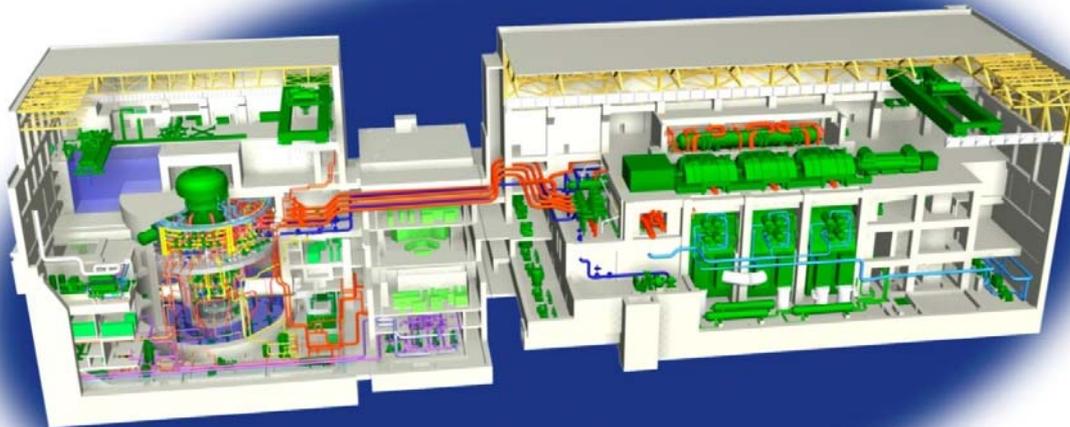


# South Texas Project Units 3 & 4 Combined License Application

- **Financial Qualifications Issues**
- **Foreign Ownership, Control or Domination (FOCD) Issues**



# Desired Outcomes

- NRC management understanding of how NINA's proposed financial qualifications License Condition using "Project Finance" as a model provides reasonable assurance of obtaining funds for construction and operations, before the start of construction.
  
- NRC management understanding of ownership shares in NINA and funding for NINA, and the adequacy of the Negation Action Plan to negate FOCD.

# Attendees

Jamey Seely	Chief Executive Officer, NINA
Mark McBurnett	Chief Nuclear Officer, NINA
Scott Head	Manager, Regulatory Affairs, NINA
John Matthews	Lead Counsel, Morgan Lewis
Richard DiSalvo	Vice President, General Counsel & Secretary, TANE
Robert Schrauder	Vice President, Licensing, TANE
Kenji Arai	Toshiba Senior Fellow
Dan Stenger	TANE Counsel, Hogan Lovells
Stephen Burdick	Counsel, Morgan Lewis

# Agenda

- Summary and Background Information
- Financial Qualifications Issues and Discussion
- FOCD Issues and Discussion

# Executive Summary

## Financial Qualifications

- Generic issue for merchant plants.
- NINA using a Project Finance model.
  - Assures funding for entire project is available prior to closing (including with DOE loan guarantee).
- NINA proposes a License Condition to allow NRC financial qualifications finding.
  - Possible under NRC regulations and precedent.
  - Provides “reasonable assurance” for construction and operating funds – in addition to the information submitted to comply with 10 CFR 50.33(f).
  - Protects safety – if condition is not satisfied, plant will not be built.

# Executive Summary

## Foreign Ownership, Control or Domination (FOCD)

- NINA is owned ~90% by NRG and less than 10% by TANE.
  - NRG has 90% voting control over NINA.
  - NRG has provided majority of funding for project and has a substantial interest in the success of the project.
    - TANE is providing most of current funding for licensing through loans to NINA (less than 1% of overall project costs prior to beginning construction).
  
- Robust Negation Action Plan prevents foreign control.
  - Assures that officers and employees responsible for special nuclear material, access to restricted data, and safety requirements must be U.S. citizens.

