NRG's Nuclear Development Strategy: Accelerating Value Creation for Shareholders

Nuclear Innovation North America LLC

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Safe Harbor

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All Development Is Risk Management

Project Risks

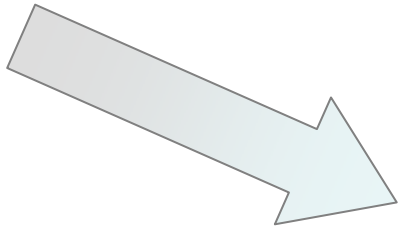
- Technology / First-of-a-kind Engineering
- Licensing
- Unit Cost
- Supply Chain
- Labor Supply
- Financing
- Construction
- Operations
- Fuel Sourcing
- Power Sales
- Transmission Access
- Water Supply
- Local Opposition

If possible, eliminate

- Technology / First-of-a-kind Engineering
- Supply Chain
- Operations
- Fuel Sourcing
- Transmission Access
- Water Supply

If you can't eliminate, get someone else to hold

- Construction
- Financing
- Power Sales



If you can't get rid of it, minimize it and get paid for holding it

- Licensing
- Unit Cost
- Labor Supply
- Local Opposition

NINA Has Managed Its Risk

If possible, eliminate

- Technology / First-of-a-kind Engineering
- Supply Chain
- Operations
- Fuel Sourcing
- Transmission Access
- Water Supply

→

- ✓ Selected ABWR
  - ✓ Built 4 times
  - ✓ 7 more on order
- ✓ World Class Operator at site
- ✓ Transmission incentivized by ERCOT
- ✓ Site has water for four units

If you can't eliminate, get someone else to hold

- Construction
- Financing
- Power Sales

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- ✓ Completed robust EPC contract with Toshiba
- ✓ Selected for Negotiation for U.S. loan guarantee
- ✓ Potential secondary loan source from Japan
- ✓ 100% of net offtake under PPA MOU

If you can't get rid of it, minimize it and get paid for holding it

- Licensing
- Unit Cost
- Labor Supply
- Local Opposition

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- ✓ Selected design previously certified by NRC
- ✓ Unit cost in "open book" period, but fixed price at Full Notice to Proceed
- ✓ Access to robust gulf coast labor market
- ✓ Highly supportive state and local population

Successful Nuclear Development: The NRG Way

- ★ The Right Technology
- ★ The Right Partner
- ★ The Right Financing Strategy

Maximum economic benefit for minimum risk

The Right Technology: Advanced Boiling Water Reactor (ABWR)

ABWR is the most viable approach to new nuclear

	Our Choice ABWR	ESBWR	AP1000	EPR
Manufacturers	GE, Hitachi, Toshiba	GE	Westinghouse	AREVA
Unit Size	1,350	1,600	1,000	1,600
Reactor Design	Boiling Water Reactor	Boiling Water Reactor	Pressurized Water Reactor	Pressurized Water Reactor
NRC Certified Design	Yes	No	Yes	No
Status of Design Engineering	Completed except for site specific changes	In Progress	In Progress	In Progress
Units Commissioned / In Operation	4	0	0	0

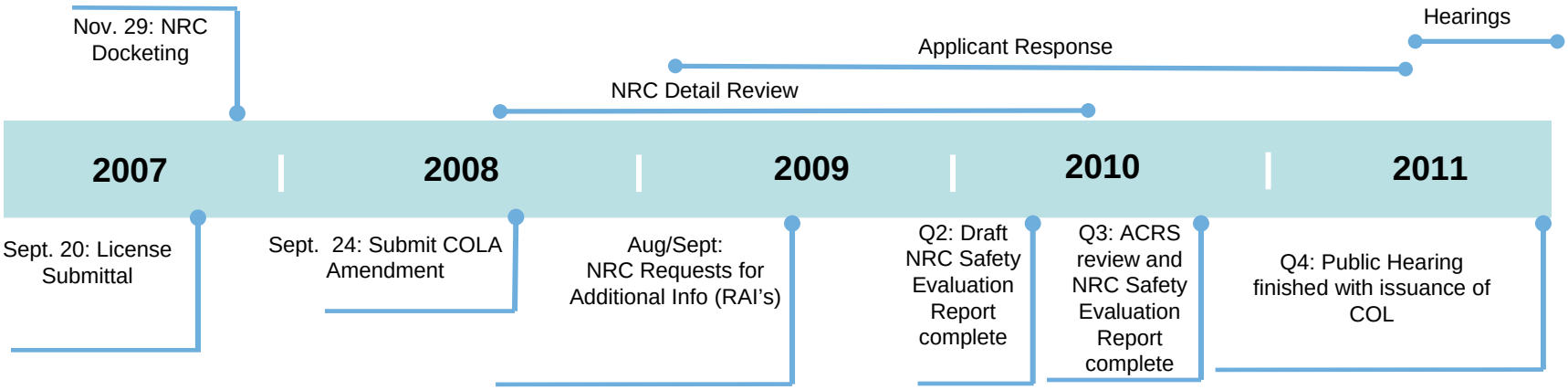
- ✓ Already certified by NRC
- ✓ Four units successfully commissioned
- ✓ Design is complete
- ✓ Dependable construction schedule & supply chain

