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Joseph M. Farley Nuclear Plant – Units 1 and 2

Enclosure 4

Non-Proprietary Version of Enclosure 1

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The basis for requesting an extension of the March 31, 2010 date to December 15, 2010 is based on completion of the protected area (PA) expansion to address many of the new Part 73 rule requirements and resource and logistical impact of the spring 2010 Unit 2 and fall, 2010 Unit 1 refueling outages. Southern Nuclear Operating Company (SNC) is continuing efforts to implement the remaining new Part 73 requirements identified in the March 27, 2009 Federal Register Notice and associated Regulatory Guides completed in July 2009 by March 31, 2010.

Prior to the new Part 73 rule, SNC had identified a need to expand the PA in order to enhance the site's protective strategy and replace aging security equipment that is difficult to maintain and obtain parts. The plan to expand the PA was approved by management on December 2, 2008 at a cost of approximately \$20 million with an original completion date of December 31, 2010.

Upon issuance of the new security requirements in the Federal Register Notice dated March 27, 2009, SNC accelerated the PA expansion schedule and began construction in June 2009. Completion of the PA expansion includes major modifications such as a [] in order to comply with the new Part 73 rule requirements; and [] at an additional cost of \$5 million. Following publication of the new Part 73 rule requirements, additional work scope was identified with a cost of approximately \$27 million.

Therefore, the total estimated cost for all the new security-related modifications scheduled for Joseph M. Farley Nuclear Plant (FNP) is approximately \$52 million. The additional work scope required by the new Part 73 requirements and not associated with the PA expansion is expected to be completed by March 31, 2010.

The following is a more detailed description of the work activities associated with the PA expansion, the revised PA expansion schedule based on the March 27, 2009 Federal Register Notice, and the Part 73 work scope not included in the PA expansion plans.

PA Expansion Overview

The FNP PA expansion project, as shown on Figures 1 and 2, will expand the PA by approximately 100%. FNP has a relatively small PA []. As described above, the PA expansion []. Expanding the PA requires that new access roads and parking lots be constructed since the expanded PA boundary will cut through the existing parking lot and access road. SNC will perform much of the work in parallel; however, many of the work activities must be sequenced. For example, the new access roads and parking lot must be completed before significant work can begin on expanding the PA. In addition, to begin the new access roads, a 12-KV transmission line must be relocated, drainage and electrical duct banks must be placed, lighting foundations located, etc. Only after access and egress routes are usable via the new roads can demolition and construction of the PA boundary begin in certain locations.



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PA Expansion Plans after the March 27, 2009 Federal Register Notice

Subsequent to the plan to expand the PA, the NRC provided rulemaking for new security requirements in the Federal Register Notice dated March 27, 2009, and Regulatory Guides completed in July 2009. These Regulatory Guides were made available to the industry as draft versions prior to issuance and were used by SNC. SNC has determined that implementation of specific parts of the new requirements can be more efficiently implemented if integrated with expedited plans to expand the PA. However, additional time beyond the March 31, 2010 date is requested to complete these mutually supportive security modifications.

SNC requested exemptions to three specific items from the Part 73 physical security requirements in letter dated June 9, 2009. Each of these items is linked to the completion of the PA expansion project. The project milestones are for the PA expansion only. These milestones represent a schedule driven by the need for []. In order to comply with the new Part 73 requirements, SNC will need to procure, design, install, and test []. A milestone schedule has been developed based on current information and anticipated challenges. The current project milestone schedule for the PA expansion is shown in Table 1.

Additional Planned Work Scope Not Included In the PA Expansion Project

Items listed below are currently planned; however, this scope may vary as needed to meet objectives:



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Challenges to Compliance by March 31, 2010

The extent of the PA expansion project extends beyond just Part 73 related modifications; however, all these security-related modifications are linked together. The size and scope of the project adds considerable challenges when coupled with planned refueling outages, Part 26 implementation, and other security-related site modifications.

