NARUC

National Association of Regulatory Utility Commissioners

EISPC

EASTERN INTERCONNECTION STATES' PLANNING COUNCIL

Request for Proposals to assist the Eastern Interconnection States' Planning Council (EISPC) Members with Identification of State-by-State Existing and Potential for:

Study 5: Assessment of the Location of New Nuclear and Uprating Existing Nuclear

and

Whitepaper 5: Consideration of other Incentives / Disincentives for Development of Nuclear Power

Solicitation Number: NARUC-2011-RFP004-DE0316

RELEASED: September, 21 2011
RESPONSES DUE: October 21, 2011

Grants & Research Department
National Association of Regulatory Utility Commissioners
1101 Vermont Avenue NW, Suite 200
Washington, D.C. 20005

REQUEST FOR PROPOSALS TO ADDRESS

STUDY 5: ASSESSMENT OF THE LOCATION OF NEW NUCLEAR AND UPRATING EXISTING NUCLEAR

AND

WHITEPAPER 5: CONSIDERATION OF OTHER INCENTIVES / DISINCENTIVES FOR DEVELOPMENT OF NUCLEAR POWER

A. Introduction

The Eastern Interconnection States' Planning Council (EISPC) represents the 39 states, the District of Columbia, and 8 Canadian Provinces located within the Eastern Interconnection electric transmission grid. This is the first time in the nation's history that these entities will be working together, supported by a funding opportunity from the United States Department of Energy, to evaluate transmission development options throughout the Eastern Interconnection.

NARUC/ Eastern Interconnection States' Planning Council issues this Request for Proposal (RFP), to enable EISPC Members to address immediate and long-term resource issues and opportunities within the Eastern Interconnection. The analysis will provide information to EISPC members and will also serve to inform longer-term modeling analysis. EISPC's expectation is that the analysis will be comprehensive.

NARUC will issue Subcontract(s) under Recovery Act DE-OE0000316 , to secure the services of a Subcontractor(s) to provide assistance to States.

The Subcontractor(s) is expected to work collaboratively with EISPC Staff and Members in all aspects of the analysis and in the preparation of reports to assure the information is as useful as possible to EISPC members. EISPC anticipates the Subcontractor(s) will require some assistance from EISPC members to complete the analysis. The Subcontractor(s) is also expected to coordinate their efforts to those of the Department of Energy's National Laboratories (please see D. Draft Statement of Work below) and other work being done by the National Laboratories (including on-going studies, Energy Zones - GIS work, and etc). The work product will be in the Public Domain.

B. Department of Energy Requirements

The study will be undertaken under Department of Energy agreement DE-OE-0000316, funded under the American Recovery and Reinvestment Act of 2009 (ARRA). Respondents must be able to comply with the provisions of ARRA and the core funding agreement with regards to transparency, reporting, financial management, lobbying exclusions, and other areas. This RFP requires the subcontractor(s) to include on their SEFA information to specifically identify Recovery Act funding. This information is needed to allow the NARUC to properly monitor subcontractor(s) expenditure of ARRA funds as well as oversight by the Federal awarding agencies, Offices of Inspector General and the Government Accountability Office.

C. Period of Performance

The period of performance for these awards will be November 2011 through no longer than December 13, 2012; unless approved by EISPC/NARUC and DOE. It is anticipated that successful Subcontractor(s) will be notified in November 2011.

D. Funds Budgeted

$250,000 has been budgeted for this effort. However, NARUC / EISPC reserves the right to alter this amount depending on the Responses and to ensure that other EISPC priorities are satisfied.

E. Responding to the RFP

Please submit State responses to the RFP to Miles Keogh, NARUC's Director of Grants and Research, by email to mkeogh@naruc.org and Bob Pauley bob.pauley@eispc.org with the email subject "**Study 5: Assessment of the Location of New Nuclear and Uprating Existing Nuclear and Whitepaper 5: Consideration of other Incentives / Disincentives for Development of Nuclear Power.**

Please your response no later than October 21, 2011. There is no specific limitation on page numbers or format, although brevity and completeness will aid the selection process. All questions regarding the RFP should be directed to Miles Keogh and Bob Pauley by email as well. In responding to this RFP, the Subcontractor(s) must respond to the following sections:

