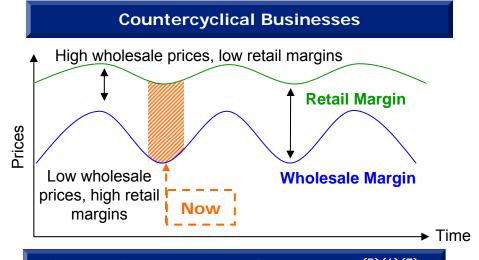
- 1) See Reg G's for detailed Adjusted EBITDA and Adjusted Recurring Free Cash Flow calculations
- 2) 2006 liquidity and cash balances include ITISA while 2008, 2009 and Q1 2010 exclude funds deposited by counterparties of \$760M, \$177M, and \$509M, respectively

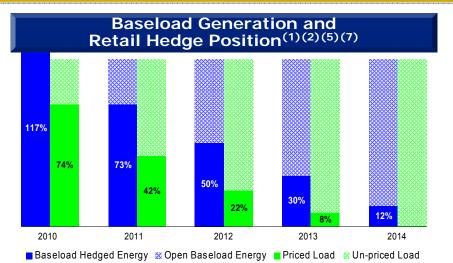


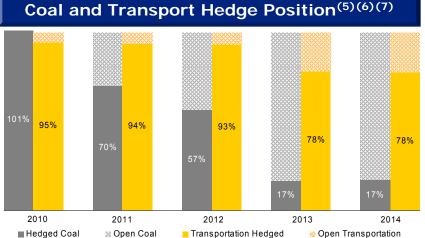


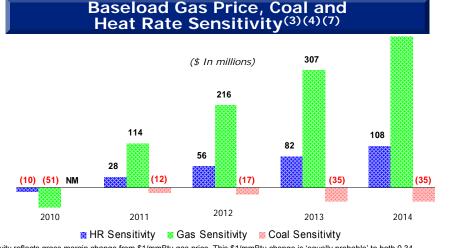
## **Managing Commodity Price Risk**











(1) Portfolio as of 4/16/2010. Data in 2010 is from May'10 to Dec'10; (2) Retail Priced Loads are 100% hedged; (3) Gas price sensitivity reflects gross margin change from \$1/mmBtu gas price. This \$1/mmBtu change is 'equally probable' to both 0.34 mmBtu/MWh move in heat rate as well as a \$1.465/ton move in PRB; (4) Sensitivities were based on hedge positions as of 4/16/2010; (5) Indian River unit 3 is assumed to be retired by the end of 2013; (6) Excludes coal inventory; (7) Q on Q changes due to revised portfolio dispatch estimates as well as incremental hedges

A five year forward hedge strategy to focus on optimizing earnings and cash flows during both down-cycles and up-cycles

## NRG's Texas Retail/Wholesale Combination Uniquely Advantages NRG Relative to Other Wholesale Power Generation Companies



\$300M

Ongoing long-term EBITDA<sup>(1)</sup> Reliant retail run rate largely driven by confidence with respect to retail sales volumes and margins, commercial synergies<sup>(2)</sup>, and implemented commercial and collateral risk mitigation

## Benefits of Retail/Wholesale Integrated Business Model

- I. Supply-Side Synergies
  - Credit Collateral
  - Transaction Costs
  - Gas & Ancillaries
- II. Premium Brand Competitive Advantage
  - Scale & Customer Mix
  - Leading Customer Provider
  - Infrastructure & Pricing Advantages

## Implied Value for Shareholders

Ongoing Reliant retail longterm EBITDA run rate

Implied equity value/share<sup>(3)</sup> at EBITDA multiples of:

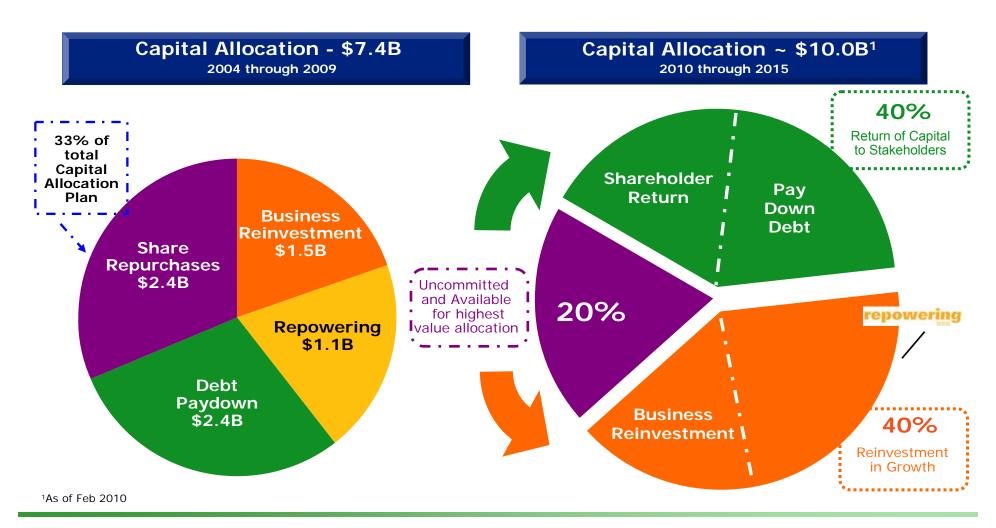
 $6x - 8x^{(4)} = ~\$7.00-\$9.00/\text{share}^{(5)}$ 