ABWR technology has been commercially deployed for 10 years in Japan with plants built “on time and on budget.”

Proven Design: Timely Construction, Flawless Operation

The Right Technology: Proven and NRC Pre-Certified Technology Enhances Path for STP 3&4 Licensing Schedule

Anticipated Timeline and Process for Licensing



- The NRC published a revised schedule for STP 3&4 on February 11, 2009
- The new schedule is consistent with NINA's previously anticipated build schedule
  - Early 2012 COL, with favorable hearing schedule
  - Leading to Full Notice to Proceed in early 2012

Licensing aspects of the project remain on schedule

The Right Partner: Toshiba Well-Positioned to Export its Successful Track Record from Japan to US

Development Capability

- ✓ Licensing Expertise
- ✓ Financing Expertise
- ✓ Partnering and Offtake Relationships
- ✓ Continued Funding of Development Efforts
- ✓ Additional Opportunities
- ✓ Existing Development Program

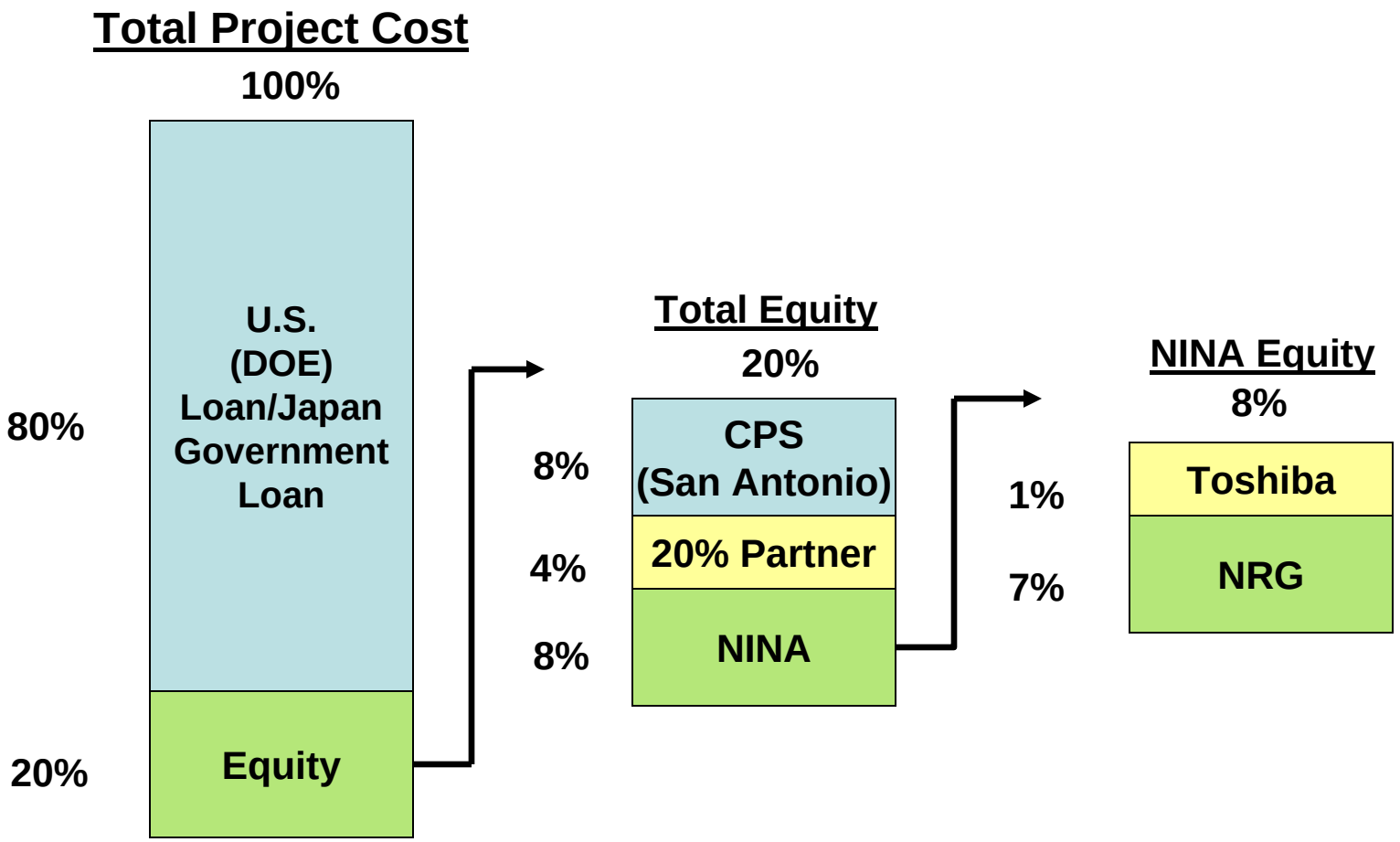
Nuclear Innovation North America LLC

EPC Capability

- ✓ 40 Years of BWR Construction Experience
- ✓ Committed Capital
- ✓ Existing Manufacturing Supply Chain
- ✓ Modularized Design Engineering and Construction
- ✓ Positive Subcontractor Relationships

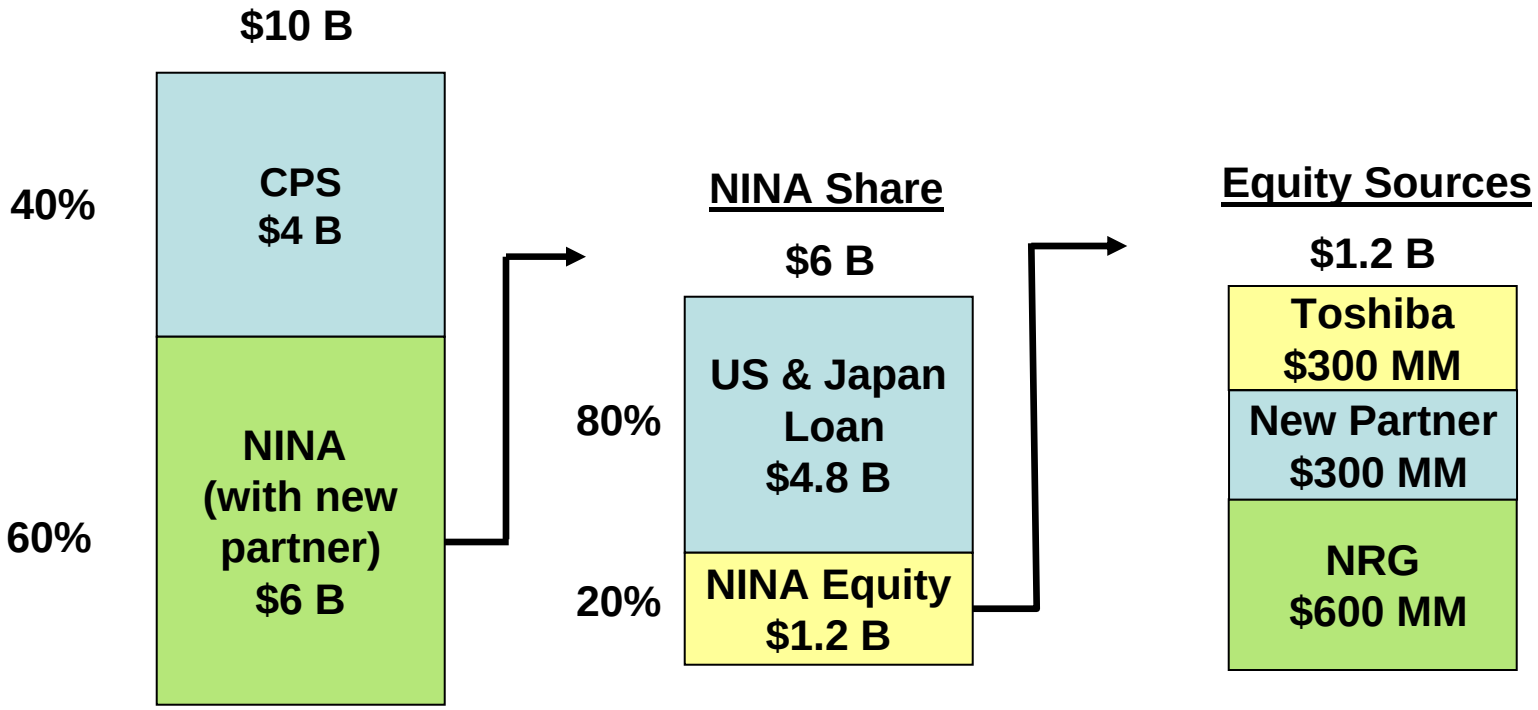
NRG and Toshiba - A Powerful Partnership:
Bringing Innovation to Nuclear Generation

