### Westinghouse Non-Proprietary Class 3



Westinghouse Electric Company LLC Hematite Decommissioning Project 3300 State Road P Festus, MO 63028 USA

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Our ref:

HEM-10-94

Date:

August 26, 2010

Subject:

Change in Hematite Licensing Manager

(License No. SNM-00033, Docket No. 070-00036)

Section 2.1 of the NRC approved license application for the Hematite facility (SNM-00033), dated May 22, 2009, specifies that notification of a change of an individual designated as the Licensing Manager (among other positions) shall be submitted to the NRC in writing. This letter informs the NRC that, effective September 1, 2010, Mr. Gerard F. Couture will no longer serve as the Licensing Manager for the Westinghouse Electric Company LLC Hematite Facility (SNM-00033). Effective September 1, 2010, Mr. Mark A. Michelsen will serve as Acting Hematite Licensing Manager until otherwise notified.

Attachment 1 provides an evaluation demonstrating that Mr. Michelsen meets the minimum experience and qualification requirements for the Licensing Manager position. Attachment 2 provides Mr. Michelsen's resume.

Please contact me at 314-810-3368, or Mark Michelsen, Acting Licensing Manager, at 314-810-3376, should you have questions or need any additional information.

Sincerely,

E. Kurt Hackmann

Director, Hematite Decommissioning Project

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Attachments:

- 1 Evaluation of Experience and Qualifications of Mark Michelsen to Satisfy Hematite License Requirements for Acting Licensing Manager
- 2) Resume for Mark A. Michelsen

#### cc w/Attachments:

- J. J. Hayes, NRC/FSME/DWMEP/DURLD
- J. W. Smetanka, Westinghouse
- J. E. Tapp, NRC Region III/DNMS/MCID
- W. J. Slawinski, NRC Region III/DNMS/MCID

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### **ATTACHMENT 1**

**Evaluation of Experience and Qualifications of Mark Michelsen to Satisfy Hematite License Requirements for Acting Licensing Manager** 

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### <u>Evaluation of Experience and Qualifications of Mark Michelsen to</u> Satisfy Hematite License Requirements for Acting Licensing Manager

### I. <u>Introduction</u>

This evaluation compares the experience and qualifications of Mark Michelsen to the requirements of Hematite License No. SNM-33 for Licensing Manager. The requirements for Licensing Manager are deemed to satisfy those of Acting Licensing Manager. The contents of Mr. Michelsen's current resume was the primary source used to ascertain his experience and qualifications. Based on the evaluation documented below, it is determined that Mr. Michelsen's experience and qualifications meet or exceed the requirements of Hematite License No. SNM-33 applicable to an Acting Licensing Manager. A copy of his resume is provided as Attachment 2.

#### II. Evaluation

A. License Requirements for Licensing Manager Experience and Qualifications

Hematite License No. SNM-33 Condition 15.A. refers to Westinghouse letter dated May 22, 2009, for the license application Chapter 2 section applicable for personnel qualifications. Section 2.1.4.2 of the license application states:

"At a minimum the Licensing Manager will have:

- A Bachelor's degree in an appropriate discipline or equivalent combination of education and experience
- Previous managerial experience in the environment health and safety discipline
- Competency in nuclear criticality safety
- Strong skills in written and oral communication and organizational management"
- B. Evaluation of Experience and Qualifications to License Requirements for Acting Licensing Manager

The license requirements applicable to an individual designated as Acting Licensing Manager are evaluated against the experience and qualifications documented in Mr. Michelsen's resume as follows:

• A Bachelor's degree in an appropriate discipline or equivalent combination of education and experience

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Based on the attached resume, Mr. Michelsen meets this license requirement by fulfillment of the "Bachelor's degree in an appropriate discipline." Specifically, Mr. Michelsen holds a Bachelor of Science degree in mathematics with a minor in physics from an accredited college. He also holds a Master of Science degree in Management. Therefore, this license requirement is satisfied.

• Previous managerial experience in the environment health and safety discipline

Nuclear Regulatory Commission licensing is an environment health and safety discipline. The attached resume indicates that Mr. Michelsen has over 18 years of experience in nuclear materials licensing associated with fuel cycle facilities, including almost 9 years in managerial roles in nuclear materials licensing. Based on the above, it is determined that Mr. Michelsen exceeds the minimum work experience above. Therefore, this license requirement is satisfied.

• Competency in nuclear criticality safety

As indicated in his resume, Mr. Michelsen's responsibilities have included 3 years managing safety, safeguards and environmental groups, including nuclear criticality safety. Other experiences described in his resume include nuclear criticality safety management roles. Therefore, this license requirement is satisfied.

• Strong skills in written and oral communication and organizational management

Mr. Michelsen has demonstrated strong skills in written and oral communication during his current almost 2 years at Hematite as Lead Licensing Engineer. His resume demonstrates strong skills in organizational management in his 3 year role as Manager of Environment Safety and Health of a fuel cycle facility and his 14 years in management roles at a nuclear steam supply system manufacturer. Therefore, this license requirement is satisfied.

