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Security Staffing Strategy for the B&W mPower™ Plant (Redacted Version)

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This is a pre-application document and includes preliminary B&W mPower Reactor design or design supporting information and is subject to further internal review, revision, or verification.

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Agenda

- Objectives
- Applicable Regulatory Requirements
- Topical Report Criteria
- Prospective B&W mPower Reactor Staffing from January 2011 TR
- Industry Concerns
- Key Points from January 2011 TR
- Interim Discussion
- Strategy for Developing Security Staffing Topical Report
- Path Forward
- Conclusions



Objectives

- Revisit security staffing discussion in 2011 technical report
- Discuss plans to develop and submit topical report
- Interact with NRC staff on current thoughts for analysis strategy and report content
- Outline schedule and future interactions with staff

Reach agreement on an approach for timely approval of the methodology and criteria for security staffing for the mPower design to support efficient design certification and licensing

Applicable Regulatory Requirements

- 10 CFR 73.55 (d)(1)
The licensee shall establish and maintain a security organization that is designed, staffed, trained, qualified, and equipped to implement the physical protection program in accordance with the requirements of this section
- 10 CFR 73.55 (d)(2)
The security organization must include ...
 - (ii) At least one member, onsite and available at all times, who has the authority to direct the activities of the security organization and who is assigned no other duties that would interfere with this individual's ability to perform these duties in accordance with the security plans and the licensee protective strategy
- 10 CFR 73.55 (i)(4)(ii)
(B) Continuously staff each alarm station with at least one trained and qualified alarm station operator. The alarm station operator must not be assigned other duties or responsibilities which would interfere with the ability to execute the functions described in § 73.55(i)(4)(i) of this section
- 10 CFR 73.55 (k)(5)
 - (ii) The number of armed responders shall not be less than ten (10)



Regulatory Requirements

MINIMUM STAFFING

FUNCTION	MINIMUM/SHIFT
Supervisor	1
CAS/SAS Operators	2
Armed Responders	10
TOTAL	13



Preliminary Staffing Scoping

PROSPECTIVE B&W mPOWER REACTOR STAFFING*

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*From "B&W mPower™ Reactor Physical Security Design and Program Considerations,"
Technical Report R0003-08-002708-000, January 2011.

[CCI per Affidavit 4(a)-(d)]

Industry Feedback on Staffing

- Security O&M costs can not be viably distributed over small rate-payer structure for small modular reactors (SMRs)
- Performance as well as compliance needs to be considered in developing staffing requirements for SMRs

Need agreed-upon approach for demonstrating optimized staffing levels for SMRs => certainty



KEY POINTS FROM TR R0003-08-002708-000

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[CCI per Affidavit 4(a)-(d)]



KEY POINTS FROM TR R0003-08-002708-000 (cont.)

[CCI per Affidavit 4(a)-(d)]



KEY POINTS FROM TR R0003-08-002708-000 (cont.)

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[CCI per Affidavit 4(a)-(d)]

Topical Report Criteria (LIC-500)

- ✓ The report deals with a specific safety-related subject regarding a nuclear power plant that requires a safety evaluation by the NRC staff
- ✓ The TR is expected to be used by multiple licensees in a number of requests for licensing actions—COLAs
- ✓ The TR will contain complete and detailed information on the methodology and acceptance criteria
- ✓ NRC approval of the report will increase the efficiency of the review process for applications that reference the report

Strategy for Developing Security Staffing Topical Report

- Report Objectives
- Proposed Report Contents



Topical Report Objectives

- Expand upon Staffing Points in 2011 TR
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[CCI per Affidavit 4(a)-(d)]



Proposed Report Content

- 2011 TR Discussion
- [

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[CCI per Affidavit 4(a)-(d)]

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Path Forward

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[CCI per Affidavit 4(a)-(d)]



Path Forward (cont.)

- Develop report
- Meet with NRC at time of submittal to facilitate review
- Submit report to NRC
- As appropriate meet with NRC to discuss report



Conclusions

- “Security-informing” is an integral part of the mPower design process
- An important part of that approach is reaching agreement with NRC on acceptable methods and criteria for establishing optimum security staffing levels
- Optimization of staffing levels is a “signature” SMR issue, and establishing methodology and criteria for security staffing in particular is important enough to warrant early review and resolution
- A topical report provides the mechanism to resolve generic methodology and criteria in a timely way which can then be leveraged to improve the efficiency and certainty of future licensing reviews