The Right Financing Strategy: STP 3&4– Limiting Impact on NRG Balance Sheet



Manageable within existing capital allocation program

More Specifically, What Is NRG's Downside Before COL?



The addition of an additional partner further manages NRG's cash commitment and pre-COL risk

The Right Strategy: Offtake Certainty

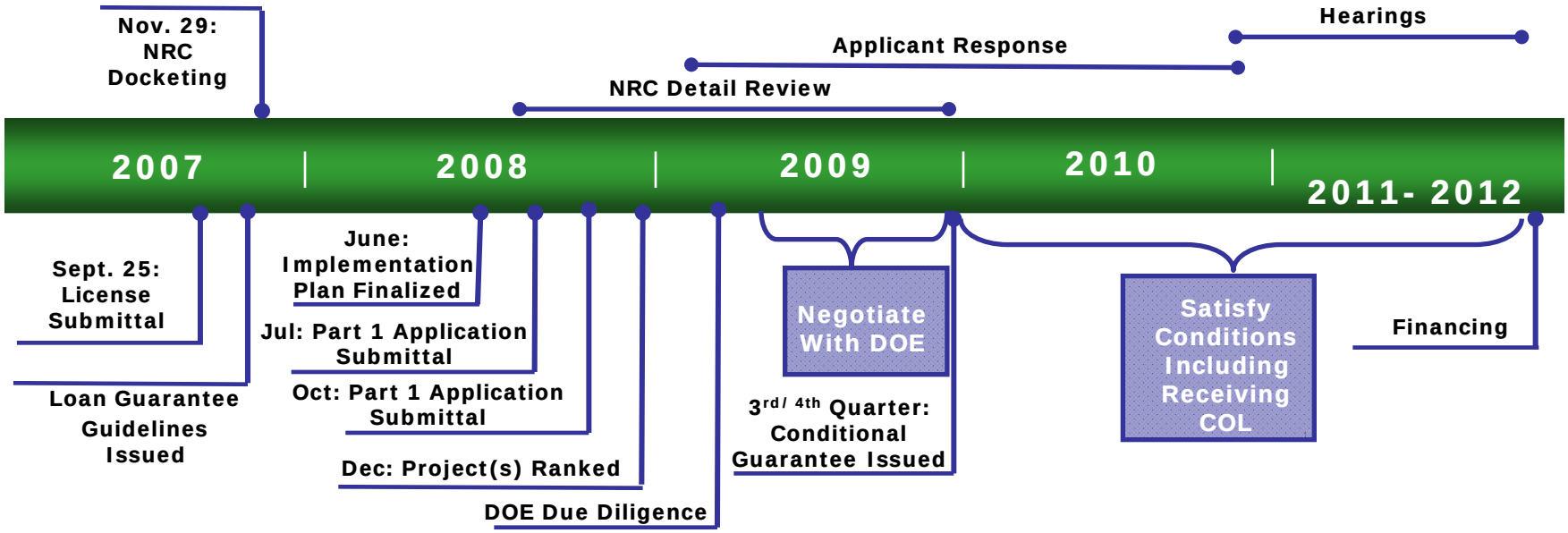
AA+ municipal utility serving its own load