#### III. Conclusion

Based on the evaluation documented above, it is determined that Mr. Michelsen's experience and qualifications meet or exceed the acting Licensing Manager requirements of Section 2.1.4.2 of the license application incorporated into the Hematite license. Therefore, Mr. Michelsen meets the license requirements that must be satisfied to be designated as acting Licensing Manager.

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### **ATTACHMENT 2**

### Resume of Mark A. Michelsen

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#### MARK A. MICHELSEN

**Title/Position: Licensing Consultant** 

**Years of Experience: 37** 

This resume includes supplemental information regarding nuclear criticality safety management experience, for evaluation purposes of certain licensing positions for which that it appropriate.

#### **SUMMARY**

- Environment, Safety and Health Management
- Plant Operations Management
- Special Nuclear Material Regulation
- Reactor License Renewal
- Engineering and Project Management

#### **EDUCATION/TRAINING**

BS, Mathematics with a Physics minor, Central Connecticut State University, 1972

MS, Engineering Management, Rensselaer Polytechnic Institute, 1983

U.S. Naval Nuclear Propulsion Plant Training - Various engineering schools including Quality Assurance, Sound Analysis, and Auxiliary Equipment Construction and Operation, 1973 - 1978

**Criticality Safety:** Bachelor's degree minor concentration was in Physics (1972). Included studies in nuclear physics at the University of California at Santa Barbara.

#### **EXPERIENCE**

### **Lead Licensing Engineer Nuclear Safety Associates**

1/09 - Present

- Licensing engineer, managing a Nuclear Regulatory Commission (NRC) special nuclear material (10 CFR 70) license application for a former nuclear fuel fabrication facility in decommissioning
- Submit a facility Decommissioning Plan to the NRC, answer NRC questions and prepare revisions as necessary throughout decommissioning
- Maintain regulatory compliance for the facility in decommissioning

**Criticality Safety:** In addition to license application development which includes a nuclear criticality safety methodology chapter, occasionally acts on behalf of Licensing Manager, which includes nuclear criticality safety management.

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# Special Nuclear Material Licensing Consultant AREVA NP (formerly Framatome ANP; Duke Engineering & Services)

10/99 - 1/09

- Licensing consultant preparing an NRC special nuclear material (10 CFR 70) license application for the Mixed Oxide Fuel Fabrication Facility, including safety descriptions in the disciplines of criticality, radiological, industrial, environmental and integrated safety analysis
- Update license application periodically as design and construction progresses
- Guide project regulatory compliance and prepare for implementation of NRC license during operation of fuel fabrication facility

Criticality Safety: Licensing for MOX fuel fabrication facility development project, for mixed oxide fuel (i.e., uranium and plutonium oxides). This project began with initial process design (based on French fuel fabrication technology), and included NRC license application submittal and response to NRC requests for additional information. Work included coordinating the criticality safety methodologies chapter and some plant processes' integrated safety analyses (including criticality safety analyses).

# Senior AVLIS Engineer, Pilot Operations United States Enrichment Corporation

10/98 - 10/99

- Lead Enrichment Operator, the lead on-shift supervisor who directs operations to optimize uranium enrichment during AVLIS demonstrations
- Manage Quality Improvements for the Pilot Operations group
- Evaluate the problem reporting database

# Manager, AVLIS Environment, Safety & Health United States Enrichment Corporation

10/95 - 10/98

- Manage employees and contractors in the areas of licensing, environmental protection and waste management, safeguards and security, safety analysis (criticality, radiation, industrial and integrated safety) and radiological protection
- Responsible for a \$5 million per year budget
- Focus on plant design, safety analysis and preparation of a 10 CFR 70 license application for the possession and use of source material (natural and depleted uranium) and special nuclear material (uranium enriched in the <sup>235</sup>U isotope)
- Plan for shift of focus to regulatory compliance following NRC approval of the license

Criticality Safety: Manager of Environment, Safety and Health for a new development uranium enrichment project (1995 - 1998), managing all safety disciplines, plus safeguards, security and licensing. Included a staff of approximately 25 people, and a budget of approximately \$5 million per year. Criticality Safety group included a supervisor reporting to ES&H Manager and approximately 8 criticality safety specialists and engineers. The effort over 3 years included developing complete criticality safety methodologies, analyses and

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demonstrations for plant operations not only for the plant under development, but also for the operating prototype at Lawrence Livermore National Laboratory. This included submittal for NRC approval of two criticality analysis methodology validation reports for the entire plant processes. Part of the effort included preparation of a license application which included a chapter on criticality safety and an integrated safety analysis summary which included descriptions of criticality analyses of plant processes. In addition, was instrumental in obtaining from Russia's Kurchatov Institute several sets of criticality benchmark experiments for intermediate energies which were used not only for the plant project, but also are now part of the International Criticality Safety Benchmark Evaluation Project.