# Background – History/Timeline

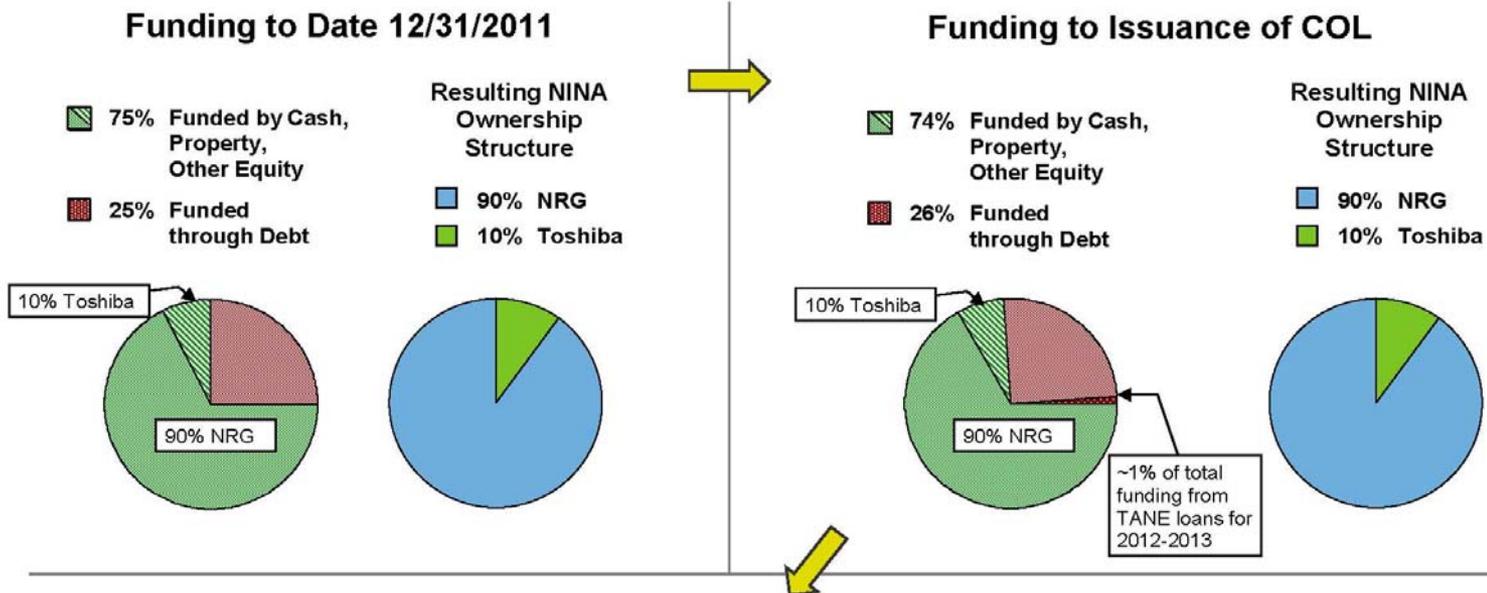
- SEP 2007 STP 3&4 COLA Rev. 0, submitted by STP Nuclear Operating Company.
- JAN 2011 NINA submitted COLA Rev. 5 describing the change in licensing lead applicant from STPNOC to NINA. STPNOC is responsible for operation of STP 3&4, and becomes lead licensee at 10 CFR 52.103(g) finding.
- APR 2011 NRG Energy announced that “while it will cooperate with and support its current partners and any prospective future partners in attempting to develop STP 3&4 successfully, NRG will not invest additional capital in the STP development effort.”
- MAY 2011 NRG Energy 10-Q filing with the Securities and Exchange Commission stating that it planned to reduce the scope of development at STP 3&4, will continue to hold majority legal ownership, and for accounting purposes will cease to have a controlling financial interest in NINA at the end of first quarter 2011.
- JUN 2011 NINA submitted changes to COLA including updated FOCD Negation Action Plan designed to provide flexibility to accommodate the *hypothetical potential* for future changes up to ~85% foreign ownership, as subject to NRC approval.
- DEC 2011 NRC issued letter notifying NINA of staff determination that the application does not meet 10 CFR 50.38.
- JAN 2012 NRC staff informed NINA that it does not satisfy financial qualifications requirements. NINA committed to remove the flexibility in the Negation Action Plan and affirmed that TANE ownership of NINA will remain at less than 10%.
- FEB 2012 NINA submitted additional information and proposed revisions to the COLA in response to financial qualifications and FOCD issues (U7-C-NINA-NRC-120014).

