

## NINE MILE POINT NUCLEAR STATION UNITS 1 AND 2

### FIRE PROTECTION OPEN ITEMS

(Open Item 2.3.3.A.9-7)  
(Open Item 2.3.3.B.13-1)  
(Open Item 2.3.3.B.13-23)  
(Open Item 2.3.3.B.13-25)  
(Open Item 2.3.3.B.13-26)

#### RAI 2.3.3.A.9-7 (Open Item 2.3.3.A.9-7)

The scoping and screening LRA table associated with the fire detection and protection system includes the following component types as being subject to an AMR: filters/strainers, flow elements, and orifices. However, the intended function assigned to these components is “NSR Functional Support.” LRA Table 2.0-1, “Intended Functions Abbreviations & Definitions” identifies intended functions applicable to these component types that are not identified in the LRA table associated with the fire detection and protection system. Aging management to ensure that the component level intended functions can be performed is necessary to ensure that the system level intended functions can be maintained. The intended functions include “filtration” and “flow restriction.”

The staff requested that the applicant describe how the intended functions for these components were assigned and evaluated.

#### Applicant’s Response and Staff’s Evaluation

In its response dated December 17, 2004, the applicant stated that because a component performs a particular function, such as filtration for a filter or flow restriction for a flow orifice, it does not mean that the function is an intended function for license renewal. A component function would only be considered an intended function (IF) if failure of that component would cause the failure of a system IF. Failure of the “filtration” or “flow restriction” functions for the above mentioned components would not prevent the NMP Unit 1 fire detection and protection system from performing its IF. Therefore, the only IF credited for these components is “NSR Functional Support” as identified in LRA Table 2.3.3.A.9-1.

Based on its review, the staff is not able to find the applicant's response to RAI 2.3.3.A.9-7 acceptable because it does not adequately explain what intended functions, “NSR Functional Support” represent and how it is applied to all the component types in the fire detection and protection system including piping, valves, strainers, pumps, and orifices. Therefore, the staff's concern described in RAI 2.3.3.A.9-7 remains an open issue. **(Open Item 2.3.3.A.9-7)**

#### RAI 2.3.3.B.13-1 (Open Item 2.3.3.B.13-1)

The GALL Report section for the fire water system, describes the requirements for aging management of the fire protection water system. It requires that an AMP be established to evaluate the aging effects of corrosion, MIC, biofouling of carbon steel and cast iron components in fire protection systems exposed to water.

The LRA discusses requirements for the fire detection and protection program but does not

mention trash racks and traveling screens for the fire pump suction water supply. Trash racks and traveling screens are mentioned in the LRA section for the service water system, but are not listed in the associated LRA table for that system which contains the list of components that require aging management. They are not mentioned in the LRA.

The NMP2 UFSAR states that the trash racks and traveling screens are located upstream of the fire pump suction to remove any major debris from the water. The staff asked the applicant to explain the apparent exclusion of the trash racks and traveling screens that are located upstream of the fire pump suction from the scope of license renewal and from being subject to an AMR.

#### Applicant's Response and Staff's Evaluation

In its response dated December 17, 2004, the applicant stated that although the trash racks and traveling screens are addressed in NMP Unit 2 UFSAR Section 9.2.5 as preventing large debris from reaching the service water pumps, and, therefore, the fire pumps as well, the collection of debris on the trash racks and/or the traveling screens such that blockage could occur is not a license renewal intended function and are not credited under 10 CFR 50.48. If such a blockage were to occur, bypass valves automatically open to bypass the blockage and continue to supply water to the pump suction.

Additionally, the fire pump suction headers have their own strainers in-line such that the loss of the trash racks or traveling screens would not challenge the operation of these pumps until repair/replacement of the damaged component could be performed.

The applicant further stated that the supports of the trash racks are within the scope of license renewal and subject to an AMR.

Based on its review, the staff is not able to find the applicant's response to RAI 2.3.3.B.13-1 acceptable because although it explains that the trash racks and traveling screens are addressed in the NMP Unit 2 UFSAR, they perform no intended function. The staff finds this contrary to the NMP Unit 2 UFSAR which includes the original NMP Unit 2 fire protection SER as CLB. Therefore, the staff's concern described in RAI 2.3.3.B.13-1 remains an open item.  
**(Open Item 2.3.3.B.13-1)**

#### RAI 2.3.3.B.13-23 (Open Item 2.3.3.B.13-23)

A license renewal drawing for the fire detection and protection system depicts a portion of the dry pipe sprinkler system for the reactor building railroad access bay as being excluded from the scope of license renewal and from being subject to an AMR. The applicant was asked to explain the apparent exclusion of this portion of the fire detection and protection system from the from requiring an AMR in accordance with 10 CFR 54.21(a).