- Discussion of Subcontractor(s) recommended approach to addressing the RFP. EISPC has provided a proposed Scope of Work (contained herein). However, the Subcontractor(s) is expected to recommend the types of information required (ideal and currently available), clarifications, recommendations for future work including databases / analysis / equipment / and etc., and propose modifications to the Scope of Work with attendant rationales.
  Even if the ultimate Scope of Work proposed by the Subcontractor(s) is not fully approved by EISPC / NARUC, those additional areas of investigation may be included in subsequent Requests for Proposals issued by NARUC / EISPC.
  The Subcontractor(s) response should also reflect the work being done by the National Laboratories, Nuclear Regulatory Commission, Energy Information Administration, and others to ensure there is no undue duplication of effort.

- Proposed methods to collaborate with EISPC members, coordinate work with the Energy Zones Workgroup, and the National Laboratories. This shall include expected general information to be obtained from EISPC members and to facilitate the work of the National Labs.

- Provide an initial list of some of the resources (e.g., Nuclear Regulatory Commission, Energy Information Admin., etc) you intend to build upon and a cursory discussion of the potential enhancements that you (your firm) offer.

- The Response shall contain detailed timelines / milestones with deliverables. This should include obtaining the information required of each state, Planning, Authority, utility, power plant developer, and etc.

- Statement of Qualifications and work experience for each of the Subcontractor(s) Staff on topics similar to those in this RFP. The Subcontractor(s) response should include examples of relevant Work Products (web links are sufficient).

- Subcontractor(s) should be provided with their Qualifications, examples of work product, and their expected contribution to the deliverables, and contract amounts.

- Identification of primary contact and their contact information.

Please be advised in order to comply with the lobbying restrictions of the core funding agreement from the Department of Energy no proposal may be intended to support lobbying efforts of any kind (including advocating specific outcomes of federal agency regulatory activities) or be proposed with any of the aforementioned activities in mind.

1. Subcontractor(s) **Selection Proposal**

EISPC / NARUC will select a Subcontractor(s) through a competitive selection.

2. Budget Estimate

Subcontractor(s) must identify the total costs and should provide a budget estimate of the cost-components expected for this analysis. Cost categories in this budget estimate should include labor, travel, and other direct costs (such as supplies, printing, other expenses.), and costs of Subcontractor(s).

An example table that may be useful in responding to this RFP follows. Respondents may use any budget format they prefer.

Subcontractor(s) **Labor**			
	Hours	Rate	
Name of Principal / Senior Subcontractor(s)			
Name(s) of Junior Subcontractor(s) (other categories as necessary)			
Total Labor Cost Estimate			**$**
Other Direct Costs			
Travel to EISPC Meetings	(trips)	(cost)	$
Printing of Interim and Final Reports	(documents)	(cost)	$
Communications (such as conf. calls)			$
Other (identify other costs is necessary)			$
Total Other Direct Costs			**$**
Total			**$**

D. Scope of Work

Study 5: Assessment of the Location of New Nuclear and Uprating Existing Nuclear

and

Whitepaper 5: Consideration of other Incentives / Disincentives for Development of Nuclear Power

INTRODUCTION

This Study and Whitepaper is intended to provide EISPC Members with accurate, comprehensive, and timely information to assist Eastern States Planning Council (EISPC) and its members with formulating resource policies and on-going modeling efforts. EISPC recognizes that nuclear energy is an important element of a diverse energy supply and the potential for helping to address carbon emissions. However, expansion or even continued reliance on this option requires overcoming five Challenges —siting, economics, safety, waste, and proliferation. The analysis is not intended to be an advocacy paper for nuclear generation technologies. Rather, the analysis will objectively discuss various nuclear technologies in the context of the forecasted demand for electricity, diversity of resources, and long-term environmental requirements as well as suggesting what information we should be developing.

The Subcontractor(s) is expected to coordinate with EISPC efforts on Energy Zones (including GIS work) and Research and Development work by the Department of Energy (and its National Laboratories), the Nuclear Regulatory Commission (NRC), and state commissions. The Subcontractor(s) is expected to compile and build on the research and information that has been assembled and to provide substantial added value to EISPC's on-going efforts and the needs of individual states. The Subcontractor(s) shall include the work done by the DOE, NRC, Federal Energy Regulatory Commission (FERC), National Electric Reliability Corporation (NERC), National Association of Regulatory Utility Commissioners (NARUC), National Regulatory Research Institute (NRRI), Electric Power Research Institute (EPRI), trade associations such as Nuclear Energy Institute (NEI), Architectural and Engineering firms with expertise in nuclear generation, equipment vendors, universities (e.g., MIT), and states.

