

April 14, 2014

MEMORANDUM TO: Richard A. Rasmussen, Chief  
Electrical Vendor Inspection Branch  
Division of Construction Inspection  
and Operational Programs  
Office of New Reactors

FROM: Eugene Huang, Inspection Team Leader **/RA/**  
Electrical Vendor Inspection Branch  
Division of Construction Inspection  
and Operational Programs  
Office of New Reactors

SUBJECT: INSPECTION PLAN FOR THE QUALITY ASSURANCE  
PROGRAM OF RSCC WIRE & CABLE LLC.

VENDOR: RSCC Wire & Cable LLC, East Granby, CT

VENDOR CONTACT: Mr. David Murphy, Manager of Quality  
david.murphy@r-scc.com

INSPECTION DATES: May 19-23, 2014

VENDOR LOCATION: RSCC Wire & Cable LLC  
20 Bradley Park Road  
East Granby, CT 06026

VENDOR DOCKET NO.: 99901443

INSPECTION REPORT NO.: 99901443/2014-201

INSPECTION TEAM:

Eugene Huang	NRO/DCIP/EVIB	Team Leader
Jose Jimenez	NRO/DCIP/EVIB	
Annie Ramirez	NRO/DCIP/EVIB	
Laura Micewski	NRO/DCIP/MVIB	
Thomas Kendzia	NRO/DCIP/QVIB	
Denise Terry-Ward	RII	

Enclosure: Inspection Plan

CONTACT: Eugene Huang, NRO/DCIP  
301-415-4140

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**Distribution:**

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DTerry-Ward

**ADAMS ACCESSION No.:** ML14094A399 NRO-002

<b>OFFICE</b>	NRO/DCIP/EVIB	NRO/DCIP/EVIB
<b>NAME</b>	EHuang	RRasmussen
<b>DATE</b>	04/14/2014	04/14/2014

**OFFICIAL RECORD COPY**

## **RSCC Wire & Cable – Vendor Inspection Plan**

### **INSPECTION BASES:**

Appendix B to Title 10 of the *Code of Federal Regulation* (10 CFR) Part 50, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," and 10 CFR Part 21, "Reporting of Defects and Noncompliance."

### **INSPECTION PURPOSE AND INSPECTION PROCEDURES TO BE USED:**

The RSCC Wire & Cable LLC facility is located in East Granby, CT. This facility provides Class 1E wire and cable, and commercial-grade dedication (CGD) services to U.S. nuclear power plants. Currently, this facility is in the process of qualifying different cable types for the AP1000. This inspection will be the first at this RSCC Wire & Cable facility.

Inspection procedures (IP) to be used include IP 43002, "Routine Inspections of Nuclear Vendors," IP 43004, "Inspection of Commercial-Grade Dedication Programs," and IP 36100, "Inspection of 10 CFR Part 21 and Programs for Reporting Defects and Noncompliance."

### **INSPECTION SCOPE:**

The vendor inspection of RSCC Wire & Cable will focus on the quality assurance policies, procedures, and implementation associated with the: Part 21 program; design control and CGD processes; manufacturing, inspections, testing controls; measuring and test equipment; nonconforming materials, parts, or components; and corrective actions. The inspection will focus on the design control, commercial-grade dedication, and qualification of Class 1E cables and wires. The inspection will also focus on in-process safety-related qualification, manufacturing, inspections, and testing at the time of the inspection. The inspection will also cover areas related to the following Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC):

<b>DESIGN COMMITMENT</b>	<b>INSPECTION, TESTING, ANALYSIS</b>	<b>ACCEPTANCE CRITERIA</b>	<b>DCD TIER 1 REFERENCE</b>
2.2.1.6a.ii Containment System - The Class 1E equipment identified in Table 2.2.1-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.	Inspection will be performed of the as-installed Class 1E equipment and the associated wiring, cables, and terminations located in a harsh environment.	A report exists and concludes that the as- installed Class 1E equipment and the associated wiring, cables, and terminations identified in Table 2.2.1-1 as being qualified for a harsh environment are bounded by type tests, analyses, or a combination of type tests and analyses.	Section 2.2.1 Tables 2.2.1-1 & 2.2.1-3