# Financial Qualifications Issues

# Generic Issue for Merchant Plants

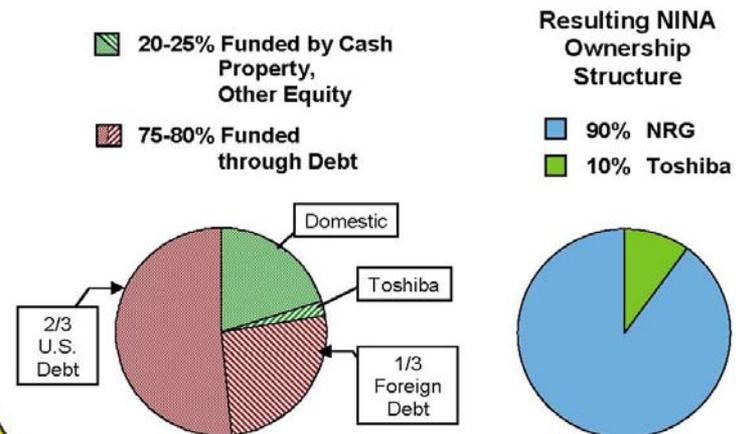
- NRC requires applicant to demonstrate it “possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs and related fuel cycle costs” – 10CFR 50.33(f)(1).
- For all practical purposes, merchant plants require a License Condition to address the financial qualifications issue.
  - Any new merchant plant project is unlikely to have the funding required for construction unless it can complete the Financial Closing of a Project Finance.
    - STP 3&4 is to be built using a Project Finance model.
    - However, Lenders will insist upon issuance of the COL (a “catch-22”) before the closing of a large infrastructure Project Finance can be completed.
  - The conditions required by Lenders for a Project Finance provide assurance that the funding will be adequate.
  - DOE’s Regulations for Loan Guarantees illustrate the Lender requirements:
    - 10 CFR 609.10(d)(8) (requiring that “[t]he amount of the loan guaranteed, when combined with other funds committed to the project, will be sufficient to carry out the project, including adequate contingency funds”).
    - 10 CFR 609.10(d)(9) (requiring that as a condition to issuance of a loan guarantee there must be “reasonable prospect of repayment by Borrower of the principal and interest” for all project debt, *i.e.*, the project revenue must be sufficient to not only pay O&M costs required to generate revenue, but also to make debt payments).
  - These rules present an opportunity to fashion an appropriate License Condition.

# Sources of Funding for STP 3&4



## Post-COL Construction Finance Funding – License Condition

- Proposed License Condition would require closing of project finance prior to construction.
- Substantial equity has already been contributed.
- Debt is just one method of funding NINA obligations.
- Debt does not impact ownership percentages.
- All pre-COL debt (mostly from TANE) will have to be paid off and replaced with new debt at financing, e.g., U.S. Federal Finance Bank (Shaw debt may be converted to equity).
- Debt will always remain a critical method of funding the project.
- License Condition must be met before construction begins.**



**CONSTRUCTION**

# NINA's Proposed FQ License Condition

NINA 3 and NINA 4 are financially qualified based upon the following License Condition being met prior to commencing construction authorized by each license (U7-C-NINA-NRC-120014, dated 2/23/2012):

*Excepting only construction otherwise authorized by an exemption granted by the NRC, construction pursuant to this license shall not commence before funding is fully committed at a Financial Closing with Lenders in connection with a Project Finance for STP 3&4. At least 30 days prior to the Financial Closing, the Licensee shall make available for NRC inspection, draft copies of documents to be executed at the Financial Closing of the Project Finance that demonstrate the following:*

- 1. The United States Department of Energy, or other agency of the United States Government, will either loan the funding for or guarantee loans for at least 50% of the construction funding to be provided through loans;*
- 2. The Lenders' Independent Engineer has provided an updated estimate of the Total Project Costs; and*
- 3. Funding totaling not less than the amount of Total Project Costs estimated by the Lenders' Independent Engineer shall have been funded or will be made available through: (1) equity and (2) loans committed by a government institution of the United States and/or one or more Qualified Financial Institutions; and*
- 4. In order to provide financial support during operations, provisions are made in the Financial Closing for the following to be maintained upon initial plant operation: (1) a debt service Reserve in amount not less than one year's worth debt service payments (e.g., initially more than \$600 million); and (2) a revolving credit facility of at least \$100 million for operating and maintenance expenses, with a requirement that a zero balance be maintained at least once per year.*