While nuclear power provides in excess of 20% of the Nation's electricity production[1], EISPC recognizes the situation in Japan at the Fukushima station (and Three Mile Island and Chernobyl) raises concerns for safety. Capital costs and the lack of permanent nuclear waste storage are also legitimate concerns that may affect future development of nuclear power. However public opinion about nuclear power has changed and will continue to change. In part, public acceptance of nuclear power may be affected by alternative energy sources. For example, if coal-fired generation is deemed to be economically untenable due to environmental restrictions (especially stringent carbon regulation) nuclear generation may be more acceptable. Future supply disruptions, such as the Oil Embargos of the 1970s that dramatically increases oil and natural gas prices might spur interest in nuclear power development. Standardized design of nuclear power plants, improved reactor designs, and smaller modular nuclear reactors (SMRs) units may also reduce some of the anxieties about nuclear power. Decisions by other nations may also affect nuclear power in the U.S.

BACKGROUND SECTION

This section is intended to be a primer on nuclear power; particularly in the United States.[2]

- Brief history of the use of nuclear power in the electric industry (US and other nations)
- Brief discussion of the evolution of nuclear generation
- State-by-state detail of the following as well as aggregation to the relevant region:
  - Nuclear generating units (name of unit, name of owner(s), location, size in MW, type of technology, age of units, uprates, license expiration dates)
- Historical (perhaps the last 30 years) and current fuel mix by state, region, Eastern Interconnection, and Nation
- The demand for nuclear is, in part, a function of the demand for other resources. As a result, the Subcontractor(s) shall include a brief explanation

[1] As of 2008, nuclear power in the United States is provided by 104 commercial reactors (69 pressurized water reactors and 35 boiling water reactors) licensed to operate at 65 nuclear power plants, producing a total of 806.2 TWh of electricity, which was 19.6% of the nation's total electric energy generation in 2008.

[2] EISPC Members recognize there has not been a nuclear plant built in the US in recent years due in part to expected high construction costs so there is little applicable information on the cost of constructing new nuclear facilities. EIPSC also recognizes that regulatory uncertainty is a factor that deters investment. EISPC understands the last generation of nuclear plants that were often plagued by cost-overruns and prudence disallowances need not be indicative of future plant construction. To the extent that some of the cost overruns were due to delays resulting from NRC "change orders" that often required redesign, it is hoped that standardized design will reduce the risks of cost overruns. EISPC is also aware that nuclear plant availabilities and capacity factors have increased dramatically since the 1980s and this has resulted in lower costs per kWh that will offset some of the costs of constructing new nuclear power plants.

of the risks and concerns involving other resources would be helpful to EISPC: (a) Hydro-Electric, (b) Natural Gas, (c) coal, (d) Renewable Resources – Biomass, Geothermal, Hydro-Electric, Solar, Wind by state, region, Eastern Interconnection, and Nation

- Historic and future demand for nuclear power (domestic and world-wide)
- Historic and forecasted cost of power from nuclear power plants on a unit-by-unit basis and in comparison to other resources in the relevant states and regions.
- Brief history of NRC regulation and nuclear safety events
- Brief discussion of storage and transportation issues
- US fleet performance over time (capacity factor, O&M costs, fuel costs, NRC assessment, etc.)

ASSESSING NUCLEAR TECHNOLOGIES

Against the backdrop of 104 aging nuclear units in the United States, EISPC is interested in understanding the potential ramifications of a "nuclear renaissance."[3] EISPC wishes to emphasize that the primary focus shall be on those technologies that have been approved or are being assessed by the NRC. However, EISPC is also interested in the potential for other technologies. Therefore, for each of the below technologies, the Subcontractor(s) shall provide a brief assessment of the technology and the potential cost-effectiveness over a significant planning horizon. For example, EISPC wants the Subcontractor(s) to assess whether the open, once-through fuel cycle is likely to be more cost-effective over the next 30 years or so compared to the closed fuel cycles: despite their advantages in addressing the long-term waste issues. The analysis should include life-cycle cost estimates (e.g., capital costs, variable Operations & Maintenance expenses, decommissioning, waste storage), graphic depictions, and technical analysis. The analysis shall also include a framework for states to consider in the evaluation of constructing these facilities. Some have commented on the absence of models and simulation that permit quantitative trade-off analysis among different reactor and fuel