MOUs representing 1,600 MWs (> 100% of available capacity)

- **Mix of industrials and load serving entities**
- **Average credit rating is single-A**
- **Several additional counterparties have also shown interest in capacity**

NINA has MOUs for significantly greater than 100% of its net ownership of STP 3&4

The Right Financing Strategy: STP 3&4 Financing Timeline



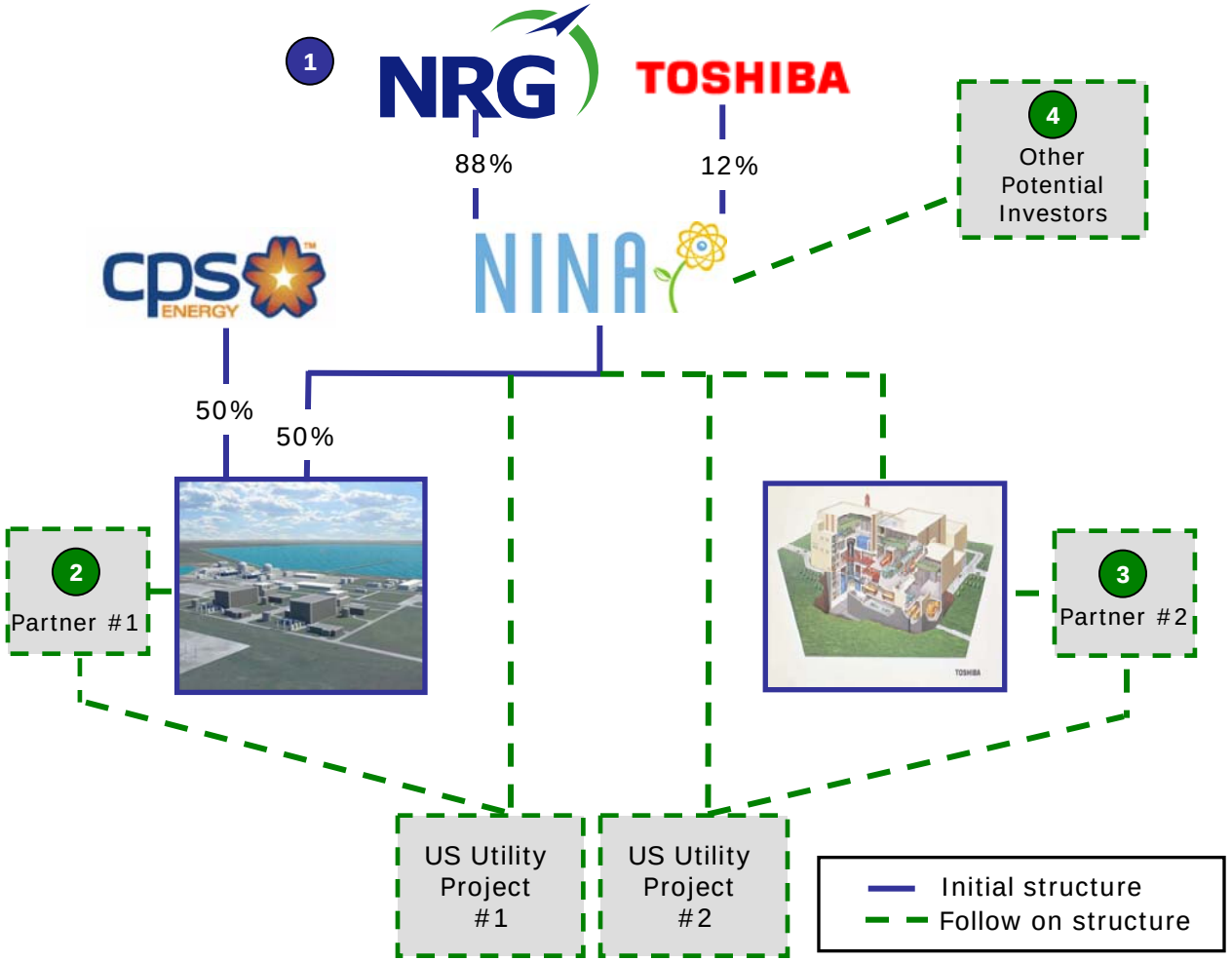
- "Top Tier" for Department of Energy Loan Guarantees
  - Notified in December
  - DOE commenced due diligence in January 2009
  - Selected NRG's STP 3&4 as one of four sites for final term sheet and due diligence (anticipated decision by 4th quarter 2009)
- Due Diligence by Japanese financing agencies in progress
  - Important step in Japanese loan support