*For purposes of the foregoing, a Qualified Financial Institution must have a senior, unsecured and unenhanced credit rating of A2 or higher by Moody's, a rating of A or better by Standard & Poor's (S&P), or a rating meeting comparable international standards.*

# Proposed License Condition Protects Safety

- Purpose of the financial qualifications requirement in 10 CFR 50.33(f) is to protect safety.
- NINA's proposed license condition accomplishes that purpose.
- Proposed license condition assures that adequate funding is in place prior to construction.
- If the condition is not satisfied, the plant will not be built.
  - Ensures no adverse impact on safety.

# Issues Related to Financial Qualifications

## Viability of a License Condition:

- NINA believes that there is no legal impediment to the application of a License Condition.
  - NRC has used license conditions to establish financial qualifications in materials license proceedings.
  - While the Commission distinguished financial qualification requirements for Part 50 as being stricter than for Part 70 and Part 72 in the LES and PFS precedent, the precedent indicates that a license condition can be used to satisfy the Part 50 financial qualification requirements, although it may need to contain stricter requirements than a similar financial qualifications license condition for a Part 70 or Part 72 licensee.
- NINA proposes a License Condition to require a Financial Closing with a DOE Loan Guarantee prior to commencing construction.

# Issues Related to Financial Qualifications

## Adequacy of financial returns during operation:

- NINA has docketed information, including financial projections, which indicate that the financial returns during operation are adequate.
  - Production tax credits that can be expected would add more than \$160 million per year in positive net income (not reflected in the NINA projections).
- The License Condition approach provides additional reasonable assurance that licensed construction activities would not take place until adequate funding for operations is in place.
  - Debt service Reserve, parental guarantee and other mechanisms provide for approximately \$1 billion in financial support to be maintained upon initial plant operation.

# FQ Conclusions and Path Forward

- NINA requests issuance of the COLs based upon reasonable assurance of obtaining funds necessary for construction, fuel and operations.
  - All information requested by NRC staff has been provided.
  - With approximately \$1 billion invested in the project, the applicants are clearly serious about seeing this project through.
  - DOE loan guarantee draft term sheet dated February 2011 provides details regarding the planned Project Finance, including debt, equity commitments, working capital requirements, debt reserve requirements, etc.
  - Reasonable assurance provided by proposed FQ License Condition.
- License condition will protect safety, which is the purpose of the requirement for financial qualifications.
  - If the condition is not satisfied, the plant will never be built.
- This is a generic issue for merchant plants.
  - NRC staff's position would have the practical effect of preventing the licensing of merchant plants.

# Foreign Ownership, Control or Domination (FOCD) Issues

# FOCD – Ownership

**Ownership** — NRG, a U.S. company, owns ~90% of the applicant NINA. Toshiba, through its U.S. subsidiary Toshiba America Nuclear Energy Corp. (TANE), owns ~10% of NINA.

This will not change — NINA has determined to maintain the current ownership through issuance of COLs:

