

efficiency bulletin

Sept. 30, 2016

Efficiency Bulletin: 16–26d Supplemental Supplier Contracts/ Use of NANTeL and EPRI STEs

Incorporate contractual language and implement best practices to ensure supplemental suppliers support the industry's expectation that supplemental workers come to the nuclear site trained and qualified to work.

Addressees: Chief nuclear officers, NEI APCs and INPO APCs

Issue: TRN-5.3, Supplemental Supplier Contracts/Use of NANTeL and EPRI

Summary of Efficiency Opportunity

- Desired end-state—Suppliers participate in the NANTeL program and use the qualification tools in the EPRI Standardized Task Evaluation (STE) program, so that supplemental workers come to the nuclear site trained and qualified to work.
- Value proposition (vision of excellence)—Controlling supplemental work force mobilization costs, optimizing in-processing time, reducing the utility resources needed to support in-processing activities and developing a larger known pool of technically proficient supplemental workers.
- Why it is important?—The industry's traditional site-specific training and qualification practices often impede supplemental workers in making a timely contribution to the work that needs to be done, resulting in outage schedule delays and cost overruns. The average cost of training for a supplemental worker is in excess of \$500 per day.
- Industry benchmark value(s)—The number of days to badge a supplemental worker should decline, as well as the costs associated with in-processing.
- Measure of effectiveness—Indicators for average days to badge for in-processing of supplemental workers should decline and annual costs associated with in-processing should decline.

Color Code: Blue
Due: June 2017

DELIVERING THE
NUCLEAR PROMISE



nuclear matters:
my work • my plant • my industry



NUCLEAR ENERGY INSTITUTE

The Nuclear Energy Institute is the nuclear energy industry's policy organization.

This bulletin and additional information about nuclear energy are available at nei.org.

1201 F Street, NW
Washington, DC 20004
NEI.org

- Maximum benefit is obtained when this efficiency opportunity is implemented in conjunction with efficiency bulletins EB 16-26a, "Standardizing Nuclear Access Processing and Requirements"; EB 16-26b, "Standardization of In-Processing Training"; and EB 16-26c, "Implement Common NANTeL Radiation Worker Training."

Relevant Standards

- None

Guidance

- Attachment 1, "TRN 5.3 Supplemental Supplier Contracts," white paper, Sept. 28, 2016.

Recommended Industry Actions

- Review Attachment 1 and incorporate the change management considerations into the utility's change management plan that includes the change management considerations referenced in Efficiency Bulletin 16-26a, "Standardizing Nuclear Access Processing and Requirements"; Efficiency Bulletin 16-26b, "Standardization of In-Processing Training"; and Efficiency Bulletin 16-26c, "Implement Common NANTeL Radiation Worker Training."

Change Management Considerations

Industry Activities

- Industry webinar on Oct. 6, 2016 to provide background for initiative, INPO discussion and an open forum to clarify expectations and ask questions. Webinar information can be found at <https://web.inpo.org/Pages/Nuclear-Promise-Issues.aspx>.
- Discuss implementation best practices and/or challenges at Nuclear Supply Chain Strategic Leaders (NSCSL) meetings.

Company Actions

- Utility shall incorporate the change management considerations referenced in Attachment 1 into the utility's change management plan for the other in-processing EBs referenced above.
- Supply chain shall participate in the development of the change management plan and support the implementation of the EBs, where appropriate.

Guidelines

- Perform a self-assessment to evaluate the effectiveness of changes. Factors to consider should include:
 - comparison of previous year's in-processing costs to current year's in-processing costs
 - comparison of supplemental workers who required on-site training to those who arrived with training completed.

Key to Color Codes:

Red: NSIAC initiative – full participation required for viability

Blue: Action expected at all sites, but is not needed for broad industry viability

Green: Utility discretion to implement, consistent with its business environment

Report Your Site's Results

Please report your company's implementation of this improvement opportunity, including the date of completion. Send this information along with your company point of contact to EfficiencyBulletin@NEI.org.