(1) EBITDA run rate for Reliant retail is provided on a segment basis and a projected annual basis; a reconciliation to Net Income or Cash from Operations, respectively, is not accessible on these bases; (2) Transaction cost savings of 1% of total supply costs and increased MWh sales; (3) Excludes Reliant retail purchase price of \$370MM (including working capital); (4) Based on sell side equity research multiples assigned to standalone merchant wholesale generation business; (5) Calculated by dividing by the 255 million common shares outstanding as per the Company's Form 10-Q filling dated May 10, 2010

NRG's integrated business model for Texas warrants at least a full merchant multiple, if not a premium

## Financial Overview: Past and Future 6 Years





A "balanced" and "value optimized" Capital Allocation Plan that is weighted towards that which provides greatest shareholder return

## NRG Today: Well Positioned vis-a-vis All Fundamentals



Market Perceived  "Industry Risks"	NRG Position	Details
Prolonged slump in electricity demand	<ul> <li>High growth Texas is our core market</li> </ul>	<ul> <li>1500 people move to Texas every day</li> </ul>
Expensive future environmental regulation of coal plants	<ul><li>"All coal plants are not created equally"</li></ul>	<ul> <li>Bigger, newer and lower emissions than most coal portfolios</li> </ul>
Federal legislation requiring exchange trading of derivatives	<ul><li>Multiple mitigants</li></ul>	<ul> <li>✓ End user exemption allows continued use of first lien</li> <li>✓ Wholesale-Retail physical hedge</li> </ul>
Natural gas is so abundant and easy to fund and produce it will be almost free forever	<ul> <li>Diversified EBITDA increasingly not correlated to natural gas prices</li> </ul>	<ul> <li>✓ Retail (inversely correlated)</li> <li>✓ Renewables (not correlated)</li> <li>✓ Electric Vehicles (inversely correlated)</li> <li>✓ EOR (inversely correlated)</li> </ul>
Wall Street still too weak to support a capital intensive sub-investment grade industry	<ul><li>Financial strength</li></ul>	<ul><li>✓ Record Liquidity</li><li>✓ First lien structure supports hedging</li></ul>



A Solid Foundation to Build on For the Future





## NRG Business Strategy and Path to Transform...



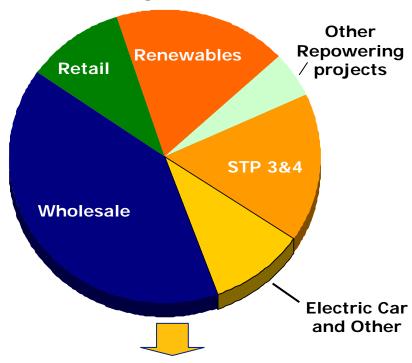
## NRG Today<sup>1</sup>

~\$1.6B/year of Recurring Free Cash Flow



#### NRG "Tomorrow"<sup>2</sup>

~\$2.5B-\$3.0B/year of Recurring Free Cash Flow



...A free cash flow machine tied to capital, carbon and commodity (natural gas) prices...

o ...A free cash flow machine increasingly driven by services, systems and the sun

<sup>1</sup>Based on 2009 results

<sup>2</sup>Not intended as guidance

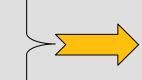
Grow Our Company/Reduce the Systemic Risks in Our Business

## The New 2010 Energy & Climate Policy Dynamic



## Bi-partisan goals

- Energy security
- Clean technology jobs & leadership
- Healthy environment



A 3-part "no regrets" legislation strategy:

#### **Carrots**

## 1. Rehab our imported oil habit

- Safe Domestic Drilling Program
- Electric Vehicle Infrastructure Roll-out for light cars & trucks
- Clean Natural Gas for heavy transport

## Carrots

- 2. Clean Energy Stimulus
- Nuclear loan guarantees & expedited licensing
- Clean Energy Portfolio Standard
- CCS subsidies
- Clean, fast-start gas