# **Program Manager, Nuclear Licensing Combustion Engineering, Inc. (Asea Brown Boveri)**

2/92 - 10/95

- Regulatory affairs and compliance, especially concerning source, byproduct and special nuclear material licensing associated with Combustion Engineering's Windsor and Hematite Nuclear Fuel Manufacturing Facilities
- Complete license renewal applications for the Hematite and Windsor facilities, and for Windsor's Broad Scope Radioactive Material license, including safety descriptions in the disciplines of criticality, radiological, industrial, environmental and integrated safety analysis
- Licensing of radioactive material shipping containers, including coordinating supporting criticality safety analysis, and plant decommissioning activities
- Lead Integrated Safety Assessment (ISA) Teams' (i.e., multi-disciplinary safety assessment teams) evaluation for two major plant modifications and the license application safety demonstration for the ISAs
- Submit environmental information for the NRC's environmental assessment of plant modifications

Criticality Safety: Experience in nuclear materials licensing began in the early stages of a large project to upgrade the Hematite fuel fabrication facility (1992 - 1995). The plant upgrade from simple fuel conversion and pellet manufacturing included the complete capability to manufacture nuclear fuel, by moving fuel assembly operations from the Windsor, CT facility to Hematite (termed the Fuel Consolidation Project), approximately doubling manufacturing operations at Hematite. This occurred at a time when the NRC was in the midst of major regulation changes for fuel cycle facilities, which eventually culminated in the 10 CFR 70 rulemaking of September 2000, and included participation in industry efforts influencing the NRC rulemaking. In addition, the Hematite facility was the first NRC regulated fuel cycle facility in 10 years to go through license renewal, and the first to commit to performing integrated safety analyses.

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The Hematite license renewal effort was performed in the early days of transition to performing criticality safety analyses on personal computers in lieu of main frame or mini-computers. Besides a complete rewrite of the criticality methods chapter of the license application and the safety demonstration analyses for the entire Hematite facility, new complete criticality methods validation reports were submitted for NRC approval.

In addition, managed the fuel transportation shipping container licensing for Hematite, including the accompanying criticality safety analyses and safety demonstration for uranium oxide powder and pellet containers and new fuel shipping containers of three different designs.

# **Program Manager, Mechanical Products and Services Combustion Engineering, Inc. (Asea Brown Boveri)**

6/86 - 2/92

- Manage business and technical aspects of engineered plant component products and services for the nuclear power industry, including those relating to pumps, valves, heat exchangers, tanks, filters, etc., and also environmental and equipment qualification, replacement part equivalency studies and reactor license renewal
- Product / Service Manager, focusing on the business aspects of plant components, including new product development, proposal preparation and costing, sales support, contract execution and profitability
- Project Manager, with full project management responsibilities (i.e., cost, schedule and quality) over a spectrum of disciplines including a variety of functional engineering groups, manufacturing, construction/field services, contract administration, accounting, purchasing
- Supervisor of plant components engineering group
- Singularly prepared Integrated Project Quality Plan Outline, which has been used as a model in Nuclear Services

### Assistant Project Manager, Operating Reactors Department Combustion Engineering, Inc. (Asea Brown Boveri)

6/81 - 6/86

- Manage, in a matrix organization, a spectrum of projects involving engineering services, construction/field services, both mechanical and electrical hardware procurement, and reactor license renewal
- Manage customer driven tasks totaling \$ 6 million per year

Criticality Safety: Assistant Project Manager in reactor aftermarket services, for a major nuclear utility customer (1981 - 1986). Included full Project Management responsibilities, including project scope definition, execution, customer interface, budgeting, scheduling, and management of deliverables. Some of the projects included nuclear criticality tasks such as reload core design, spent fuel rack criticality analyses, and criticality accident consequence analysis. Mark also

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managed the nuclear fuel hardware design and manufacturing interface for the customer.

## Senior Nuclear Engineer, Reactor Design Department Combustion Engineering, Inc. (Asea Brown Boveri)

6/78 - 6/81

• Coordinate new construction project efforts, including nuclear utility customer and architect engineer interfacing, within the departments of Mechanical Design, Reactor Design and Nuclear Engineering

Criticality Safety: Began commercial nuclear power engineering career in nuclear steam supply system design, specifically first as an Application Engineer in the Reactor Design department (1978 - 1981). Coordinated reactor design and nuclear engineering departments' efforts for several nuclear power utility customers. Included fuel assembly design, core design, new and spent fuel rack design, and decay heat and neutronics analyses.

# Assistant Engineer United States Navy

2/73 - 6/78

• Engineering Officer of the Watch on a nuclear ballistic missile submarine, Officer of the Deck, Assistant Engineer, Damage Control Assistant, Ship Alteration Officer, Ship Safety Officer, Environmental Controls Officer, Quality Assurance Officer, and Division Officer of Auxiliary Division, Electrical Division, Communications Division

**Criticality Safety:** U.S. Naval officer in the nuclear submarine force (1973 - 1978) included operational nuclear engineering theory, reactor engineering and nuclear power plant operations.