



Nuclear Innovation  
North America LLC  
122 West Way, Suite 405  
Lake Jackson, Texas 77566  
979-316-3000

May 18, 2015  
U7-C-NINA-NRC-150006  
10 CFR 50.12  
10 CFR 50.33(f), Appendix C  
10 CFR 52.7  
10 CFR 52.77

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

South Texas Project  
Units 3 and 4  
Docket Nos. 52-012 and 52-013  
Amended Request for Exemption Regarding  
Financial Qualifications for Construction and Operation

Nuclear Innovation North America LLC (NINA) is the lead applicant for the combined licenses (COLs) for South Texas Project (STP) Units 3 & 4. On June 19, 2014, NINA submitted a request for an exemption from the financial qualification (FQ) requirements for construction and operation in 10 CFR 52.77, 50.33(f), and Part 50, Appendix C as applied to its COL application (COLA) for STP Units 3 & 4. This letter contains an amended request for exemption from the FQ requirements and supersedes in its entirety the request submitted on June 19, 2014. NINA is submitting the amended request to reflect developments related to the ongoing rulemaking on FQ issues.

As explained further below, this exemption request is being filed in accordance with:

- Staff Requirements Memorandum (SRM) dated April 24, 2014 on SECY-13-0124 related to FQ requirements for new nuclear power plants;
- *Proposed Financial Qualifications Requirements Included in the Draft Regulatory Basis for the Rulemaking on Financial Qualifications for Reactor Licensing* (Draft Regulatory Basis), issued to the public in April 2015 (Accession No. ML15111A270); and
- Information provided orally by the Nuclear Regulatory Commission (NRC) Staff at a meeting on April 29, 2015 with respect to that Draft Regulatory Basis.

The financial qualifications of the applicants for STP Units 3 & 4 are addressed in Section 1.3 of Part 1 of the COLA. NINA believes that the COLA meets the financial qualification requirements in 10 CFR 52.77, 50.33(f), and Part 50, Appendix C. However, NINA's proposal

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on financial qualifications has been under review by the NRC Staff for a number of years, without resolution.

On November 22, 2013, the NRC Staff issued SECY-13-0124, recommending that the Commission modify the FQ requirements of 10 CFR Part 50. The Commission agreed and directed the Staff in the SRM to engage in a rulemaking to amend the FQ requirements in Part 50 to establish requirements similar to the FQ requirements in 10 CFR Part 70. Upon completion of the rulemaking, applicants could propose the use of license conditions to establish financial qualifications. In the SRM authorizing the rulemaking, the Commission also stated that the Staff should consider utilizing an exemption process for existing applicants during the pendency of the rulemaking process.

This letter requests that the NRC grant NINA an exemption as contemplated in the SRM. Specifically, NINA requests an exemption from the FQ requirements in 10 CFR 52.77, 50.33(f), and Part 50, Appendix C to allow use of a FQ standard similar to that contained in 10 CFR Part 70 for construction and operation (if the NRC believes it is necessary) of STP Units 3 & 4, including use of license conditions.

The attachments to this letter provide the basis for NINA's request for an exemption:

- Attachment 1 provides the information required by 10 CFR 52.7 and 50.12, as well as proposed license conditions establishing the applicants' financial qualifications for construction and operation. The proposed license conditions are based upon the example license conditions provided in the Draft Regulatory Basis.
- Attachment 2 provides NINA's Financial Capacity Plan based upon the information provided in the Draft Regulatory Basis and by the NRC Staff in the meeting on April 29, 2015.

The information in Attachment 1 is largely the same as that contained in our June 19, 2014 exemption request, modified to account for the Draft Regulatory Basis. The information in Attachment 2 is largely based upon information already on the docket for STP Units 3 & 4 or from publicly available sources.

The Draft Regulatory Basis also stated that COL applicants should provide a construction cost estimate. NINA has provided a construction cost estimate in Tables 1.3-1 and 1.3-2 of Part 1 of the COLA for STP Units 3 & 4. Following submission of the current cost estimate in 2012, no significant modifications have been made to the design of the units, and no other significant events or changes have occurred, that would materially affect the cost estimate. Therefore, the existing cost estimate in the COLA remains valid, and this amended exemption request does not include a revised estimate.

There are no commitments in this letter.