## Sticks

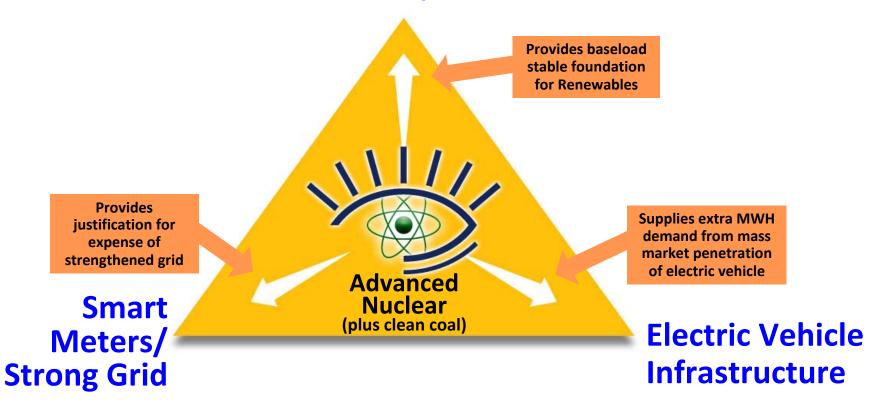
- 3. "Clean up" our Carbon
- Key sector carbon caps
- Flexible compliance exchange
- "No windfall" allocations
- Efficiency standards
- EPA preemption

If Congress cannot act, we are also ready for EPA's Clean Air Act approach

## Nuclear: A Clear Winner in Washington



## **Renewables/Fast Gas**



Nuclear plus the points on the pyramid, are each market opportunities worth hundreds of billions of dollars over the next 30 years in the United States alone

Nuclear is the foundation for the zero-emission energy system of the 21st century

# STP 3&4 Nuclear Development Partnership Structure Overview







- ✓ One of the Largest Nuclear Power Plant Operators in the World
- Development, Construction, Commissioning and Operating Experience
- ✓ Highly Skilled Workforce for Essential Training
- ✓ Financial Strength and Financing Capabilities
- ✓ Interface Strength with Counterparties and Contractors

### **STP 3&4 Project Merits**

- Only Project Using a Certified Design
- One of Five Lead Projects for Review at the NRC
- ☑ One of Four Projects in DOE Loan Negotiations
- Only Project in Substantive Discussions for Japanese Co-Financing
- One of Three Projects with Fully Negotiated and Signed EPC
- Best Site for New Nuclear in the United States



## Capability

- ✓ Licensing Expertise
- ✓ Financing Expertise
- Partnering and Offtake Relationships
- ✓ Development Expertise
- Additional Optimization Opportunities



40 Years of BWR Construction Experience

Capability

- ✓ Committed Capital
- ✓ Existing Manufacturing Supply Chain
- Modularized Design Engineering and Construction
- ✓ Positive Subcontractor Relationships



**South Texas Project 3&4** 



TEPCO partnership strengthens and enhances STP 3&4 project development in multiple direct and indirect ways

# Terms and Implications of TEPCO Partnership in STP 3&4 Nuclear Development

### Initial Investment

- TEPCO injects \$125 million of cash for a 10% interest in NINA Holdings (9% of project)
- TEPCO also pays \$30 million to NINA for a call option on an additional 10% stake in Holdings to be exercised one year from the initial closing date
- TEPCO will cover 10% of capital calls as required

## Call Option Exercise

- TEPCO injects \$125 million of cash for an additional 10% interest in Holdings (cumulative 18% of project)
- TEPCO also makes a true-up payment representing 10% of project costs incurred between initial closing and option exercise
- TEPCO will cover 20% of capital calls as required

#### **Benefits**

- Enhances project with strong credit counterparty and nuclear expertise
  - TEPCO is one of the largest electric utilities in the world
  - TEPCO is the largest owner and operator of ABWR facilities in the world
- Reinforces and substantiates NINA and STP 3&4 valuation
- ✓ Diversifies equity funding sources
- Strengthens Japanese financing potential



Top Tier partner further enhances likely success of STP 3&4 and demonstrates project value to NRG equity



## Gating Issue: STP 3&4 Federal Loan Guarantee



- Loan guarantee is entering final stages
  - Ownership issue resolved
  - Union agreement signed
  - Due diligence complete
  - Term sheet in negotiation
- Remaining process is inside the Washington government
  - DOE Credit Committee and Credit Review Board approval
  - OMB, Treasury and White House signoff
- Two projects at same place in process
  - STP and Calvert Cliffs

- Support within US government for both projects is strong
- Obama Administration has proposed massive increase in nuclear loan guarantee for next budget cycle



- ? Timing Issue: money is not fully appropriated <u>now</u> and neither Constellation nor NRG is in a position to keep going through to next budget cycle:
  - Revise interpretation of EPACT 2005
  - Special Appropriation
  - Reallocate funds available within DOF