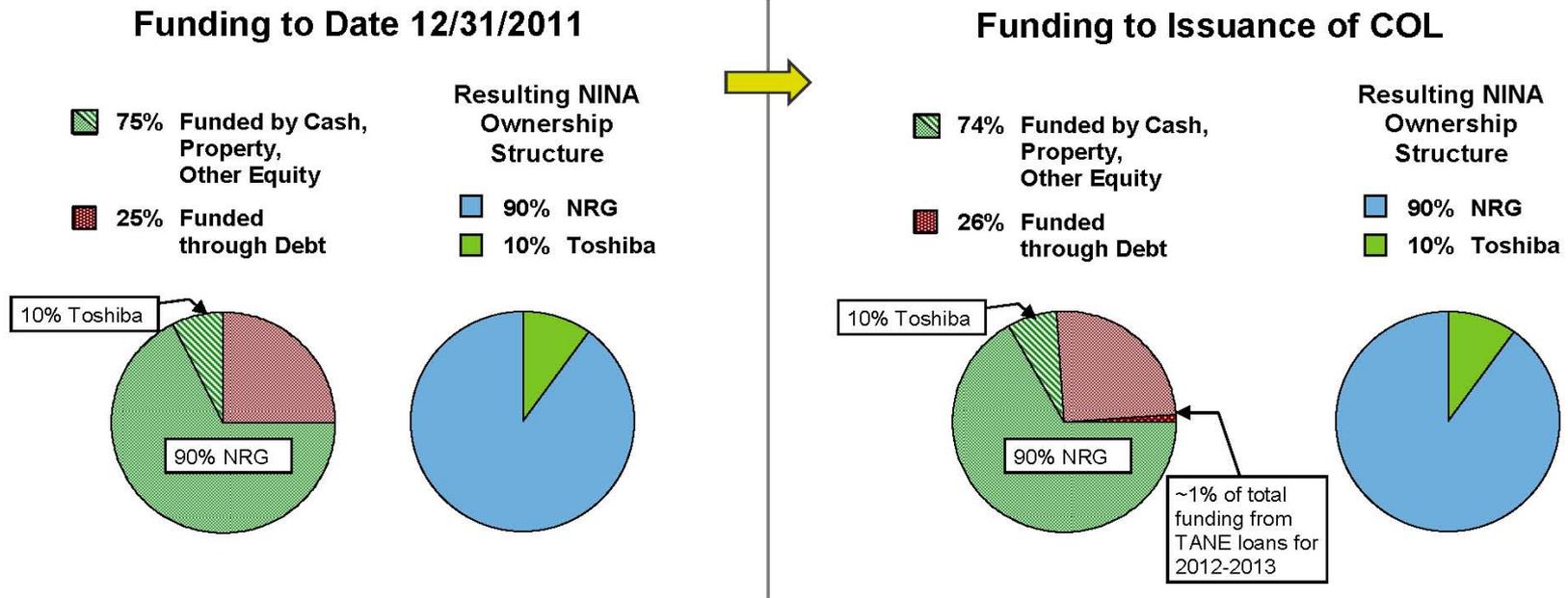
- NRG Energy owns ~90% of NINA.
- Any business decision to change NINA's ownership by more than 5% after issuance of COL would need NRC review and/or approval (10 CFR 50.80 indirect license transfer).
  - NINA has committed to provide advance information and request review and/or approval prior to implementing any proposed changes.
- Through COL, NRG has provided most of the funding for NINA and has a substantial interest in the success of the project.
  - Remaining funding for development and licensing prior to COL is being provided by TANE loans, which represent less than 1% of the total investment in the project.

# FOCD – Control

**Control** — U.S. citizens in NINA exercise all U.S. safety and security responsibilities required to comply with the Atomic Energy Act. Governance structure and robust Negation Action Plan based on NRC guidance prevent foreign control.

- Governance:
  - NRG maintains ~90% ownership and ~90% of the voting rights for NINA Board, which protects its interest in the project.
  - TANE cannot control NINA by outvoting or otherwise circumventing NRG's authority.
  - NINA Chairman, CEO and CNO each must be a U.S. citizen.
  - NRG Board Member has authority to appoint NINA's CEO, CNO and Security Committee.
- Negation Action Plan (App. 1D to COLA):
  - U.S. citizen CEO and CNO exercise control over nuclear safety, security and reliability as needed to comply with 10 CFR 50.38, and undertake special obligation to the U.S.
  - At least 50% of funding for licensed construction activities from U.S. loans or equity.
  - Prior to construction, Security Committee of Board of Directors will be formed:
    - 3 U.S. citizen members (majority will be independent U.S. citizen directors).
    - Authority over all matters that must be under US control, including matters pertaining to nuclear safety, security or reliability.
    - Approves staffing of key executive positions.
- STP Nuclear Operating Company (STPNOC) will operate STP 3&4.
  - Same authority for STP 3&4 as for STP 1&2.