If there are any questions regarding this exemption request, please contact me at (979) 316-3011, or Bill Mookhoek at (979) 316-3014.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 5/18/15

  
\_\_\_\_\_

Scott Head  
Manager, Regulatory Affairs  
South Texas Project Units 3 & 4

Attachment 1: Amended Request for Exemption from the Financial Qualification Requirements for Construction and Operation of STP Units 3 & 4

Attachment 2: NINA's Financial Capacity Plan for Construction of STP Units 3 & 4

cc: w/o attachment except\*  
(paper copy)

Director, Office of New Reactors  
U. S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

Regional Administrator, Region IV  
U. S. Nuclear Regulatory Commission  
1600 E. Lamar Blvd.  
Arlington, TX 76011-4511

Kathy C. Perkins, RN, MBA  
Assistant Commissioner  
Division for Regulatory Services  
Texas Department of State Health Services  
P. O. Box 149347  
Austin, Texas 78714-9347

Robert Free  
Radiation Inspections Branch Manager  
Texas Department of State Health Services  
P. O. Box 149347  
Austin, Texas 78714-9347

\*Steven P. Frantz, Esquire  
A. H. Gutterman, Esquire  
Morgan, Lewis & Bockius LLP  
1111 Pennsylvania Ave. NW  
Washington D.C. 20004

\*Tom Tai  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852

(electronic copy)

\*Tom Tai  
\*George Wunder  
Fred Brown  
U. S. Nuclear Regulatory Commission

John Ragan  
Denise Wilson  
Nuclear Innovation North America

Peter G. Nemeth  
Crain, Caton and James, P.C.

Richard Peña  
Kevin Pollo  
L. D. Blaylock  
CPS Energy

**Amended Request for Exemption from the Financial Qualification Requirements  
for Construction and Operation of STP Units 3 & 4**

**A. Background and Purpose**

STP Nuclear Operating Company (STPNOC) submitted an application for combined licenses (COLs) for South Texas Project (STP) Units 3 & 4 to the Nuclear Regulatory Commission (NRC) in September 2007. Nuclear Innovation North America LLC (NINA) became the lead applicant in early 2011. NINA will be the licensee responsible for designing and constructing each unit.

Section 1.3 of Part 1 of the COL application (COLA) Revision 12 addresses the financial qualifications (FQ) of the applicants for STP Units 3 & 4. That section of the COLA contains a plan for how the applicants will proceed to finance the construction and operation of the facility, including a construction cost estimate and a discussion of the applicants' financial capacity to obtain the necessary financing when they are ready to start construction (including how they will proceed to finance construction). NINA also has submitted responses to the NRC's requests for additional information (RAIs) on financial qualifications.

Section 1.3 of the COLA and NINA's supplemental response to RAI 1-024 submitted to the NRC on January 17, 2012, provide information related to financial qualifications for operation, including an estimate of the operating costs for the first five years of operation and the sources of funds to cover those costs. Based upon its interactions with the NRC Staff, NINA believes that the COLA (as supplemented by RAI responses) meets the FQ requirements in 10 CFR 52.77, 50.33(f), and Part 50, Appendix C for operations. However, if the Staff believes otherwise, NINA requests an exemption from the FQ requirements for operation.

The FQ requirements for construction have presented a challenge because STP Units 3 & 4 are "merchant" plants, *i.e.*, the majority owners do not have the benefit of traditional "cost of service" rate regulation and have had difficulty arranging for financing for construction prior to issuance of the COLs. To resolve this issue for construction of STP Units 3 & 4, the STP COLA has proposed the use of a license condition requiring financial closing of a Project Finance prior to beginning construction, which would provide the reasonable assurance that is required for the NRC Staff to issue the COLs. That proposal has been under review by the NRC Staff. Although NINA believes that it has fully satisfied the financial qualification requirements in 10 CFR 52.77, 50.33(f), and Part 50, Appendix C, that issue has remained open with the NRC Staff.

NINA submitted a letter to the NRC on May 31, 2012 requesting further consideration of the policy questions regarding merchant plants and FQ requirements, including the use of license conditions to satisfy those requirements. Other interested stakeholders, including the Nuclear Energy Institute, also submitted letters on similar issues. The NRC held public meetings in October 2012 and January 2013 to discuss these topics.

In November 2013, the NRC Staff issued SECY-13-0124, which stated that the Staff's opinion that a license condition is not an appropriate vehicle for satisfying the FQ requirements in Part 50. However, SECY-13-0124 discussed new approaches to evaluating FQ requirements for

merchant plants applying for an initial license. The Staff recommended that the Commission engage in rulemaking to modify the FQ requirements in Part 50.