We remain highly confident but uncertainty remains and time is running out

## **DOE Outcomes: Alternative Scenarios**



#### If Loan Guarantee Received By NINA

### **Description:**

- STP 3&4 receives second loan guarantee; or,
- STP 3&4 and Calvert Cliffs both receive loan guarantees

#### Our Plan:

- Maintain reduced spend plan
- Seek additional partners in 2010 to strengthen project and mitigate cash flow requirements to NRG
- Finalization of JBIC/NEXI loans
- Explore possibility of Pre-COL funding from Japanese Government

### If Unfavorable Outcome or Uncertainty

### **Description:**

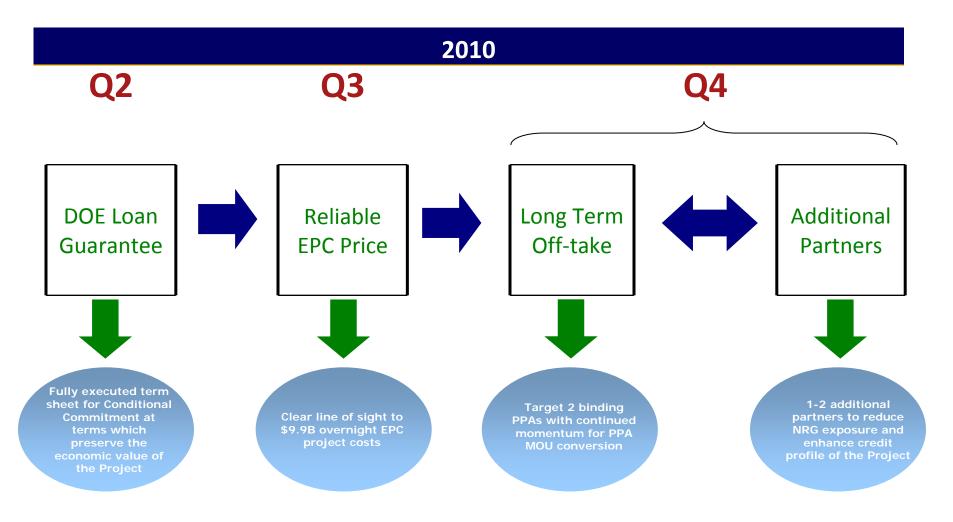
 Either Calvert Cliffs receives second loan guarantee, DOE does not issue second loan guarantee or DOE issues partial loan to both combined with future promise

#### Our Plan:

- Cut project spend to ZERO (including immediate suspension of all external spend)
- Evaluate partner's interest in continuing the project with limited support from NRG (NRG ownership dilution)
- In worst case, seek to monetize value of the intellectual property owned by NINA

## 2010: Critical Path





Significant Milestones with Clearly Demarcated Exit Ramps

## **WA Parish Carbon Capture Project**



### **Project Highlights**

#### **Description**

- 60 MW post-combustion carbon capture unit on 600+ MW WA Parish Unit 7 near Houston
- Capacity to sequester 400,000 MT CO2 per year

#### **Technology**

- Fluor Econamine FG + capture technology
- Small co-generation unit will supply steam
- Sequestered CO2 to be used for enhanced oilfield recovery in Houston area

#### **DOE Support**

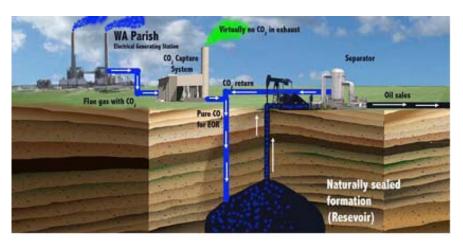
- Newly upsized \$167 million Clean Coal Power Initiative Grant
- DOE will match NRG up to the amount of the grant

#### **Timing**

- Initial engineering study starts in the summer
- Operation Date: 2013

## **Project Objectives and Benefits**

- Demonstrate feasibility of utilityscale carbon sequestration project
- Prove that use of captured CO2 in enhanced oilfield recovery provides commercially significant revenue stream



Establish NRG as a leader with first mover advantage in Clean Coal

# Renewables: The Highest Growth Segment of the Power Industry Today



## Why NRG?

- ✓ The only certain high growth segment of the power generation business
- ✓ The key to changing the PERCEPTION of NRG and our plants
- ✓ An avenue to extend the life of our existing fossil plants through connected (firming) deals
- Firmly engages NRG with public policy dynamics that control the destiny of NRG and the power industry more generally
- An obvious business opportunity, given NRG's distinct competitive advantage:
  - Exceptionally strong liquidity
  - An appetite for tax equity near term
  - Conventional assets in renewable resource-rich markets (CA, TX) for firming
  - Good reputation for reliability and honest dealing
  - Regional support infrastructure

