Portfolio Media, Inc. | 860 Broadway, 6th Floor | New York, NY 10003 | www.law360.com
Phone: +1 646 783 7100 | Fax: +1 646 783 7161 | customerservice@portfoliomedia.com

The Complexity Of Contracts Amid Nuclear Renaissance

Law360, New York (April 27, 2010) -- In addition to the myriad of issues that confront the sponsors of a new power generating facility when negotiating the terms and conditions of agreements for the engineering, procurement and construction of a new facility, sponsors of new nuclear generating facilities must also consider and address unique nuclear regulatory issues.

While the need to consider and appropriately address nuclear regulatory issues is present no matter where a project is located, this guest column focuses on some of the impacts of nuclear regulation on contracts for the engineering, procurement and construction of new nuclear generating facilities in the United States.

In addition, if the sponsors are intending to construct a new nuclear generating facility in the United States, the sponsors are most likely going to seek a U.S. Department of Energy loan guarantee to assist in financing the facility. Successful DOE loan guarantee applicants likely will need to address the use of union craft labor on the project and "Buy American" issues for procurement of certain equipment and materials.

EPC Agreements for New Nuclear Generating Facilities

Traditional engineering, procurement and construction agreements, or EPC agreements, typically span the development of a generating facility project from engineering design through completion of construction of the project and on through a warranty period commencing once the facility achieves commercial operation.

Development of a new nuclear generating facility is unique due to the extensive licensing process with the U.S. Nuclear Regulatory Commission (NRC) and the detailed review and oversight required both to plan for the design and construction and to obtain a "combined operating license" (COL), which authorizes construction and operation.

The COL also designates a responsible "operator licensee" and sets forth the detailed terms under which the construction and operation will be permitted. Due to the several years it takes to obtain a COL — which must be in place before on-site construction activities involving nuclear safety-related structures, systems and components can begin — an EPC agreement for a new nuclear generating facility must cover a significantly extended period of time, particularly during the engineering and early development phase.

Extra attention should therefore be paid to project control issues, including schedule and cost controls, during the engineering and early development phases. Sponsors may also want to consider utilizing separate agreements such as front-end engineering and development agreements during earlier phases of project development.

In addition, long lead times for ordering certain equipment and materials may also require sponsors to include at least some procurement in the early phase agreements.

Nuclear Licensing

The NRC's licensing process requires that a "technically qualified" organization with an appropriate quality assurance (QA) program and oversight capability be responsible to the NRC for the design and construction as well as the ultimate operation of the facility after initial fuel is loaded.

Although a contractor may have responsibility for construction under the EPC agreement and functional control of the site during construction, the licensed operator's organization must maintain ultimate control of the site from a nuclear regulatory perspective.

The term "operator licensee" should not be read narrowly to refer only to actual "operation" of the facility, because there must be an NRC licensee responsible for construction, which typically is also the NRC-licensed organization responsible for operation. These functions can be separated, but separation is unlikely in most cases due to practical consideration such as the nuclear safety needs associated with continuity during the transition of licensed responsibility from construction to operation.

The licensed operator is the organization accountable as an NRC licensee and responsible to the NRC for nuclear safety and security at the facility. This nuclear safety responsibility includes a unique level of QA program implementation and oversight during the entire procurement process including both design and construction of the facility, whereby the licensed operator must assure the quality and adequacy of the QA programs implemented by the prime contractor and all of its subcontractors.

Moreover, during construction the contractor may be responsible for conducting various inspections, tests and analyses to meet acceptance criteria, but the licensed operator will be responsible for certifying these results to the NRC.

EPC agreements for new nuclear generating facilities should therefore recognize that control of nuclear safety aspects of the project will always reside with the licensed operator. The agreements should include specific provisions addressing oversight of relevant engineering, procurement and construction work by the licensed operator.

Among other things, EPC agreements for new nuclear generating facilities should expressly grant inspection and stop work rights to the licensed operator so that the licensed operator can comply with its license requirements. Contractors that are not experienced in nuclear construction in the United States may be concerned with the impact of oversight by NRC and licensed operator personnel, but experienced contractors should recognize that the NRC inspection and oversight regime will be specified and identifiable as long as the contractor performs the work in compliance with the specifications and regulatory requirements.

Nuclear Safety & Security

The licensed operator and the prime contractor and its subcontractors will be required to maintain an appropriate "nuclear safety culture" and to implement various programs to assure a safety conscious work environment. The regulatory requirements also will include security requirements that may need to interface with existing operating units at the same site, as well as heightened requirements that will apply once nuclear fuel is present at the project site.

Thus, EPC agreements for new nuclear generating facilities should specifically address requirements for employee concerns programs, security programs, background investigations, "fitness for duty" and other regulatory requirements applicable to contractors engaged in the construction of new nuclear generating facilities.

Project Labor Agreements and Buy American Requirements

While using union labor and procuring from American sources may not be technically required to obtain a DOE loan guarantee for a new nuclear generating facility, both practices have been strongly encouraged by President Obama's administration. As such, establishing a project labor agreement to govern the construction and implementing "Buy American" practices in connection with the new nuclear facility are factors that are more likely to result in a favorable review in the loan guarantee program.

Sponsors of new nuclear generating facilities may therefore want to consider including a requirement in the EPC agreement that the prime contractor responsible for on-site construction enter into a project labor agreement setting the terms and conditions for use of union craft labor on the project. The prime contractor in turn must subcontract in compliance with the project labor agreement, including requiring subcontractors to agree to be bound by the terms of the project labor agreement.

The sponsor should therefore make a decision as to whether the use of union labor will be required early on during discussions with potential contractors in order to identify and address concerns the contractors may have about the impact of union craft labor on project costs due to potential differences in wage rates and productivity from non-union craft labor.

In order to demonstrate that the sponsor is procuring equipment and materials from American sources, a sponsor will need to require its prime contractor and all relevant subcontractors to utilize American sources for the desired equipment and materials. By addressing the use of American sources for certain equipment and materials during the early stages of negotiating an EPC agreement, the sponsors will be able to identify potential impacts on costs and agreement terms such as warranties and guarantees.

Early recognition of original equipment manufacturer preferences for use of non-American sources for certain equipment and materials will also allow a sponsor to set expectations with DOE and negotiate appropriate exceptions to "Buy American" requirements that the sponsor might otherwise impose through the EPC agreement.

Benefits of Appropriately Addressing Nuclear-Related Issues

There are a number of additional nuclear regulatory issues that will impact an EPC agreement for a new nuclear generating facility, including import/ export regulations and unique nuclear liability issues, which are not addressed within the scope of this guest column.

By considering and appropriately addressing all of the potential nuclear-related issues during the early stages of negotiating an EPC agreement for a new nuclear generating facility, sponsors and potential contractors will be able to craft an agreement that allows the sponsor to develop the project and allows the contractor to perform its scope of work in compliance with applicable rules and regulations.

Early discussion of nuclear-related issues will also allow sponsors to identify and engage appropriately experienced contractors that will be an asset in the development of the project, facilitate financing, and help avoid issues that might result in increased regulatory oversight.

--By John E. Matthews and Ingrid A. Myers (pictured), Morgan Lewis & Bockius LLP

John Matthews is a partner at Morgan Lewis in the firm's Washington and Houston offices. Ingrid Myers is a partner in the firm's Los Angeles and Houston offices.

The opinions expressed are those of the authors and do not necessarily reflect the views of Portfolio Media, publisher of Law360.