[3] As used in EISPC's Energy Zones work, the term "nuclear renaissance" has, since about 2001, been used to refer to a possible nuclear power industry revival, driven by rising fossil fuel prices and new concerns about meeting greenhouse gas emission limits. China has 27 new reactors under construction and there are also a considerable number of new reactors being built in South Korea, India, and Russia. As of June 2011, in the U.S., there are 28 combined license applications for new reactors filed with the Nuclear Regulatory Commission for nuclear units expected to be built over the next 10 years.
Several generations of reactors are commonly distinguished. Generation I reactors were developed in 1950-60s, and outside the United Kingdom, none are still running today. Generation II reactors are typified by the present U.S. and French fleets and most in operation elsewhere. Generation III are the Advanced Reactors and are the basis of the large reactor in this study also referred to as the U.S. Evolutionary Power Reactor (U.S. EPR™). Generation IV reactor designs are at concept stage and will not be operational before 2020 at the earliest.

cycle choices. To the extent there are recent empirical examples of nuclear plants being constructed or planned, information from these should be included.

- Generation 3[4] and 4 Nuclear Facilities that use advanced fuels, higher burn up to reduce fuel use and waste, greater longevity (60 or more years), and potentially lower cost due to standardization of design.
- Pressurized Water Reactors (PWR)
- Boiling Water Reactors (BWR) and Advanced Boiling Water Reactors
- Pressurized Heavy Water Reactors such as Canada's Advanced CANDU Reactors
- Light Water Reactors
- Fast Breeder Reactors (FBR) potential and problems (e.g., encountered by France and others)
- Small and Modular Reactors (SMR) [5]such as the Westinghouse (International Reactor Innovative & Secure) modular 100 - 335 MW pressurized water reactor

[4] As used by the Energy Zones work, Generation III a1600 MW(e) plant size bounds all large Generation III plant designs under consideration by the NRC. The power output is used to determine the necessary stream flow to supply makeup water for cooling, which is subsequently reflected in the criteria for identifying resources. Plant cooling in all cases is provided by a closed-cycle mechanical-draft cooling tower with make-up water required for evaporation and blowdown. Based on knowledge of current reactor plant installations, available data on proposed new large reactor designs, and expert judgment, it is assumed that a single or dual plant U.S. EPR can be accommodated on a 500-acre footprint. Generation III reactors have:

- a standardized design for each type to expedite licensing, reduce capital cost and reduce construction time,
- a simpler and more rugged design, making them easier to operate and less vulnerable to operational upsets,
- higher availability and longer operating life - typically 60 years,
- further reduced possibility of core melt accidents,
- 72-hour grace period, so that following shutdown the plant requires no active intervention for 72 hours,
- resistance to serious damage that would allow radiological release from an aircraft impact,
- higher burn-up to reduce fuel use and the amount of waste,
- greater use of burnable absorbers ("poisons") to extend fuel life.

[5] Consistent with EISPC's Energy Zones definition, a small modular reactors (SMRs) are part of a new generation of nuclear power plants being designed all over the world. The objective of these SMRs is to provide a flexible, cost-effective energy alternative. Small reactors are defined by the International Atomic Energy Agency as those with an electricity output of less than 300 MWe, although general opinion is that anything with an output of less than 500 MWe counts as a small reactor. Modular reactors are manufactured at a plant and brought to the site fully constructed. They allow for less on-site construction, increased containment efficiency, and heightened nuclear materials security .A small reactor is a light water reactor with a nominal output of 350 MWe, representative of a single Innovative and Secure Reactor (IRIS) small modular reactor (SMR) design. As with the large reactor, the power output is used to determine the necessary stream flow to supply makeup water for cooling, which is subsequently reflected in the criteria for identifying resources. Plant cooling in all cases is provided by a closed-cycle mechanical-draft cooling tower with make-up water required for evaporation and blowdown. Based on preliminary design information and expert judgment, it is assumed that an SMR single or multi-module site can easily be accommodated on a 50-acre footprint.