# Sources of Funding for STP 3&4



- TANE loans for 2012-2013 represent ~1% of total project investment/funding.
- Large NRG investment to date gives it a substantial interest in the success of the project.
- **Post-COL, at least 50% of the funding for any licensed construction activity will be provided from U.S. sources, through loans or equity.**

# Summary of Recent Changes

NINA proposed revisions to the NAP (letter U7-C-NINA-NRC-120014, dated 2/23/2012):

- Clarifies that the current ownership is ~90% NRG and less than 10% TANE.
- Removes language from the NAP that accommodated flexibility for foreign ownership.
- Specifically requires the following:

*“Prior to the execution of the documents necessary to implement any proposed change of ownership of NINA that either individually, or when combined with prior changes, would result in a change in ownership greater than 5% of NINA, NINA shall provide complete information to the NRC regarding the proposed transaction and seek either an NRC threshold determination that no license transfer approval is required or NRC’s prior written consent to a license transfer pursuant to 10 CFR 50.80.”*

- Adds requirement that NINA will assure that at least 50% of the funding for licensed construction activities is funded from U.S. sources, loans or equity.

# Response to 12/13/2011 Letter

## NINA responses to the specific NRC staff findings identified in the letter (ML113390176):

1. “Revision 6 to the COLA would allow Toshiba to acquire up to 90% ownership of NINA, thereby obtaining an 85% ownership interest in STP 3&4.”

### NINA perspective:

- ❑ NRG owns and will continue to own ~90% of NINA (92.375% owner of STP 3&4).
- ❑ NINA has recently revised the proposed changes to the COLA to remove the allowance in the NAP for up to 90% foreign ownership of NINA.
- ❑ COLA requires NRC notification of any variance of more than 5% in ownership and changes will be subject to prior NRC review and/or approval pursuant to 10 CFR 50.80.

2. “Since NRG Energy will not be investing additional capital in the project there is reason to believe that most of the financing going forward will be from Toshiba.”

### NINA perspective:

- ❑ NRG continues to make limited capital contributions.
- ❑ Remaining investment (loans) by TANE prior to issuance of COLs will represent a small fraction (~1%) of the amount invested in the project to date.
- ❑ The majority of funding for construction will be provided from U.S. sources, according to DOE requirements.
- ❑ NINA’s proposed COLA revision limits total foreign equity and loans to less than 50%.

# Response to 12/13/2011 Letter (cont'd)

3. “Toshiba is a foreign corporation.”

NINA perspective:

- ❑ True statement; however, with respect to the “totality of the facts” –
  - Toshiba, a Japanese corporation, is a significant nuclear supplier.
  - Japan is a significant U.S. strategic partner.
  - Issuance of a license is not inimical to the common defense and security or to the health and safety of the public because of Toshiba’s involvement.

4. “Toshiba has the power to exercise ownership, control or domination over NINA.”

NINA perspective:

- ❑ NRG controls ~90% of the votes on the Board of NINA, whereas TANE votes only ~10%.
- ❑ The NRG member appoints NINA’s CEO, CNO and Security Committee and continues to have voting authority.

5. “The Negation Action Plan does not negate the FOCD issues described above.”

NINA perspective:

- ❑ NRG member on the NINA Board has the control over the appointment of NINA’s CEO, CNO and the Security Committee – each required to be a U.S. citizen.
- ❑ Simply stated, there is no credible reason to believe that these U.S. citizens would not fulfill their legal obligations to the NRC and U.S. Government.

# FOCD Conclusions and Path Forward

- NRG Energy owns ~90% of NINA as reflected in the COLA.
  - NINA requests issuance of COLs based upon NRG maintaining ~90% ownership of NINA.
  - Under NINA governance, NRG has 90% voting authority on NINA Board, including control over the appointment of CEO, CNO, and Security Committee.
  
- Foreign interest in the form of loans from TANE to NINA for the purpose of obtaining the COLs amounts to ~1% of the total project cost and does not affect ownership percentages.
  - The loans from Toshiba do not give it control over NINA.
  
- The STP 3&4 NAP provides for exclusive U.S. citizen control for access to special nuclear material and restricted data, and control over decisions affecting safety.
  - U.S. citizens (CEO and CNO) exercise U.S. control to assure compliance with 10 CFR 50.38 throughout the pre-COL and pre-construction development phases.
  - Prior to construction, any decision-making authority by NINA regarding nuclear safety or compliance with NRC requirements will be delegated to a Security Committee.
  - 50% of funding for licensed construction activities must be provided from U.S. sources.