#### Applicant's Response and Staff's Evaluation

In its response dated December 17, 2004, the applicant stated that the identified license renewal drawing, LR-43C-0 is correct and properly shows the components in question excluded from the scope of license renewal and from being subject to an AMR. The dry-pipe sprinkler system in the railroad access bay is not credited to meet the requirements of 10 CFR 50.48, and therefore not within the scope of license renewal in accordance with 10 CFR 54.4(a)(3)

because it has no license renewal intended functions. The dry-pipe sprinkler system in question is correctly depicted on its license renewal drawing and is not subject to an AMR.

Based on its review, the staff is not able to find the applicant's response to RAI 2.3.3.B.13-23 acceptable because although it explains that the dry-pipe sprinkler system in question is not credited to meet the requirements of 10 CFR 50.48, the staff finds this contrary to the UFSAR which includes the original NMP Unit 2 fire protection SER as CLB. The NMP Unit 2 UFSAR includes a description of this sprinkler system. Therefore, the staff's concern described in RAI 2.3.3.B.13-23 remains an open issue. **(Open Item 2.3.3.B.13-23)**

#### RAI 2.3.3.B.13-25 (Open Item 2.3.3.B.13-25)

The NMP2 UFSAR describes criteria for fire resistance of interior finishes. It is not clear from review of the LRA, that interior finishes are included within the scope of license renewal. The applicant was asked to confirm that interior finishes are within the scope of license renewal in accordance with 10 CFR 54.4(a) and subject to an AMR in accordance with 10 CFR 54.21(a) or to explain their exclusion.

#### Applicant's Response and Staff's Evaluation

In its response dated December 17, 2004, the applicant explained that the UFSAR states that noncombustible and fire-resistive building and interior finish materials are used wherever practical throughout the plant, particularly in structures containing safety-related systems and components. The interior finishes, which consist of paint and floor coverings, serve no intended function and are not in scope for license renewal. The materials used to seal structural gaps and joints, that do have an intended function for 10 CFR 50.48, fire protection, can be found in the NMP LRA section for, fire stops and seals.

Based on its review, the staff is not able to find the applicant's response to RAI 2.3.3.B.13-25 acceptable because although it explains that the interior finishes in question are not credited to meet the requirements of 10 CFR 50.48, the staff finds this contrary to the UFSAR which includes the original NMP Unit 2 fire protection SER as CLB. The NMP Unit 2 UFSAR includes a description of the fire resistance of interior finishes. Therefore, the staff's concern described in RAI 2.3.3.B.13-25 remains an open item. **(Open Item 2.3.3.B.13-25)**

#### RAI 2.3.3.B.13-26 (Open Item 2.3.3.B.13-26)

The LRA identifies structures that are included within the scope of license renewal. The UFSAR identifies structures that are included in the fire protection licensing basis and thus should be considered within the scope of license renewal. However, the LRA does not include the condensate storage tank structure and the normal switchgear building that are included in UFSAR as structures within the scope of license renewal in accordance with 10 CFR 54.4(a). Because these structures support fire protection intended functions, the applicant was asked to explain their apparent exclusion from requiring an AMR.

#### Applicant's Response and Staff's Evaluation

In its response dated December 17, 2004, the applicant explained that the normal switchgear building and the condensate storage building are located in the protected area and are considered to be non-essential yard structures. Further the applicant explained that these

structures do not meet any of the three criteria of 10 CFR 54.4, nor do they contain safety-related equipment, and do not house equipment required for safe plant shutdown, or radioactive material. Therefore, fire protection equipment in these structures is for asset protection only. Neither of these buildings is credited for 10 CFR 50.48, fire protection.

Based on its review, the staff is not able to find the applicant's response to RAI 2.3.3.B.13-26 acceptable because although it explains that the normal switchgear building and the condensate storage buildings are not credited to meet the requirements of 10 CFR 50.48, the staff finds this contrary to the UFSAR which includes the original NMP Unit 2 fire protection SER as CLB. The NMP Unit 2 UFSAR includes a description of these structures. Therefore, the staff's concern described in RAI 2.3.3.B.13-26 remains an open item.

**(Open Item 2.3.3.B.13-26)**