On April 24, 2014, the Commission issued a Staff Requirements Memorandum (SRM) for SECY-13-0124, which accepted the Staff's recommendations to initiate a rulemaking to amend the FQ requirements of 10 CFR Part 50 in order to make them similar to the FQ standards in 10 CFR Part 70. The Commission described the rulemaking's objective as creating a FQ requirement in Part 50 "that approximates, as appropriate, the approach currently used for 10 CFR Part 70 applications, but does not reduce the standard of review below that of 'appears to be financially qualified.'" Upon completion of the rulemaking, license applicants would be allowed to propose use of license conditions to address financial qualifications. The Commission also directed the Staff to "consider utilizing an exemption process to address existing and emergent cases, as appropriate and necessary, during the pendency of the rulemaking process and that anticipates the outcome of the proposed changes to the current financial qualification regulations."

In April 2015, the NRC Staff issued *Proposed Financial Qualifications Requirements Included in the Draft Regulatory Basis for the Rulemaking on Financial Qualifications for Reactor Licensing* (Draft Regulatory Basis) (Accession No. ML15111A270). The Draft Regulatory Basis summarizes a new reactor FQ standard to be adopted through rulemaking and regulatory guidance. This new standard would change the current standard that requires the applicant to provide reasonable assurance of obtaining the funds necessary to construct and operate the reactor, to a Part 70-type standard in which the applicant appears to be financially qualified. The Draft Regulatory Basis also outlines the contents of a showing by a COL applicant for a merchant plant that has not arranged financing for construction and operation, including a construction cost estimate, an Applicant's Financial Capacity Plan (AFCP), and license conditions.

As contemplated by the Commission in the SRM for SECY-13-0124, NINA is submitting this request for exemption from the FQ requirements in 10 CFR 52.77, 50.33(f), and Part 50, Appendix C to allow use of a FQ standard similar to that contained in 10 CFR Part 70, including the use of a license condition for construction of STP Units 3 & 4. NINA believes that the FQ requirements for operations are satisfied by the COLA for STP Units 3 & 4. However, if the Staff believes it is necessary, NINA also requests an exemption from the FQ requirements for operation.

In support of this request, NINA is providing the following information in accordance with the Draft Regulatory Basis:

- a construction cost estimate, which is contained in Tables 1.3-1 and 1.3-2 of Part 1 of the COLA for STP Units 3 & 4;
- a Financial Capacity Plan, which is contained in Attachment 2 to this request; and
- proposed license conditions, as discussed in Section B below.

Under 10 CFR 52.7, the Commission has the authority to issue specific exemptions from application requirements based on standards in 10 CFR 50.12. As discussed in Section C below,

the exemption would meet those standards: namely, (1) it is authorized by law; (2) it will not present an undue risk to the public health and safety; (3) it is consistent with the common defense and security; and (4) special circumstances are present.

## **B. Requested Exemption and Proposed License Conditions**

Section 52.77 requires COLAs to “contain all of the information required by 10 CFR 50.33.” Section 50.33(f) in turn requires applicants to state “information sufficient to demonstrate to the Commission the financial qualification of the applicant to carry out . . . the activities for which the permit or license is sought.” More specifically, under Section 50.33(f)(1), the applicant must show that it “possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs and related fuel cycle costs, and shall indicate the source(s) of funds to cover these costs.” Section 50.33(f)(2) requires an applicant to submit information that demonstrates it possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operation costs for the period of the license, including estimates for total annual operating costs for each of the first five years of operation of the facility and the sources of funds to cover these costs. Additionally, Appendix C to Part 50 states that applicants that are newly formed entities should submit estimates of construction costs and sources of construction funds.

As explained above, NINA respectfully requests an exemption from the FQ requirements in 10 CFR 52.77, 50.33(f), and Part 50, Appendix C as applied to construction and operation (if the Staff believes one is necessary). In place of the requirements in those regulations, the exemption would require the applicants for STP Units 3 & 4 to establish that they “appear to be financially qualified.” The exemption would also require license conditions on financial qualifications, as discussed further below. As a result, the exemption would allow use of a FQ standard similar to that contained in 10 CFR Part 70 for construction and operation of STP Units 3 & 4, including the use of license conditions. This exemption request does not pertain to decommissioning funding pursuant to 10 CFR 50.75, and the COLA fully satisfies the applicable requirements in that section of the regulations. This request also does not pertain to any on-site property insurance requirements in 10 CFR 50.54(w).