- Design engineering has begun for all the major modifications; however, there are many details that have yet to be worked out that threaten to delay procurement and/or construction.
- []
- The sequencing of this many activities within such a compressed time frame present a number of challenges. Many activities have to be completed in series with each other while other activities can be accomplished in parallel. In order to meet the current date every sequential activity must be compressed and there is no margin to allow for late material delivery, unexpected complications due to design, construction, weather issues, unexpected plant issues that would divert manpower, etc.
- One piece of operating experience that came from implementation of the previous security orders is that decisions made within a compressed schedule to meet an aggressive deadline may meet the intent of the regulation but, since there is not adequate time to thoroughly research and evaluate all available options and considerations, they often create unintended consequences that have long-term adverse impacts on the site. Additional time for design and implementation will help to avoid adverse consequences associated with this project.
- Prior to the Unit 2 refueling outage, currently scheduled to start on March 28, 2010 and the Unit 1 refueling outage scheduled to start September 26, 2010, several hundred outage workers must be processed by Security. This pre-outage processing requires both the security computer and security personnel. [].
- Functional testing, security strategy validation, and security training must be completed prior to declaring that FNP is in compliance with the new Part 73 requirements. To achieve best results, these activities should not be completed until after all modifications are complete.
- [] is scheduled to be in place by August 31, 2010; however, final connection of loads, functional testing, and system turnover will not be complete until October 31, 2010.

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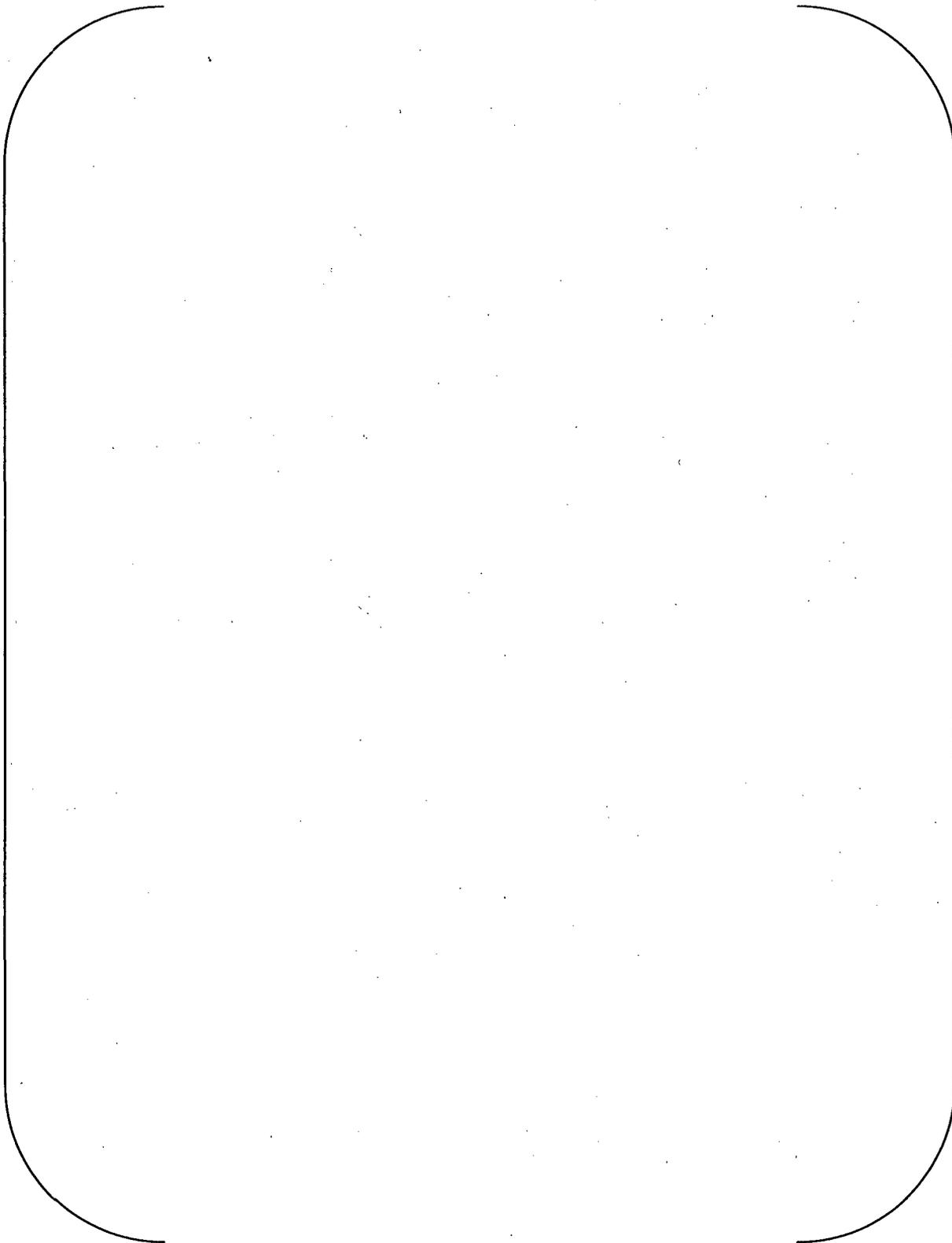
- If this exemption is not granted and SNC can not complete these required modifications in time to meet the March 31, 2010 implementation date, additional compensatory measures may be required. The majority of these measures would require additional security manpower that FNP is not currently staffed to provide. This additional staffing of security officers would be extremely difficult to achieve due to the new Part 26 work hour requirements and the time required for screening, hiring, and training new security officers.