# Questions and Comments



# Additional Background Information Slides

# List of Acronyms

CEO	Chief Executive Officer
CNO	Chief Nuclear Officer
COL	Combined license
COLA	COL application
DOE	Department of Energy
FOCD	Foreign ownership, control or domination (10 CFR 50.38)
FOCI	Foreign ownership, control or influence (10 CFR 95.17(a)(1))
FQ	Financial qualifications (10 CFR 50.33(f))
NAP	Negation Action Plan
NINA	Nuclear Innovation North America LLC
NRG	NRG Energy Inc.
STP	South Texas Project
STPNOC	STP Nuclear Operating Company
TANE	Toshiba America Nuclear Energy Corporation

# Project Finance Model

- STP 3&4 is to be built using a Project Finance Model.
- Under this Model, the Lenders require assurance that funding is adequate for completion of the entire project:
  - Led by DOE Loan Guarantee of funds provided by U.S. Federal Finance Bank.
  - Includes requirements for equity contributions, contingencies, cost overruns, decommissioning funding assurance, debt reserves to pay for debt service, *etc.*
- Detailed Preconditions for Financial Close:
  - Prior to loans being committed, all sources of funds (debt and equity) must either be provided at closing (paid in) or committed (with credit requirements).
  - License Condition requiring Financial Close = demonstration of reasonable assurance of obtaining the funds necessary to cover estimated construction costs and related fuel cycle costs.
- NINA must also demonstrate to Lenders at Financial Close that it has all regulatory approvals to begin construction.
  - Requires NRC sign-off that NINA has satisfied the License Condition:
    - Simultaneous execution.

# Construction Finance Funding

- Financial Closing of “Project Finance” Must Occur Prior to Construction:
  - Post-COL major funding for construction will have to come from a future Project Finance, e.g., loan from U.S. Federal Finance Bank with a DOE Loan Guarantee.
  - To be required by a License Condition.
  - Will include mix of Equity and Debt.
  - Previous loans (including TANE loans) will have to be paid off.
- Equity:
  - Substantial equity has already been contributed (90% by NRG).
  - Additional equity will likely be required.
    - Per 10 CFR 50.80, NRC would need to review and approve any new investor that provides material equity.
- DOE Loan Guarantee Program will require payment of pre-existing TANE debt:
  - Debt from development effort will have to be paid off.
    - This is necessary so that new debt can have a first lien, which is required by DOE regulations.
    - This means that the current loans from TANE will be paid off prior to closing.
  - New debt must come from the United States Government.
    - U.S. Federal Finance Bank – thus, majority of project funding will be U.S. loans.
    - DOE would like to see some loans from Japan to support the project.
    - In any case, all creditor rights must be consistent with the interests of the United States.
      - Required by DOE regulations.
    - This means foreign lenders cannot control the project.

# FOCD Review

## Foreign Ownership Control or Domination – Standard Review Plan (64 FR 52355)

- An applicant is considered to be foreign owned, controlled or dominated whenever a foreign interest has the “power,” direct or indirect, whether or not exercised, to direct or decide matters affecting the management or operations of the applicant.
- The Commission has stated that the foreign control limitation should be given an orientation toward safeguarding the national defense and security.
- Negation measures should focus on ensuring U.S. citizens are responsible for special nuclear material and access to restricted data.
  - Negation measures should formally provide U.S. citizens with adequate authority to protect against foreign influence causing:
    - Diversion of special nuclear material;
    - Diversion of nuclear technology (whenever proliferation concern is present);
    - Diversion of national security information; or
    - A disruption in the licensee’s ability to comply with safety requirements.

# Guidance on Applying FOCD Basic Limitations

## FOCD SRP guidance:

- “Even though a foreign entity contributes 50%, or more, of the costs of constructing a reactor, participates in the project review, is consulted on policy and cost issues, and is entitled to designate personnel to design and construct the reactor, subject to the approval and direction of the non-foreign applicant, these facts alone do not require a finding that the applicant is under foreign control.”
  
- “An applicant that is partially owned by a foreign entity, for example, partial ownership of 50% or greater, may still be eligible for a license if certain conditions are imposed, such as requiring that officers and employees responsible for special nuclear material must be U.S. citizens.”
  
- If the applicant is partially foreign owned, further consideration will be given to:
  - The extent of partial ownership;
  - Details concerning foreign parent company;
  - Whether the applicant is seeking authority to operate the reactor, has interlocking directors or officers, or would have access to restricted data.