## Why Now?

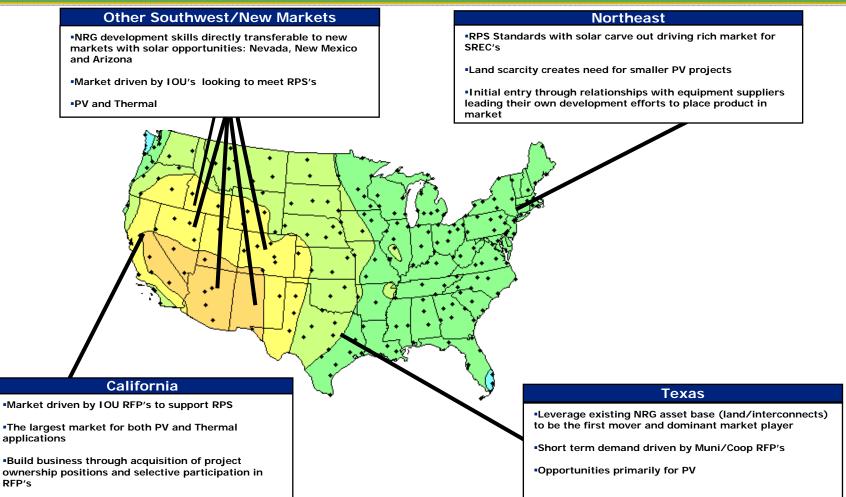
- Industry shakeout
- Technological advancement
- States' RPS driving availability of longterm offtake agreements
- ✓ Manufacturing glut
- LSEs anxious and able to satisfy their future RPS obligations sooner rather than later
- ✓ Investment tax credits and accelerated depreciation

A "Perfect Storm" of Advantageous Conditions for NRG to act as First Mover

## \*Market is National in Scope, but **Approach Varies by Region**

RFP's





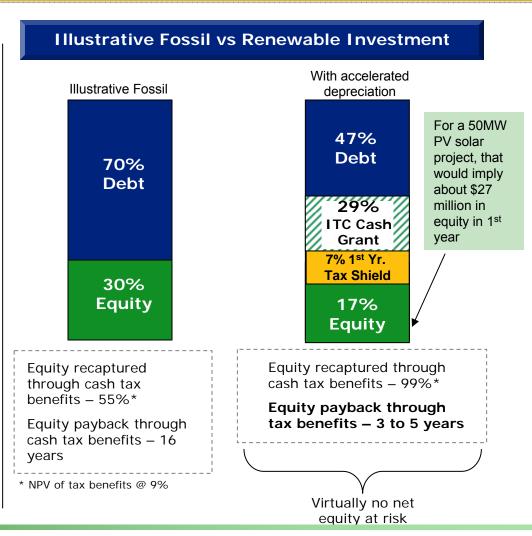
Note: Resource map is for Solar Thermal; PV resource map would show better resources more broadly across Midwest, central and Eastern US since PV can use diffuse sunlight as a resource (thermal needs direct sunlight)

~500 MWs of opportunities that could break ground in 2010 and are eligible for the ITC grant

## **Economics of Solar**



PV vs Solar Thermal					
Type of solar technology:	Solar Thermal	Solar PV			
Cost/kw	\$4500- 5000/ kW	\$3000 - \$3300 /kW			
Scale	100-500 MW	kWs-500 MW			
Capacity Factor	20% – 25%	15% – 25%			
Construction	24-36 months	6-9 months			
Technology Advantage	Thermal inertia – less disruptive to grid	Can supply energy even with poor solar resource			
Non – Recourse Financing (~ 45 -50%)	Requires DOE loan guarantee for newer technologies	Traditional project financing			
Levered Returns	Mid-to-high teens	Mid-to-high teens			



Protecting equity and accelerating paybacks

#### **Electric Vehicles: A Future of Untold Potential** NRG for the American Power Industry Northeast Stats • 58 million people 45 million cars · 100,000 Square Miles **Midwest Stats California Stats** · 4 of 15 Largest Cities 27 million people • 37 million people • 1 of 10 Largest Ports 23 million cars 31 million cars 90,000 Square Miles 60,000 Square Miles · 2 of 15 Largest Cities · 2 of 15 Largest Cities · 2 of 10 Largest Airports · 2 of 10 Largest Airports · 1 of 10 Largest Ports 15 **Texaplex Stats** • 24 million people 20 million cars • 75,000 Square Miles 2 of 15 Largest Cities Florida Stats • 1 of 10 Largest Airports 4 of 10 Largest Ports 17 million people **Potential Totals** 14 million cars · 25,000 Square Miles • 163 million people **Step One: Intra-City Footholds** 1 of 15 Largest Cities · 133 million cars · Objective: 10% new sales by 2012 350,000 Square Miles **Step Two: Regional Footholds** 11 of 15 Largest Cities 5 of 10 Largest Airports · Objective: 15% new sales by 2015 20% new sales by 2020 6 of 10 Largest Ports