Industry Contacts

- Industry champion for this issue: Brandon Zimmerman, 205-992-6418, bmzimmer@southernco.com
- INPO contact: Tammy Love, 770-644-8612, lovets@inpo.org
- NEI contact: Elizabeth McAndrew-Benavides, 202-739-8143, emb@nei.org
- EPRI contact: Heather Feldman, 704-595-2735, hfeldman@epri.com
- On the web: www.nei.org/bulletin1626d

Industry Approval:

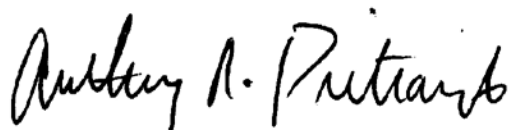
Bill Pitesa, CNO Lead



David P. Igyarto, Institute of Nuclear Power Operations



Anthony R. Pietrangelo, Nuclear Energy Institute



Supplemental Supplier Contracts

September 30, 2016

To encourage supplemental suppliers to participate in the NANTel program and use the qualification tools in the EPRI Standardized Task Evaluation program, contractual agreements must support the industry's expectation that supplemental workers come to the nuclear site trained and qualified to work.

I. Background

Supplemental workers are critical to the nuclear industry's mission of safe, reliable, cost-effective operations. However, traditional site-specific training and qualification practices employed by the industry often inhibit supplemental workers from contributing to the workforce in a timely manner, resulting in outage schedule delays and cost overruns. The average cost of training for a supplemental worker is in excess of \$500 per day. As an alternative to costly site-specific training practices, the industry needs to adapt a more efficient training process.

The majority of the training and qualification activities needed to fulfill nuclear site access, radiological worker, industrial safety and other key training courses are available in the National Academy for Nuclear Training e-Learning ("NANTel") program. These training and evaluation activities can be completed well before a worker reports to a nuclear site for their assignment. Maximizing use of NANTel is a key attribute in achieving the end goals of controlling supplemental work force mobilization costs, optimizing in-processing time, reducing required utility resources to support in-processing activities and developing a larger known pool of technically proficient supplemental workers.

In addition to NANTel, Electric Power Research Institute's (EPRI) Standardized Task Evaluation (STE) program supports the end goals above through a proven, objective-based knowledge/skills evaluation process. The qualification tools developed in the EPRI STE program can be used by utilities and supplemental suppliers to ensure the competency of the industry's supplemental workers. To enable supplemental suppliers to administer the STEs and to support portable qualifications, EPRI, in conjunction with utilities and supplemental suppliers, developed the Administrative Protocol for Portable Practicals (AP3). AP3 is an attribute-based protocol to assess a supplemental supplier's administration of the EPRI STE practicals. Use of the EPRI STE program is an "industry recognized training and qualification program" per ACAD 91-006, *Guidelines for On-The-Job Training and Evaluation*.

Utilization of the qualification tools in the EPRI STE program will help reduce training and qualification costs, meanwhile increasing the pool of proficient supplemental workers through enhanced qualification portability using the EPRI STE Completion Database and/or NEI PADS.

To encourage suppliers to participate in the NANTel program and to utilize the qualification tools in the EPRI STE programs, utility-supplier contractual agreements must support the industry's expectation that supplemental workers come to the nuclear site trained and qualified to work. With industry encouragement, both programs can reduce in-processing time and workforce mobilization training costs, as well as develop a larger known pool of technically proficient supplemental workers to support utility maintenance and project activities. It should be noted that compensation of the supplemental workers for training prior to arriving to the nuclear site will vary throughout the industry.

II. TRN 5.3 Requirements and Timeline

The requirements stated below are to be implemented by the utility to the extent permitted by federal, state and/or municipal laws or regulations, commissions and/or union labor agreements.

The utility shall include and enforce the standard contract language in Section III(a) below (or language substantively similar thereto) in all **new** project and general service agreement contracts awarded after June 30, 2017, that involve the use of supplemental workers in the operations and maintenance of the utility's nuclear sites.

In addition to the requirement above, each utility is directed to review and amend, in a timely manner as deemed appropriate by the utility, all **existing** project and general service agreement contracts that involve the use of supplemental workers in the operations and maintenance of the utility's nuclear sites to include and enforce the standard contract language in Section III(a) below (or language substantively similar thereto).

The broad sweeping development and use of the EPRI STE program has been identified as a future Delivering the Nuclear Promise Improvement Opportunity (IO) and may be addressed in a future Efficiency Bulletin. Thus, the utility may include and enforce, at its discretion, the standard contract language in Section III(b) below (or language substantively similar thereto) in all **new** and **existing** project and general service agreement contracts that involve the use of supplemental workers in the operations and maintenance of the utility's nuclear sites, unless or until otherwise directed by a future Efficiency Bulletin.