STP 3&4 is well positioned to receive support from both U.S. and Japanese governments

The NRG First Mover Nuclear Advantage: NINA's Multi-Unit ABWR Strategic Step Structure

Long Term Strategy

1. NRG contributes its STP 3&4 interest and development rights and Toshiba contributes $50 million cash upon Nuclear Innovation North America closing with an additional 5 annual installments, totaling $300 million
2. Leverage assets and expertise of Nuclear Innovation North America into a participation interest in another ABWR project
3. Nuclear Innovation North America and partners begin additional 2 unit nuclear site developments
4. Additional third party investors can be added to fund cash requirements



Note: the current ownership of STP 1&2 (44% NRG, 40% San Antonio and 16% Austin) remains unaffected by the development of STP 3&4 and the creation of Nuclear Innovation North America.

Focus on advancing and leveraging the ABWR design

How Do We Think About Value?

- **Toshiba Base Investment: $150mm for 12% of NINA**
  - ⇨ Implies total value of NINA of $1.250 Billion (~ $4 per NRG Share)

- **NINA owns 60% of STP 3&4 (assuming exercise of 10% CPS Call)**
  - ⇨ Implies total value of STP 3&4 of $2.1 Billion

We expect a 20% sale of STP 3&4 to confirm Toshiba's valuation

We expect to complete the sale process in Q3 2009

NINA: The Unique Value of Leading the Nuclear Renaissance

Recent Developments	Comparative Advantage
✓ NRC Schedule for STP 3&4 issued	▪ COL issuance anticipated for 2012
✓ Highly ranked within upper tier of preliminary DOE rankings	▪ DOE in final term sheet negotiations with final four nuclear sites selected; includes NRG's STP 3&4 ▪ $18.5 billion of federal guarantees already authorized
✓ EPC Contract executed	▪ Open book period followed by Fixed Price Turnkey construction period provides price certainty ▪ Contractual terms substantially the same as large fossil project ▪ Triggers two additional EPC contracts with the same terms
✓ $500mm credit facility to be provided by Toshiba	▪ Non-recourse to NRG ▪ Supports long lead time material purchases during open book phase ▪ Repaid with DOE/ Japanese guaranteed loan proceeds at Full Notice to Proceed (FNTP) ▪ Defers significant equipment spend until FNTP

Value will continually be created in several ways at STP 3&4

Additional Information on Nuclear

South Texas Project (STP) - "Today"

Key Operating Data for Current Units		
Unit	1	2
Commenced Operations	8/1988	6/1989
License Expiration	2027	2028
Net Capacity[1] (MW)	1,342	1,331
Technology	Westinghouse PWR	
Last Outage Cycle	4/2008	10/2008
Net Capacity Factor (3 year rolling avg.)	96.1%	94.7%

[1] Total MW capacity includes recently completed uprates

Key Site Characteristics

- ✓ 4 unit site (2 currently operating)
- ✓ 7,000 acre reservoir
- ✓ 12,200 acre site
- ✓ Low population
- ✓ Minimal site preparation required
- ✓ Barge & rail access
- ✓ Robust transmission system

Other STP Facts

- ✓ **Owners** include NRG (44%), City of San Antonio (40%) and City of Austin (16%)
- ✓ **Operator and Fuel Manager** is South Texas Project Nuclear Operating Company or STPNOC
- ✓ **Fuel Storage** is adequate for current life of the units
- ✓ **Fuel Contract Coverage** is 100% through 2011 and 25% through 2021 for uranium, 100% through license life for enrichment, and 100% through license life for fabrication

★ Existing STP Facility is Young and Robust ★

Nuclear at STP

Why Nuclear Power?