and PRISM **t**he GE / DOE national lab effort to develop advanced liquid-metal fast breeder reactors that are approximately 310 MW.
- Other (e.g., liquid sodium)

PLANT-LIFE EXTENSIONS, UPRATES, AND RETIREMENTS

The Subcontractor(s) shall prepare a policy guide for states to assess the cost-effectiveness of plant-life extensions, uprates, derates, and retirements for utility and merchant owned nuclear generation. The information should augment the information in the Background Section and include other types of information that would be considered in evaluating the benefits and costs to changes in nuclear generating capacity.

- Name, in-service date, location, owner(s), and type of unit(s),
- Name plate capacity (other capacity information such as capacity at time of system (e.g., RTO) maximum demand, environmental derates such as those due to water temperatures and attainment zone requirements,
- Capacity factor, unit availabilities, heat rates, and other relevant operational / reliability indices for each of the last 10 years,
- Estimates of variable Operations and Maintenance Costs; to the extent possible. It may be that this will require confidentiality agreements and other means to protect the confidentiality.
- Generic cost estimates for plant life extension; to the extent possible this should be developed from empirical data. It may be that this will require confidentiality agreements and other means to protect the confidentiality.
- Impacts (on all generating technologies) of proposed EPA regulations and other anticipated regulations such as water regulations.

ASSESSING THE LOCATIONS OF NEW NUCLEAR FACILITIES AND NUCLEAR UNITS THAT ARE POTENTIAL CANDIDATES FOR UPRATES

The Subcontractor(s), in coordination with the Energy Zones work, shall make an assessment of the potential sites for development of new nuclear units. The Subcontractor(s), shall also assess the existing units that may be candidates for uprates. In this regard, the Subcontractor(s) shall detail the considerations that may affect the decision to uprate the units such as on-sight storage, age of the unit, space considerations, cost of the uprate, added capacity, the ability to recover investments in the uprates, demand for power, and etc. To the extent that critical information is deemed to be confidential, the states may be able to provide some assistance provided there are safeguards to protect the confidential nature of the information.

RISK AND LIABILITIES

The Subcontractor(s) shall develop a detailed assessment of risks (short and long-term) that could be used by policymakers to assist in assessing the viability of nuclear power in their state. EISPC fully recognizes that some of this analysis will be theoretical, however, the emphasis shall be on how to make the EISPC members can apply this information. By way of example, the event in Japan may increase the perceived or actual risk of constructing nuclear power plants how can EISPC members assess any potential added risks? EISPC notes that all of the nuclear power plants in the U.S. were built by regulated or government-owned (e.g., TVA, BPA) utilities. Given the perceived or real financial risks, will this limit future development of nuclear power?[6]

- State-by-state survey of incentives / disincentives for nuclear generating capacity. The incentives and disincentives should include an appendix of statutory provisions and regulatory practices that allow (or prohibit) "Construction Work in Progress," "Allowance for Funds Used During Construction," "pre-approval," siting processes (i.e., some states have moratoriums or siting restrictions) that are either streamlined or unduly cumbersome, and etc. Notwithstanding some examples to the contrary, the Subcontractor(s) should assess whether investments in large-scale nuclear facilities may be increasingly too risky for a single entity, especially smaller entities, to undertake and may be facilitated by joint owners to minimize financial risks.

- To what extent do Regional Transmission Organizations and other Planning Authorities promote or inhibit the planning, operations, and development of nuclear generating resources? This could include, but not be limited to, transmission planning (e.g., is it sufficiently long-term to accommodate very capital intensive projects), the planning processes, capacity markets, dispatch practices (including the implications for integrating wind. access to broad markets to buy and sell power, regional differences in capacity factors and other operational indices), coordination with states in the planning / siting / construction / and operations, and etc.

- To what extent do federal agencies inhibit or facilitate the planning, operations, and development of nuclear generating resources?
  This should include, but not be limited to:
  - NRC licensing processes for new and uprated capacity (relicensing),

[6] Specifically, do investors believe that regulation or government (quasi governmental) -ownership reduces the cost of capital by offering protection against construction cost uncertainty, operating performance uncertainties and uncertainties associated with future oil, gas and coal prices? In other words, if market participants, such as merchant plant developers, have to bear the cost and performance risks or sign long-term (e.g., 40 year) contracts, would nuclear power plants be constructed? To what extent, if any, do market constructs such as RTOs affect the risk for non regulated or governmental entities to build nuclear power since it appears the shift to competitive retail electricity markets leads investors to favor less capital-intensive and shorter construction lead-time investments?