On a limited case-by-case basis, the utility may exclude the standard contract language from a specific contract if an evaluation of the factors below warrants doing so:

- 1) Limited scope/duration of the current contract award
- 2) Whether there are future opportunities for the supplier to perform work in the nuclear industry
- 3) Proximity of the contract award to the supplier's mobilization or start date.

III. Standard Contract Language

a. **NANTeL**

{UTILITY} retains the sole right to determine training and qualification requirements for Supplier's personnel working at {UTILITY} facilities.

Supplier shall allow {UTILITY} to review the Supplier's training program, content, documents, and facilities to allow {UTILITY} to make a determination concerning credit that may be awarded towards worker training and qualification requirements. Supplier verification of completed NANTeL courses is required prior to mobilization on-site. Supplier agrees to provide access and reasonable assistance to the training program, content, documents and facilities relevant to the type of work covered in this Agreement. Neither party shall invoice/charge/bill the other for any time, expenses and/or costs associated with providing such access and reasonable assistance.

[OPTION #1 – COURSES LISTED] Supplier shall not invoice/charge/bill {UTILITY} for time, expenses and/or costs associated with Supplier personnel that receive any training on-site by {UTILITY} personnel on the following topics for which training content and evaluation tools exist on NANTeL:

- Generic Plant Access
- Generic Radiation Worker Training
- Generic Fitness for Duty Behavior Observation Program
- Generic Foreign Material Exclusion

- Generic Confined Space Entrant/Attendant
- Generic Fall Protection
- Generic Cyber Security Awareness
- Electrical Safety for Non-Qualified Workers
- Generic Scaffold Safety
- Electrical Safety for Qualified Workers
- Generic Material Handling
- Generic Hot Work Firewatch
- Asbestos Awareness
- Generic Lead Awareness
- Human Performance

[OPTION #2 – NO COURSES LISTED] Supplier shall not invoice/charge/bill {UTILITY} for time, expenses and/or costs associated with Supplier personnel that receive any training on-site by {UTILITY} personnel for which training content and evaluation tools exist on NANTeL.

Supplier shall not invoice/charge/bill {UTILITY} for time, expenses and/or costs previously paid for by another utility. In accordance with {UTILITY}'s audit rights, {UTILITY} shall have the right to review Supplier's records to ensure Supplier has not received payments from multiple utilities for such training.

Completion of the NANTeL training courses does not guarantee Supplier personnel entry into a nuclear site or a right to work. Additional fitness for duty, security, training or task evaluations may be required prior to Supplier's personnel obtaining an access badge.

b. EPRI STE

{UTILITY} will accept task qualifications awarded by Supplier, if Supplier achieves and maintains compliance with the Electric Power Research Institute Administrative Protocol for Portable Practicals (EPRI AP3).

Supplier agrees to pursue EPRI AP3 compliance within six (6) months of execution of this Agreement, to establish a schedule for the AP3 review process with EPRI, and to obtain EPRI AP3 compliance in a timely manner. Failure to obtain EPRI AP3 compliance shall be grounds for {UTILITY} to suspend or terminate this Agreement in accordance with Sections XX of this Agreement.

[OPTION #1 – TASKS LISTED] Supplier shall not invoice/charge/bill {UTILITY} for time, expenses and/or costs for Supplier personnel associated with any training or qualification activities performed on-site by {UTILITY} personnel on the following tasks for which approved EPRI standardized task evaluations (STEs) exist:

[UTILITY TO INSERT SPECIFIC EPRI STEs]

[OPTION #2 – NO TASKS LISTED] Supplier shall not invoice/charge/bill {UTILITY} for time, expenses and/or costs for Supplier personnel associated with any training or qualification activities performed on-site by {UTILITY} personnel for any tasks for which approved EPRI standardized task evaluations (STEs) exist.

Completion of the EPRI STEs does not guarantee Supplier personnel entry into a nuclear site or the right to work. Additional fitness for duty, security, training or task evaluations may be required prior to Supplier's personnel obtaining an access badge.

IV. Change Management Considerations

The utility will need to develop a change management plan to address the considerations below, in addition to those considerations identified in in Efficiency Bulletin 16-26a (Standardizing Nuclear Access Processing and Requirements); Efficiency Bulletin 16-26b (Standardization of In-processing Training); and Efficiency Bulletin 16-26c (Implement Common NANTEL Radiation Worker Training). It should be noted that most of the change management considerations referenced below and in the other in-processing EBs will require input/engagement from multiple departments within the utility. Therefore, it is recommended that the utility assign a project manager to oversee the development and implementation of the change management considerations, with Supply Chain to support as necessary.