Based on the Draft Regulatory Basis, NINA proposes the following ministerial license condition for construction in connection with this requested exemption related to financial qualifications for construction:

The licensee will notify the NRC at least 60 days prior to its anticipated date of construction that the license condition has been fulfilled and that the following are available for inspection:

- An updated cost estimate;
- Documentation identifying any material variances from the original cost estimate provided in the application; and
- Documentation demonstrating that the licensee has secured financing to fund the updated cost estimate for the project. This documentation will include operative closing documents, and may include documented proof of parent and affiliate assurances, or capital from other sources (as required to close the financing) that reflect financing for the project.

As used in this proposed license condition, the term “construction” has the same definition as contained in 10 CFR 50.10(a). This proposed license condition supersedes the proposed license condition in Section 1.3 of Part 1 of the COLA Revision 12.

Additionally, based on the Draft Regulatory Basis, NINA proposes the following ministerial license condition for operation (if the Staff believes that the COLA and the RAI responses do not currently satisfy the FQ requirements for operation):

The licensee will notify the NRC at least 60 days prior to initial loading of fuel that the license condition has been fulfilled and that the following are available for inspection:

- An updated cost estimate for each of the first 5 years of operations;
- Documentation identifying any variance from the original cost estimate provided in the application; and
- Documentation of sources of funds to cover each of the first 5 years of operations. Such funds may come from, but are not limited to, power purchase agreements, parent assurances, and/or revenues from the anticipated sale of power.

The proposed license conditions are also consistent with past Commission practice for financial qualifications for Part 70 facilities. For example, the Commission has approved the use of license conditions to ensure financial qualifications for both construction and operation for fuel cycle facilities. In *Louisiana Energy Services, L.P.* (Claiborne Enrichment Center), CLI-97-15, 46 NRC 294 (1997), the Commission provided for the use of license conditions that enabled the licensee to arrange for funding of construction after licensing but before building a uranium enrichment facility.

This approach will preserve financial qualification information in the licensing basis for STP Units 3 & 4, and will be consistent with NRC’s monitoring of the potential for financial distress during construction and operation.

### **C. Information Required by 10 CFR 50.12(a)**

Section 50.12(a) states that the NRC may grant exemptions that are authorized by law, will not present an undue risk to the public health and safety, and are consistent with the common defense and security. In addition, the NRC will not consider granting an exemption unless special circumstances are present. As demonstrated below, this exemption request satisfies the provisions in 10 CFR 50.12(a).

#### **1. The exemption is authorized by law.**

The Commission has the authority to issue NINA’s requested exemption. The exemption would not conflict with any provision of the Atomic Energy Act (AEA) or any other law.



In particular, the NRC has broad discretion to evaluate financial qualifications, as provided in Section 182a of the AEA. The Commission itself has observed that the AEA “does not impose any financial qualification requirement; it merely authorizes the Commission to impose such financial requirements as it may deem appropriate.” *Public Service Company of New Hampshire* (Seabrook Station Units 1 & 2), CLI-78-1, 7 NRC 1, 9 (1978). Federal courts have agreed, finding that “[the AEA] gives the NRC complete discretion to decide what financial qualifications are appropriate.” *New England Coalition v. NRC*, 582 F.2d 87, 93 (1st Cir. 1978). Therefore, the exemption is authorized by law.

2. The exemption does not present an undue risk to the public health and safety.

The exemption does not pertain to any NRC safety requirements that apply to the design, construction, and operation of STP Units 3 & 4. Furthermore, as explained above, the license conditions would require 1) prior to construction of STP Units 3 & 4, that NINA provide documentation demonstrating that it has secured financing to meet the updated cost estimate for the project; and 2) prior to operation of STP Units 3 & 4, that NINA provide documentation demonstrating that it has sources of funds to cover each of the first 5 years of operations. If the necessary funding is not secured, the plant will not be constructed or operated, thereby ensuring that the exemption will not present a nuclear safety issue. Consequently, the exemption presents no undue risk to the public health and safety.