- NRC decommissioning processes and issues. EISPC was also interested in the potential for using sites of decommissioned nuclear facilities to construct other generation,

- The prospects for continued DOE research and development and the potential ramifications for nuclear power development,

- Federal requirements for on-site storage and the attendant effects on the siting and construction of nuclear facilities. EISPC wants an assessment of risks associated with various storage options (continued on-site storage, more permanent nuclear waste storage, and the potential for reprocessing spent fuel), EISPC also wants an assessment of other risks associated with nuclear safety and security issues (anti-proliferation, transportation, natural disasters and other emergencies, and etc). The Subcontractor(s) is also asked to discuss any special requirements for transmission facilities that are unique to nuclear units,

- Nuclear liability issues shall include an assessment of the sufficiency of the Price Anderson Act,

- State statutory and regulatory risks such as the existence of moratoriums / prohibitions that would impede the development of any new nuclear-fired facilities, plant-life extensions, or uprates of existing nuclear facilities,

- Do the risks change regionally and by state due to market structures, desire for greater diversity of resources, environmental concerns (e.g. limits on carbon and other emissions from fossil fuel facilities, concerns for natural disaster risks?

- Factors that may affect construction lead times and the attendant ramifications for the cost of nuclear facilities,

- Commentary on the potential for changes in political philosophies that might result in changes in the viability of nuclear power. Commentary of the characteristics that may make a developer / operator more successful in the siting and operations of a nuclear power plant, This is not intended to be a critique of any specific company or the practices of any specific company. Rather, EISPC desires a general description of actions that some companies have taken that may enhance public acceptance and expedite construction of nuclear facilities.

- Forecasted nuclear fuel costs and potential supply risks and the implications for the cost-effectiveness of nuclear,

- With the potential need for greater use of intermittent renewable generation resources, what is the potential (if any) for new generation nuclear facilities (including SMRs) to ”firm up” intermittent resources and mitigate their potential adverse impacts on the bulk electric system?

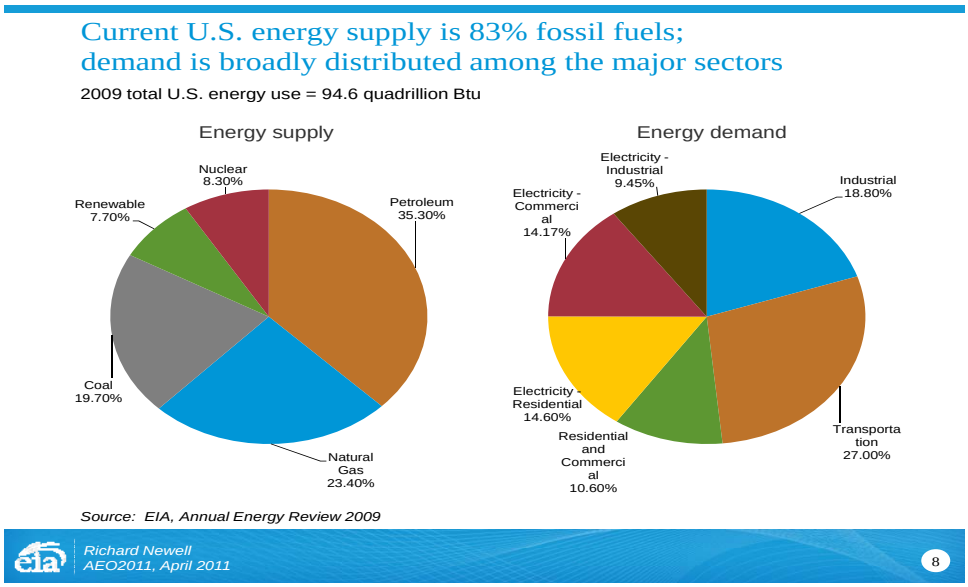
- The “aging work force” is a concern and EISPC wants an objective assessment of manpower requirements for restarting and carrying out a renewed nuclear program. The issue is that many of the nuclear engineers in the U.S. will be retiring in the next decade and there is a need for educating a new generation of nuclear experts in the US colleges and universities. This has been identified by IEEE as one of the issues that need to be overcome for reviving the nuclear program in the US.