DESIGN COMMITMENT	INSPECTION, TESTING, ANALYSIS	ACCEPTANCE CRITERIA	DCD TIER 1 REFERENCE
<p>2.2.3.7a.ii</p> <p>Passive Core Cooling System - The Class 1E equipment identified in Table 2.2.3-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.</p>	<p>Inspection will be performed of the as-installed Class 1E equipment and the associated wiring, cables, and terminations located in a harsh environment.</p>	<p>A report exists and concludes that the as-installed Class 1E equipment and the associated wiring, cables, and terminations identified in Table 2.2.3-1 as being qualified for a harsh environment are bounded by type tests, analyses, or a combination of type tests and analyses.</p>	<p>Section 2.2.3 Tables 2.2.3-1 &amp; 2.2.3-4</p>
<p>2.1.2.7a.ii</p> <p>Reactor Coolant System - The Class 1E equipment identified in Table 2.1.2-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.</p>	<p>Inspection will be performed of the as-installed Class 1E equipment and the associated wiring, cables, and terminations located in a harsh environment.</p>	<p>A report exists and concludes that the as-installed Class 1E equipment and the associated wiring, cables, and terminations identified in Table 2.1.2-1 as being qualified for a harsh environment are bounded by type tests, analyses, or a combination of type tests and analyses.</p>	<p>Section 2.1.2 Tables 2.1.2-1 &amp; 2.1.2-4</p>
<p>2.1.3.9ai</p> <p>Reactor System - The Class 1E equipment identified in Table 2.1.3-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.</p>	<p>Type tests, analysis, or a combination of type tests and analysis will be performed on Class 1E equipment located in a harsh environment.</p>	<p>A report exists and concludes that the Class 1E equipment identified in Table 2.1.3-1 as being qualified for a harsh environment can withstand the environmental conditions that would exist before, during, and following a design basis accident without loss of safety function for the time required to perform the safety function.</p>	<p>Section 2.1.3 Tables 2.1.3-1 &amp; 2.1.3-2</p>

The NRC inspection team will review the following areas:

#### INSPECTION ASSIGNMENTS

Huang	– Manufacturing process in relation to testing and inspection, M&TE, oversight of contracted activities, and procurement document
Jimenez/Micewski	– Manufacturing process in relation to design control, CGD, and qualification packages for operating reactors
Kendzia	– Part 21, nonconformances, corrective action
Ramirez/Terry-Ward	– AP1000 Qualification and ITAAC related activities in relation to: 2.2.1.6.a.ii, Containment System 2.2.3.7.a.ii, Passive Core Cooling System 2.1.2.7.a.ii, Reactor Coolant System 2.1.3.9.a.i, Reactor System

#### VENDOR PRIORITIZATION STRATEGY (VPS) EVALUATION

RSCC Wire & Cable LLC, whose scope of supply is class 1E wires and cables, qualification, and CGD, was evaluated using the VPS outlined in the Vendor Inspection Program Plan, scoring **24 out of a possible 41** points in favor of inspection. The evaluation indicated that the RSCC Wire & Cable facility in East Granby, CT, has an above score compared to the vendor population evaluated. RSCC Wire & Cable's score is driven by the following factors:

- No NRC inspection within the last 3 years
- Somewhat complex product
- Direct relation (e.g., targeted ITAAC)
- Supplier to more than 10 licensees

#### LOGISTICS

Recommended hotels (team members are free to stay at their choice of lodging):

SpringHill Suites Hartford Airport/Windsor Locks  
225 Ella Grasso Turnpike  
Windsor Locks, CT 06096  
860-758-7000

Hartford/Windsor Marriott Airport  
28 Day Hill Road  
Windsor, CT 06095  
860-688-7500

Hyatt House Hartford  
200 Corporate Drive  
Windsor, CT 06095  
860-298-8000

Per-diem rate: \$112/\$56/\$168

An entrance meeting is planned for 8:30 am Monday, May 19, 2014, at the RSCC Wire & Cable facility located in East Granby, CT. An exit meeting is planned for 8:00 am on Friday, May 23, 2014.

Inspection schedule:           8:00am to 4:00pm  
                                      Daily team meeting at 4:00pm  
                                      Vendor debrief at 4:30pm

Time charge information:    The inspectors will charge time in HRMS to the RSCC Wire & Cable Vendor Inspection, inspection report number 99901443/2014-201.

**DELIVERABLES:**

A written outline of findings and observations for input to the Team Leader is required for exit meeting development.

Draft input to the inspection report should be completed and provide to team leader by Friday, May 30, 2014. Input should be formatted in a manner consistent with IMC-0617, "Vendor Inspection Reports."

Management review and approval of the inspection report is due by July 7, 2014, to meet the 45-day inspection report timeliness requirement.