- 1) Technological Accessibility: The utility, its suppliers and/or its union locals will need to ensure that supplemental workers are given access to computers to complete the NANTEL courses.
 - a. Cost-saving opportunities/best practices:
 - i. Use the utility's in-processing computers during non-outage months.
 - ii. Donate the utility's older desktops and laptops to suppliers and/or local union halls.
 - iii. Identify locations that can be used by suppliers, union locals, and supplemental workers for proctored and non-proctored courses (e.g., libraries, computer labs, junior colleges, technical schools).
 - iv. Use testing trailers.
- 2) Proctor Logistics: The utility, its suppliers and/or union locals will need to ensure that proctors are accessible at various times to oversee supplemental workers when completing the proctor-required courses.
 - a. Cost-saving opportunities/best practices:
 - i. Train and certify individuals within supplier and/or the union locals to self-proctor the supplemental workers when completing the proctor-required courses.
 - ii. Schedule training days (e.g., second Tuesday of the month) during non-outage months that the utility will have laptops and proctors at a central location to allow supplemental workers to complete the proctor required courses.
 - iii. Use third-party proctoring services or testing centers to supplement proctored course offerings.
 - iv. Align proctor training requirements across the industry so that one proctor can support multiple utilities.
 - v. Investigate web-based or virtual proctoring, if supported by technological accessibility.
- 3) Emergent On-Site Support: The utility will need to consider how it will handle supplemental workers performing emergent on-site support.
 - a. Cost-saving opportunities/best practices:
 - i. Escort the workers to minimize training costs and the associated impacts on the utility.
 - ii. Identify existing supplemental suppliers within the industry for the various emergent on-site services that may be needed and establish multi-year agreements.
- 4) Local Union Agreements: The utility, its suppliers and/or union locals need to review the local union agreements, if applicable, to ensure that the in-processing effort/initiative is supported.

a. Cost-saving opportunities/best practices:

- i. Review international, national and/or union agreements at neighboring utilities to minimize the time spent on negotiations.

5) Compensation: The utility, its suppliers and/or local union halls need to ensure that the supplemental worker contract and/or union labor agreement clearly states the compensation to be received by the worker for pre-qualification. The particulars of this consideration will vary from utility to utility.

a. Cost-saving opportunities/best practices:

- i. Establish time tables for the standard NANTeL courses required and align the compensation structure to a reasonably expected completion time. Below is a table with the average national completion time, as reported by NANTeL:

Topic	Completion Time
Generic Fitness for Duty Behavioral Observation Program	90 min
Generic Plant Access	90 min
Generic Radiation Worker Training	150 min
Generic Respiratory Protection	60 min
Generic Hot Work Firewatch	60 min
Asbestos Awareness	<i>Not Available</i>
Generic Lead Awareness	30 min
Generic Cyber Security Awareness	50 min
Electrical Safety for Non-qualified workers	30 min
Electrical Safety for qualified workers	<i>Not Available</i>
Generic Foreign Material Exclusion	60 min
Generic Material Handling	30 min
Generic Scaffold Safety	60 min
Generic Fall Protection	60 min
Generic Confined Space Entrant/ Attendant	30 min
Human Performance	<i>Not Available</i>

- ii. Agreement should clearly address what costs are billable to the utility (e.g., proctors, computers, building/trailer rentals);
- iii. The time, expenses and/or costs associated with failed NANTeL modules/courses shall NOT be eligible for reimbursement by the utility.

6) Engage Existing Suppliers: The utility should consider communicating the industry’s expectations and shared benefits with their existing suppliers immediately following the publication of the EB.

a. Cost-saving opportunities/best practices:

- i. Industry wide communication distributed by NEI or INPO to its supplier organizations and/or by each utility to its key suppliers.
- 7) Contract Administration Support: The utility may need to identify/develop technological and/or reporting capabilities to support Contract Administrators in the performance of invoice reviews. Reports that could identify supplemental workers that gained access to multiple sites during a given year could assist the Contract Administrators in the review and validation of training costs being submitted by Supplier.
 - a. Cost-saving opportunities/best practices:
 - i. Review existing reporting capabilities within NANTeL and PADS.
- 8) Participation in EPRI STE Program: If the utility elects to utilize the qualification tools in the EPRI Standardized Task Evaluation (STE) program, the utility and its suppliers will be required to become a program funder to gain access to the EPRI STE Completion Database and accept STE qualifications.