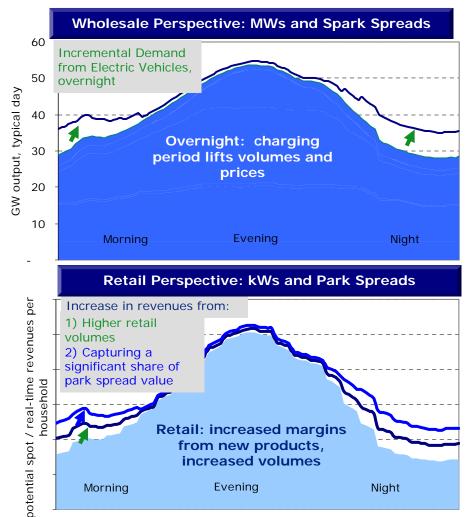
EV ecosystem present a large, multi-region growth opportunity

**Step Three: National** 

· Objective: 30% new sales by 2030

## **EV Opportunity for NRG Wholesale** and Retail





### Wholesale: Electric Vehicle Drives Greater Demand and Higher Prices

- Need more generation to charge vehicles as EV market share increases
- Higher volumes support prices (energy and capacity)
- Higher prices drive increased spark and dark spreads

### Retail: Capture the Park Spread

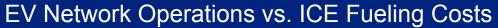
- Higher demand and new service models lead to increased energy sales and retail opportunities
- Retail sales volumes rise as EV market shares increase: US switches from petroleum to electric fueled fleet
- EV network operator captures the value of providing EV charging infrastructure and services for home and highway: Earn park spread on these assets.
- The park spread beats traditional retail margins—a high-volume, high-margin business

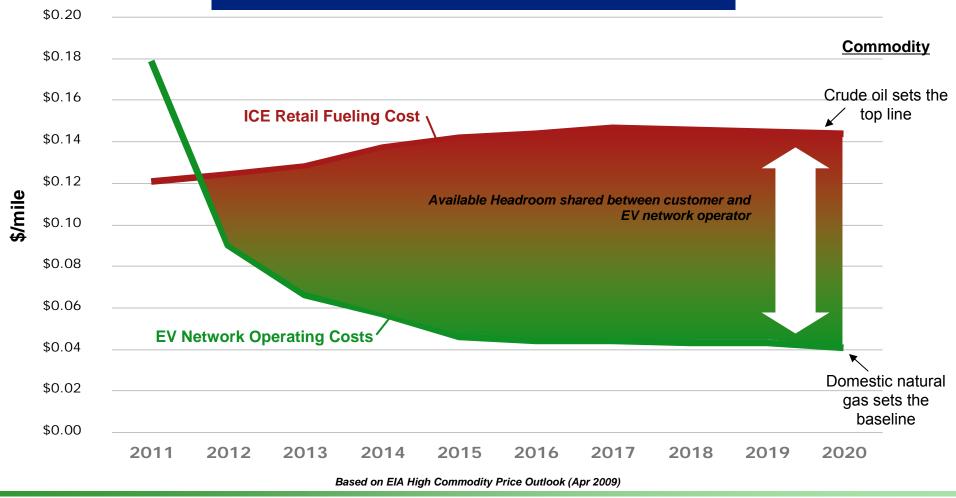
Note: Source: NRG Research, ERCOT, Electrification Coalition. "Typical" day in ERCOT shown. Assumes fully deregulated service territory. Spot revenue per customer shown: actual revenue will be based on a fixed bundled package rate including cost to provide capacity and energy services and charging infrastructure.

EV will benefit retail and wholesale margins and generate EBITDA across the business