3. The exemption is consistent with the common defense and security.

The exemption only pertains to the FQ requirements for STP Units 3 & 4 and will not authorize the possession of licensed material or pertain to any NRC security requirements that apply to STP Units 3 & 4. Furthermore, as explained above, the license condition would require 1) prior to construction of STP Units 3 & 4, that NINA provide documentation demonstrating that it has secured financing to meet the updated cost estimate for the project; and 2) prior to operation of STP Units 3 & 4, that NINA provide documentation demonstrating that it has sources of funds to cover each of the first 5 years of operations. Those conditions ensure that the common defense and security will not be impacted. Therefore, the exemption is consistent with the common defense and security.

4. Special circumstances are present.

10 CFR 50.12(a)(2) states that special circumstances are present whenever any of six listed circumstances exist:

- (i) Application of the regulation in the particular circumstances conflicts with other rules or requirements of the Commission; or
- (ii) Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule; or

- (iii) Compliance would result in undue hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated; or
- (iv) The exemption would result in benefit to the public health and safety that compensates for any decrease in safety that may result from the grant of the exemption; or
- (v) The exemption would provide only temporary relief from the applicable regulation and the licensee or applicant has made good faith efforts to comply with the regulation; or
- (vi) There is present any other material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. If such condition is relied on exclusively for satisfying paragraph (a)(2) of this section, the exemption may not be granted until the Executive Director for Operations has consulted with the Commission.

The following special circumstances apply here:

- a. Section 50.12(a)(2)(ii) applies because the exemption will be consistent with the objective of the FQ requirements in Part 50, which is to protect public health and safety. As provided in 33 Fed. Reg. 9,704 (July 4, 1968), “the fundamental purpose of the financial qualifications provisions . . . is the protection of the public health and safety and the common defense and security.” The regulation’s practical objective is to prevent safety lapses from underfunded projects. Because the license conditions will ensure that construction and operation of the project only proceed with adequate funding assured, the conditions satisfy the underlying purpose of the FQ requirements in Part 50. Consequently, the special circumstance described in 10 CFR 50.12(a)(2)(ii) applies to this exemption request.
- b. Section 50.12(a)(2)(vi) applies because there is a material circumstance not considered when the regulation was adopted for which it would be in the public interest to grant an exemption. Specifically, the Commission in the SRM on SECY-13-0124 has approved the Staff’s request to initiate a rulemaking to amend the FQ requirements of 10 CFR Part 50 and to use FQ standards similar to those contained in 10 CFR Part 70, including allowance for the use of license conditions addressing financial qualifications. The Commission further authorized the Staff to consider an exemption for existing cases, such as STP Units 3 & 4, during the pendency of the rulemaking process. Consequently, the special circumstance described in 10 CFR 50.12(a)(2)(vi) applies to this exemption request.

**D. Conclusion**

In accordance with the Commission's statements in the SRM for SECY-13-0124 and the Draft Regulatory Basis, NINA seeks an exemption from the NRC's FQ requirements for construction (and operation if the Staff determines one is necessary for operation). The exemption would enable the applicants to establish financial qualifications for construction and operation through the use of license conditions that would require 1) prior to construction of STP Units 3 & 4, that NINA provide documentation demonstrating that it has secured financing to meet the updated cost estimate for the project; and 2) prior to operation of STP Units 3 & 4, that NINA provide documentation demonstrating that it has sources of funds to cover each of the first 5 years of operations. The exemption request satisfies the factors in 10 CFR 50.12. For the foregoing reasons, NINA respectfully requests that the NRC grant the requested exemption from the requirements of 10 CFR 52.77, 50.33(f), and Part 50, Appendix C as related to the financial qualifications for construction and operation of STP Units 3 & 4.

## **NINA'S FINANCIAL CAPACITY PLAN FOR CONSTRUCTION OF STP UNITS 3 & 4**

### **1.0 PURPOSE**

This plan demonstrates NINA's level of understanding of the size and scope of construction of STP Units 3 & 4, including the level of capital necessary to undertake the project. The plan also discusses the organizational and human resources, experience, skills, and expertise required to obtain proper financing and ultimately finance the project. The plan includes a description of the management team as it pertains to financing, and the team's experience and expertise in the areas of finance, capital sourcing, and large build projects.

### **2.0 DESCRIPTION OF MANAGEMENT TEAM FOR FINANCING**

This section discusses NINA's management team for financing of construction of STP Units 3 & 4. The management team includes experienced financing professionals from NINA's ultimate owners, NRG Energy, Inc. (NRG) and Toshiba Corporation (Toshiba), as well as representatives and financial advisors from consultants. This section describes their experience with potential sources of project funding, including financing of the construction and operation of large energy and other infrastructure projects.