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Table 1



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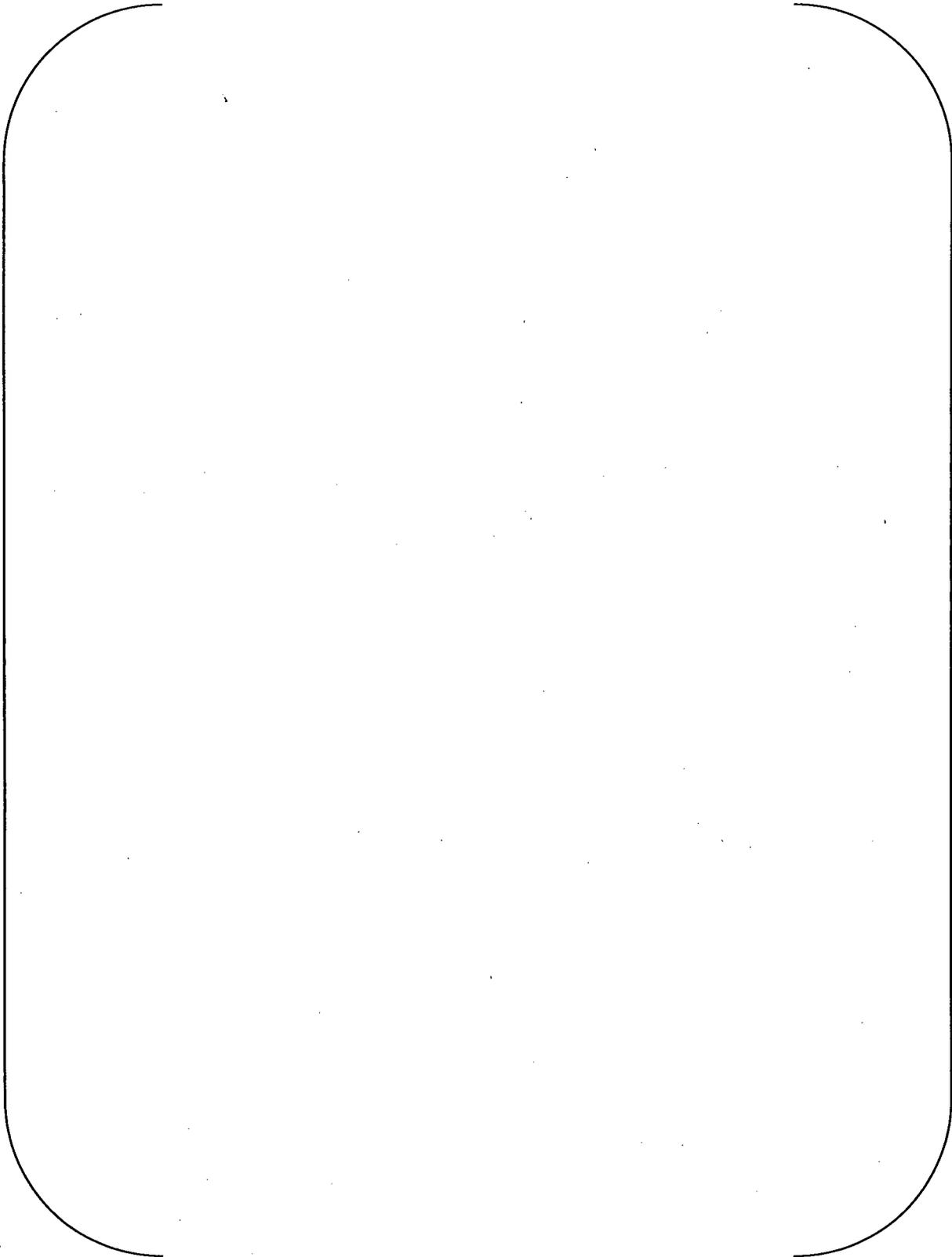


Figure 1

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