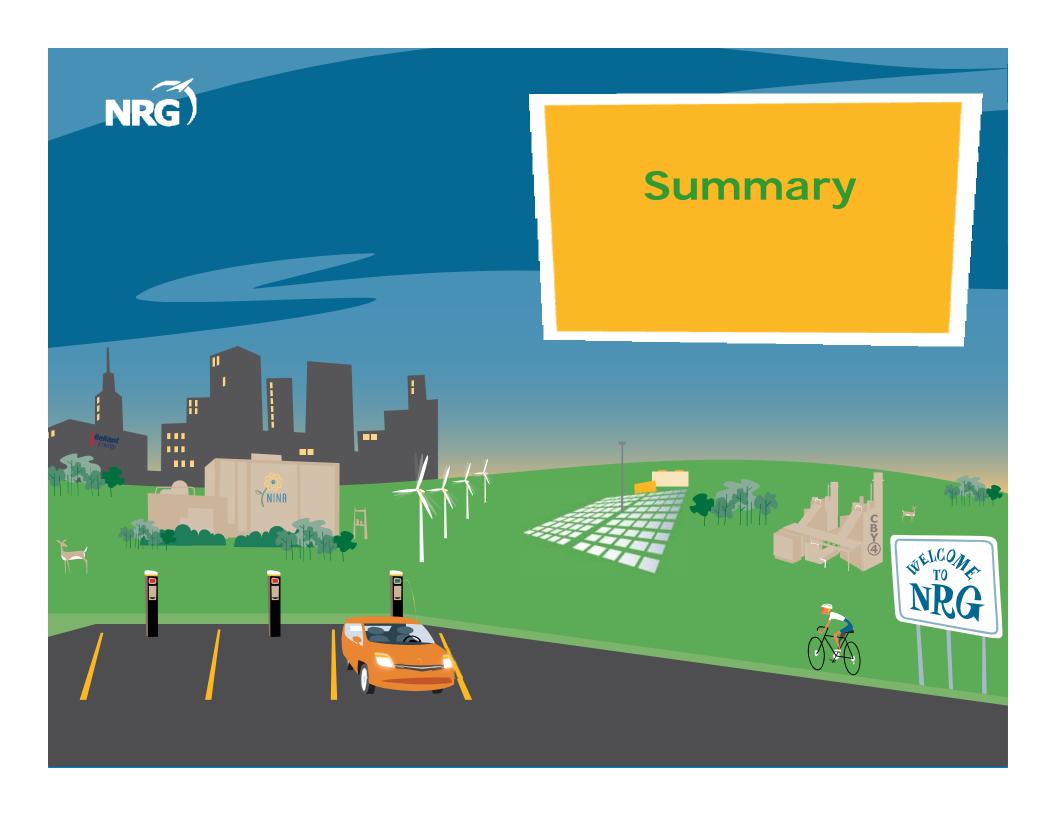
## **EV Network Operator Margin Opportunity**







A high margin, high volume profit opportunity



## **Shareholder Value at NRG**



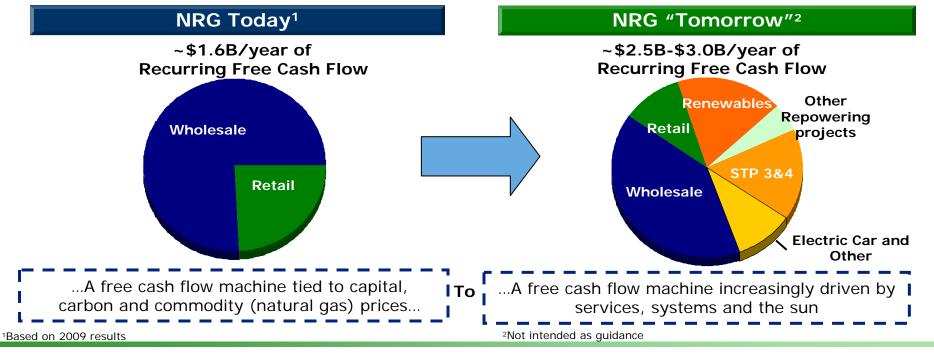
## A Simple Equation:

Less Commodity Exposure

Less Capital Intensivity

Less Carbon Exposure

= More Cash

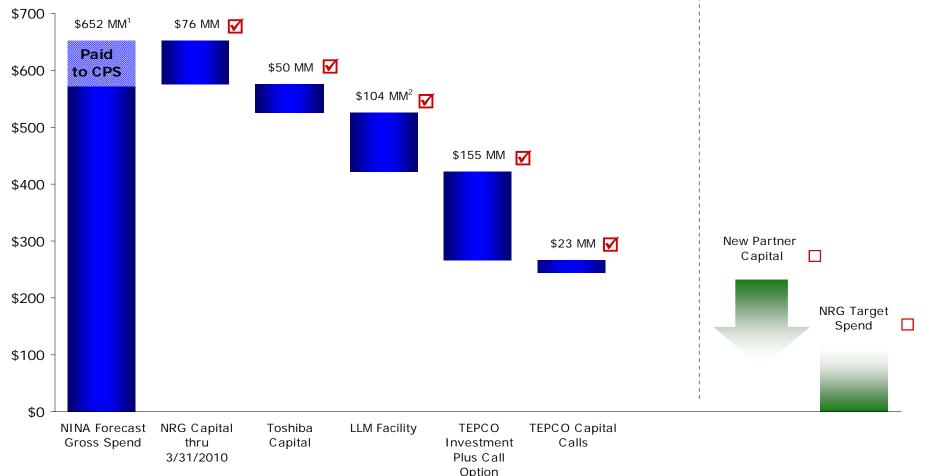


A Future of Enormous Promise



## 2010 Estimated Spend (with Loan Guarantee)





<sup>&</sup>lt;sup>1</sup> Excludes \$8 million to San Antonio's Residential Energy Assistance Partnership, \$652 million of gross spend equals \$634 million of cash CapEx and \$18 million of expenses