When market and other conditions indicate that construction of STP Units 3 & 4 can proceed, NINA will apply for a loan from the U.S. Federal Finance Bank through the U.S. Department of Energy (DOE) Loan Guarantee Program and other financing. NINA also anticipates obtaining a loan issued by Japan Bank for International Cooperation (JBIC) and loans backed by insurance issued by Nippon Export and Investment Insurance (NEXI).

#### **2.1 Experience of NINA with Construction of Large Projects**

NINA has substantial experience with arranging the financing for the construction and operation of STP Units 3 & 4.

NINA negotiated a detailed loan guarantee term sheet and conditional loan commitment with the DOE Loan Programs Office. This term sheet, which was previously provided by NINA to NRC by letter dated October 5, 2011,<sup>1</sup> was reviewed and approved by several stakeholders and was at a very advanced stage. The Fukushima event occurred two business days before the scheduled final approval by the last Intra-Governmental Committee required for issuance of the conditional loan guarantee.

NINA has also had experience negotiating with the JBIC and NEXI to provide loans and insurance for STP Units 3 & 4. NINA previously received support letters from both JBIC and NEXI.

Finally, NINA has been managing the engineering, procurement, and construction (EPC) contract and procurement of long lead items. To date, hundreds of millions of dollars have been spent under the direction of NINA on procurement of long lead materials and payment of EPC services for STP Units 3 & 4.

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<sup>1</sup> Accession No. ML14029A394.

## **2.2 Experience of NRG with Construction of Large Projects**

NRG has substantial experience in developing large energy infrastructure projects.

As discussed in its 2014 Annual Report,<sup>2</sup> NRG had more than \$15 billion in total operating revenues and more than \$20 billion in long term debt in 2014. NRG owns and operates more than 52,000 MW of installed electrical capacity. As of December 31, 2014, NRG had committed approximately \$1 billion in capital for more than ten major power projects that were then underway, including additions, repowering (change fuel source), and environmental upgrades.

## **2.3 Experience of Toshiba with Construction of Large Projects**

NINA's minority owner Toshiba has substantial experience with developing large infrastructure projects around the globe.

Toshiba is one of the world's leading energy and infrastructure companies. As discussed in its 2014 annual report,<sup>3</sup> in fiscal year 2013 (year ending on March 31, 2014), Toshiba's Energy & Infrastructure business segment generated more than \$16.5 billion in revenues (¥2 Trillion).

Toshiba has delivered approximately two dozen nuclear power reactors (including acting as the prime contractor for 17 units). In that regard, Toshiba has participated in the development of three ABWR units that have achieved commercial operation in Japan: Kashiwazaki-Kariwa Unit Nos. 6 & 7, and Hamaoka Unit No. 5.

Toshiba is also a leading supplier of thermal power plants. Toshiba has supplied a combined power generation capacity of 174 GW at 1,914 units in 42 countries.<sup>4</sup>

## **2.4 Experience of Consultants**

Throughout the STP 3&4 project NINA has used many expert consultants to support various aspects of project development and will continue to do so as needed and appropriate. For example, one of NINA's current contractors for business development is Deloitte. Deloitte is a large, well-known consulting firm that provides numerous financial services including helping clients develop strategies and plans for financing of projects.

Deloitte's Power & Utilities practice includes the following experience:<sup>5</sup>

- Serves all of the top 10 and 96% of the Fortune 1000 power and utilities companies;
- Audits six of the top 10 Fortune 1000 power and utilities companies;
- Provides accounting and enterprise risk services to 79% of the Fortune 1000 power & utilities companies;
- Provides consulting services to 83% of power and utilities companies on the Fortune 1000; and
- Provides financial advisory services to 68% of the Fortune 1000 power and utilities companies

<sup>2</sup> <http://investors.nrg.com/phoenix.zhtml?c=121544&p=irol-reportsannual>.

<sup>3</sup> <http://www.toshiba.co.jp/about/ir/en/finance/ar/ar2014/tar2014e.pdf>.

<sup>4</sup> <http://www3.toshiba.co.jp/power/english/thermal/products/generators/generator.htm>.

<sup>5</sup> <http://www2.deloitte.com/content/dam/Deloitte/us/Documents/energy-resources/us-er-deloitte-power-and-utilities-practice.pdf>.

## 2.5 Summary of Experience of NINA's Management Team

In summary, NINA's management team has an understanding of project finance requirements, as indicated by NINA's draft term sheet for a DOE loan guarantee for construction of STP Units 3 and 4, and the involvement of NINA's owners in the construction of large power plants, including nuclear power plants.