The Subcontractor(s) will also offer reasoned scenarios of the consequences of recent decisions by Germany, Japan, and others to de-emphasize their reliance on nuclear power. In this regard, the Subcontractor(s) should consider the opportunities for US companies to purchase equipment at discounted prices, hiring and retention of expertise, the potential effects on construction timelines, the forecasted cost of nuclear fuel, and etc.

EISPC REVIEW

The Subcontractor(s) shall include a review process in their responses to allow EISPC Members to review the Report(s) to ensure the greatest potential value to the EISPC processes.

DEFINITION OF TERMS (the definitions should include graphic depictions of nuclear technologies and other graphics addressing fuels, costs, plant diagrams, and etc.)



INCORPORATION OF EISPC's ENERGY ZONE WORK

Nuclear Generation	
Criteria for identifying resources in Candidate Study Areas	
Parameter	**Criteria**
Population	Land with a population density greater than 500 people per square mile (including a 20-mile buffer) is excluded.
Earthquake	Land with a safe shutdown earthquake peak ground acceleration greater than 0.3g is excluded.
Fault lines	Land too close to identified fault lines (length determines standoff distance) is excluded;
Wetlands	Wetlands and open water are excluded.
Protected Areas	Protected lands (national parks, historic areas, wildlife refuges, etc.) are excluded.
Slope	Land with a slope greater than 12% is excluded.
Landslide	Land with a moderate or high landslide hazard susceptibility is excluded.
Floodplain	Land that lies within a 100-year floodplain is excluded.
Cooling Water	Land areas that are greater than 20 miles from cooling water makeup sources with at least 200,000 gpm for large reactor—exclusionary and 50,000 gpm for small reactor is excluded
Hazardous Facilities	Land located in proximity of hazardous facilities is avoided (buffer zones can vary). major airports—10 mile buffer zone and military bases, oil pipelines, refineries, oil/gas storage, etc.—5 mile buffer zone.
Infrastructure	Land near adequate roads and railroads for infrastructure delivery and spent fuel waste hauling.

BIBLIOGRAPHY (This should reflect the state-of-the-art empirical research)

EISPC CONTACT INFORMATION
The Subcontractor(s) shall maintain contact information of state representatives that provided information to be included in the Report(s).

E. Initial Milestones/Deliverables (final Milestones & Deliverables to be negotiated)
Milestones:
Coordination protocols with EISPC and the National Laboratories
Approval of approach to the Analysis and any survey instruments (if applicable)
Progress updates
Initial Report
Final Report

Deliverables:
Enhancements, if any, to the Scope of Work to be approved by EISPC
Expected initial data sources
Monthly Reports. Presented in written form and, at the discretion of EISPC, in person.
Draft survey instruments, if applicable, presented to EISPC for review and comment.
Results of survey instruments, if applicable, and recommendations for additional information.
Draft Initial Report presented to EISPC for review and comment. Presented in written form and, at the discretion of EISPC, in person.
Draft Final Report presented to EISPC for review and comment. Presented in written form and, at the discretion of EISPC, in person.
Final Report. Presented in written form and, at the discretion of EISPC, in person.

F. Rejection of Proposals & Incurred Costs

NARUC reserves the right to reject any or all submitted proposals not in conformance with this RFP, or for other causes. NARUC shall not be liable for any costs incurred by any Subcontractor(s) prior to the execution of a contract.

G. Estimated Schedule (subject to change)

- Posted on NARUC website 09/21/11
- Responses to RFP due 10/21/11
- Subcontractor(s) Selected 11/30/11
- First Conference Call 12/08/11
- Subcontractor(s) First Progress Report due 01/26/12
- Future Progress Reports due based on negotiated Milestones
- Draft Final Report Due 11/16/12
- Final Report Due 12/13/12

H. Questions and further information
All questions and information requests should be addressed to Miles Keogh, NARUC's Director of Grants & Research, by email at mkeogh@naruc.org. and Bob Pauley bob.pauley@eispc.org