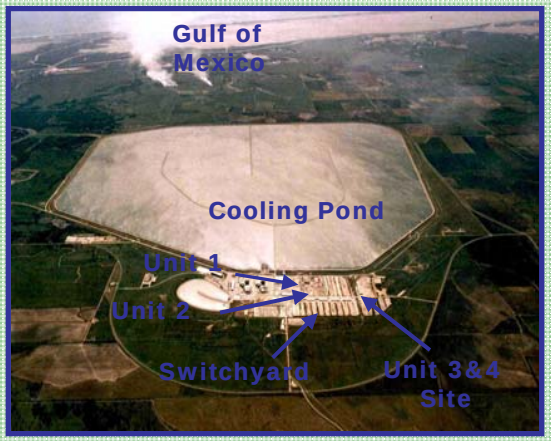
Energy Independence[1]

- Avoids 37.6 million barrels of oil/p.a.
- Avoids 177 bcf of gas/p.a.
- Avoids 13.1 million tons of coal/p.a.
- Avoids 8,100 MW or 202,500 acres of land for wind

Environmental Air Emission Displaced[1]

- Avoids SO_2 emissions of 40,918 tons/p.a. (3.46 lb/MWh)
- Avoids NOx emissions of 11,353 tons/p.a. (0.96 lb/MWh)
- Avoids mercury emissions of 828 lbs (0.56 oz/GWh)
- Avoids CO_2 emissions of 18.4 million tons (1,560 lb/MWh)

South Texas Project



Why STP?

- One of only two existing nuclear facilities in state
- Enormous footprint
- Common station facilities[1] (particularly reservoir) already designed for four units
- Ready access by barge and rail
- Widespread public support
- Open space and access to local Houston load center
- Top quality operator (STPNOC)

[1] Assumes 100% capacity factor for nuclear, ERCOT average (2005) and assumes representative technology by fuel type

★ Nuclear power is the most efficient "zero carbon" power generation available ★

Proven EPC Partner: Toshiba

BWR / ABWR Experience

- Entered business in 1966
- Constructed 22 plants
  - 17 as prime contractor
- Constructed[1] ABWR nuclear units Kashiwazaki Kariwa 6 & 7 in 37 (Jan-96) and 40 months (Dec-96), respectively

United States Experience

- Owns Westinghouse Nuclear
- Largest US manufacturer and service provider of Pressurized Water Reactor (PWR)
- Led 2004 TVA/DOE Bellefonte Study of ABWR construction in US
- Formed Toshiba American Nuclear Energy (TANE) to focus on ABWR licensing and engineering in the US
- Migrating Japanese successful construction (open top construction and modularization[2]) methods to US constructor

[1] Construction months begin with first safety concrete to complete first fuel load

[2] Implies keeping open building rooftop to allow for large modules to be place into the building and avoid manufacturing on site in restricted spaces.

Creating Cost Certainty – Overnight Reference

- Significant risk mitigation by selecting ABWR technology which has been built four times
  - ✓ Provides history of full engineering and nearly all quantities required for construction are known
- Primary open risk for our activities is the difference between U.S and Japanese labor productivity
- NRG will have a closed book, fixed price contract at financial closing, at which point escalation risk will cease
- Similarly, NRG intends to hedge its foreign exchange exposure as it makes its financial commitments

Relative Cost Comparison	ABWR Cost ($/kw)	FPL Midpoint ($/kw)
Base Cost (including G&A, Fee and Contingency)		
U.S. Sourced Quantities	$470	
Foreign Sourced Quantities	$770	
Site and Structural Improvements	$340	
Labor	$1,320	
Total EPC Cost	**$2,900**	**$3,013**
Owner's Cost (Excluding IDC)	$300	$592
Total Cost Excluding IDC	**$3,200**	**$3,605**
Transmission Cost	$0	$220
Total Cost Including Transmission	**$3,200**	**$3,825**

Risks	Low	High	
Cost Escalation Provided by FPL (through 2020)			$2,680
Potential Cost Variance for NRG[1]	($335)	$470	
Price Range (before IDC)	**$2,865**	**$3,670**	**$6,505**

Source: NRG estimates and Nucleonics Week dated 2/21/08

[1] Variance includes labor productivity, material price escalation until finance close and foreign exchange currency risk until hedged

NRG's choice of ABWR, with a fixed price contract, creates significantly more price certainty than other developers


NRG