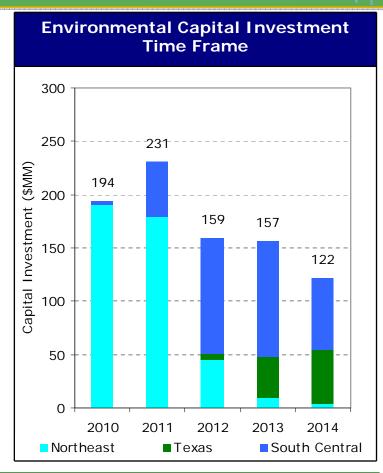
With loan guarantee success, much of 2010's remaining cash requirement is funded apart from NRG

<sup>&</sup>lt;sup>2</sup> Net of RBS \$20 million facility pay off

## **Environmental Capital Plan Today...**



Region	Current Air Controls	Budgeted	Control Design
Northeast	Multi-pollutant (SO <sub>2</sub> , NOx, Hg) controls	Enhanced Controls for IR4; Retire IR 1-3 2010-2013 NY State 316(b) mitigation NOx controls for certain gas units	✓ CAIR <sub>orig</sub> ✓ Hg MACT ✓ State Req
Texas	Parish: SCR, FF, 1 scrubber, low S fuel, SO <sub>2</sub> FF co- benefit Limestone: LNB/OFA, scrubbers, ESP	All: ACI Limestone: SNCR Bertron & Cedar Bayou: 316(b)	✓ CAIR <sub>orig</sub> ✓ Hg MACT ✓ State Req
South Central	Big Cajun: LNB/OFA, low sulfur fuel	Big Cajun: ACI, FF, SO <sub>2</sub> FF co-benefit	✓ Hg MACT



**Legend:** ACI- Activated carbon injection SNCR- Selective non-catalytic reduction

FF- fabric filter

LNB/OFA- Low NOx burners with overfire air

SCR- Selective catalytic reduction

NRG plan optimizes balance between capital, fuel switching, operational controls and emissions allowances

## ...and Yet Undefined Rules of Tomorrow



## Worst Case Est. Incremental Capex from Revised or New Regulation

#### CAIR, 2014-2020 and MACT, 2015-2016

- Worst case: MACT for acid gases on every unit
  - NRG worst case MACT: scrubbers on ~1900 MW at WA Parish and ~1500 MW at Big Cajun
  - A significant portion of Big Cajun II 1&2 costs can be recovered

#### **NRG Base Case View**



#### Rulemaking

SO2 CAIR 2010 or acid gas MACT 2011

#### Mitigation

- Some incremental capital investment
- Relatively low emission rates, operational flexibility e.g. duel fuel, biomass co-firing
- Emissions averaging where permitted
- Control technology improvements

#### Once-through Cooling- 316(b), 2011-2020

Big Cajun II Unit 3, Encina and El Segundo to determine once through cooling mitigation



#### Rulemaking

> EPA and CA 2010

### Mitigation

Mix of repowering, operational mitigation and capital investment

#### Coal Combustion Residue (2011-2020)

Dry landfill design changes



#### Rulemaking

CCR 2010

#### Mitigation

Dry disposal techniques in place; design changes as new cells are opened

Worst Case: Approximately \$0.9-1.0 billion

Base Case ≠ Worst Case

Future environmental investments, under the strictest scenarios, are manageable for larger, newer units at NRG

## **Existing Clean Tech Funding Opportunities**



Program	Total \$ Available	NRG Projects	Status
ITC/Cash Grant	Open ended – based on eligible projects*	Langford Wind, Blythe Solar, Montville Biomass	Applied for cash grant for Langford and Blythe
Smart Grid Grant	\$3.4 billion	Reliant Smart Grid	Reliant awarded \$20 million grant in March
Clean Coal Power Initiative	\$750 million+	WA Parish Post- Combustion Carbon Capture	Awarded \$167 million grant in May
Innovative Loan Guarantee – Nuclear	\$18.5 billion of loan guarantee authority	STP 3&4	One of four projects chosen for further due diligence
Innovative Loan Guarantee – Renewable	\$>15 billion of loan guarantee authority (two solicitations)	Bluewater Wind, eSolar New Mexico	eSolar, Bluewater applying under current solicitation
Advanced Vehicle Loan Program (i.e. electric car)	\$25 billion	Various projects NRG is indirectly interested in	In progress
REC markets from States and possible federal RPS	Varies	NE and LA Biomass co- firing; e-Solar; PV development Offshore Wind	Projects at various stages of development

<sup>\*</sup> ITC for wind available through 2012 and biomass through 2013; cash grant (in lieu of ITC) only available for projects under construction by end of 2010

"Green" money from Washington available to first movers