## 3.0 DESCRIPTION OF ANTICIPATED FUNDING METHODS AND SOURCES

This section provides a description of the anticipated funding methods and sources, and a discussion of past successes with such financing in energy and other large build projects.

As discussed above, NINA anticipates obtaining funding through a project financing that involves one or more loans issued under the DOE Loan Guarantee Program and a loan issued by JBIC and one or more loans backed by insurance issued by NEXI. As discussed in the following sections, NINA's management team has substantial experience negotiating with these organizations and successfully obtaining financing.

### 3.1 Experience of NINA

As discussed in Section 2.1 above, NINA negotiated a detailed loan guarantee term sheet and conditional loan commitment with the DOE Loan Programs Office. NINA also has had experience negotiating with the JBIC and NEXI to provide loans and insurance for STP Units 3&4. NINA previously received support letters from both JBIC and NEXI for STP Units 3 & 4.

### 3.2 Experience of NRG

NRG has successfully financed three major solar projects with loans issued under the DOE Loan Guarantee Program:<sup>6</sup>

<u>Solar Project</u>	<u>Location</u>	<u>Loan Amount</u>
California Valley Solar Ranch	San Luis Obispo, CA	\$1.237 billion
Agua Caliente	Yuma County, AZ	\$967 million
Ivanpah (BrightSource)	Baker, CA	\$1.3 billion

NRG has also obtained a \$167 million DOE grant, and a loan from JBIC and a loan backed by NEXI for a \$1 billion carbon capture project that NRG is developing with JX Nippon Oil & Gas Exploration Corporation.<sup>7</sup>

<sup>6</sup> [http://www.taxpayer.net/images/uploads/downloads/Current\\_Loan\\_Guarantee\\_Applicants - Aug. 2013 - Update.pdf](http://www.taxpayer.net/images/uploads/downloads/Current_Loan_Guarantee_Applicants_-_Aug._2013_-_Update.pdf).

<sup>7</sup> NRG's 2014 Annual Report.

<u>Project</u>	<u>Location</u>	<u>Loan Amount from JBIC</u>
Petra Nova	Fort Bend County, Texas	\$250 million

Thus, NRG has successfully obtained financing for power projects using DOE loan guarantees and financing from JBIC and NEXI.

### 3.3 Experience of Toshiba

Toshiba and its affiliates have successfully financed projects (in whole or part) with loans from JBIC:

<u>Project</u>	<u>Location</u>	<u>Loan Amount</u>
Equipment for High-Efficiency Coal-fired Generating Station (3x800 MW) <sup>8</sup>	Kudgi, India	\$210 million
Trains for Metro Line Extension <sup>9</sup>	Cairo, Egypt	\$65 million
Equipment for Sogamosa River Hydro Project (820 MW) <sup>10</sup>	Santander, Columbia	\$39.5 million
Acquisition of Smart Meter Company Landis+Gyr AG <sup>11</sup>	Switzerland	\$600 million

Thus, Toshiba has obtained financing of large infrastructure projects, including financing of power plants with loans from JBIC.

### 3.4 Summary of Experience of NINA's Management Team in Obtaining Financing

NINA's management team has been successful in obtaining financing for large infrastructure projects, including power plants. That financing includes DOE loan guarantees, loans for JBIC, and loans backed by insurance from NEXI.

<sup>8</sup> <https://www.jbic.co.jp/en/information/press/press-2013/0127-17508>.

<sup>9</sup> <https://www.jbic.co.jp/en/efforts/support/support-2010/0901-4351>.

<sup>10</sup> <https://www.jbic.co.jp/en/information/press/press-2011/0309-7298>.

<sup>11</sup> <https://www.jbic.co.jp/en/efforts/support/support-2011/0901-4308>.

[http://www.toshiba.co.jp/about/press/2012\\_02/pr2302.htm](http://www.toshiba.co.jp/about/press/2012_02/pr2302.htm).

#### **4.0 CONCLUSIONS**

NINA's management team has an understanding of the complexities of financing a large nuclear power plant, the challenges in raising capital, and the need for ensuring financing before beginning reactor construction. Members of NINA's management have successfully obtained financing from the DOE loan guarantee program, JBIC and NEXI for power plants. NINA's management team has the capacity to obtain similar financing for STP Units 3 & 4.