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October 11, 2018

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ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Director, Office of Nuclear Material Safety and Safeguards
11555 Rockville Pike
Rockville, MD 20852

Docket No. 40-3392; License No. SUB-526

SUBJECT: HONEWYWELL METROPOLIS WORKS REDACTED RESPONSES TO REQUEST FOR ADDITIONAL INFORMATION CONCERNING LICENSE RENEWAL APPLICATION IN THE AREAS OF INTEGRATED SAFETY ANALYSIS AND MANAGEMENT MEASURES

On February 9, 2017 Honeywell Metropolis Works submitted to the USNRC an application for renewal of USNRC Source Materials License SUB-526. On February 12, 2018 the USNRC provided to Honeywell Requests for Additional Information (RAI) on the following sections of the License Application:

- Section 3.0 Integrated Safety Analysis (ISA)
- Section 11.0 Mangement Measures (MM)

The responses were originally due by April 13, 2018, however, Honeywell was granted an extension during a meeting held on April 12, 2018 to April 30, 2018. Honeywell prepared and submited draft responses to the ISA/MM RAIs on April 6, 2018. During the meeting on April 12, 2018, the NRC had additional questions related to the draft submittal. Those questions were answered and incorporated into this version of the RAI responses. Honeywell received a request from the NRC to develop a public version of the ISA/MM responses. This letter transmits Honeywell's redacted responses to the ISA/MM RAIs. If you have questions or comments regarding this submittal, please contact Mr. Sean Patterson, Regulatory Affairs Manager, at (618) 524-6341.

NM5520

Sincerely,

Jeff Fulks
Plant Manager

Enclosure 1 – Redacted Final Responses to RAIs on Section 3.0 Integrated Safety Analysis and Section 11.0 Management Measures of the MTW License Renewal Application

Cc: U.S. NRC Region II
Marquis One Tower
Attention: Tilda Liu
245 Peachtree Center Avenue N.E., Suite 1200
Atlanta, GA 30303

~~Security Related Information~~
~~Withhold Under 10 CFR 2.390~~

Honeywell Metropolis Works
USNRC Source Materials License SUB-526
Docket No. 40-3392

License Application
Final Responses to Request for Additional Information
Section 3.0 Integrated Safety Analysis and Section 11.0 Management Measures

General Regulatory Basis Pertaining to Integrated Safety Analysis Summary and Management Measures Reviews

As directed in the Staff Requirements Memorandum to SECY-06-0186, "Increasing Licensing Terms for Certain Fuel Cycle Facilities," the U.S. Nuclear Regulatory Commission (NRC) staff can consider a maximum license term of 40 years only for those licensees who submit Integrated Safety Analysis (ISA) Summaries according to Title 10 of the Code of Federal Regulations (10 CFR) Part 70, Subpart H. Honeywell International, Inc. (the licensee or the applicant) submitted, along with its license renewal application (LRA), its "Justification for Forty-Year License Term," which documents a regulatory comparison of the applicant's ISA with 10 CFR 70, Subpart H, and respective management measures. Through this comparison, the applicant concludes that "...MTW [Metropolis Works Facility] ISA contains the relevant provisions of an ISA prepared in accordance to 10 CFR 70 Subpart H and used applicable guidance from NUREG-1520..." Therefore, in addition to compliance with 10 CFR 40, the staff reviewed the application to determine the extent to which the applicant demonstrates compliance with 10 CFR 70, Subpart H.

With respect to 10 CFR 40, the regulatory basis for draft request for additional information (D-RAI) 3-1 through 3-21 includes 10 CFR 40.32(c). D-RAI 3-1 through 3-12, and 3-21, assume maintenance of License Condition 18(D), and D-RAI 3-13 through 3-20 assume maintenance of License Condition 18(J). Paragraph 40.32(c) of 10 CFR requires the applicant's proposed equipment, facilities and procedures to be adequate to protect health and minimize danger to life or property. License Condition 18(D) requires the applicant to conduct authorized activities at the Honeywell MTW facility in accordance with the statements, representations and conditions in the current ISA Summary. License Condition 18(J) requires the applicant to conduct authorized activities at the Honeywell MTW facility in accordance with the statements, representations and conditions in the facility's configuration control system.

RAI 3-1

Explain the process for analyzing the hazards associated with facility operation in the event the applicant chooses not to implement an ISA methodology. According to the ISA Summary, the applicant performed an ISA "to provide an industry-standard analysis of the hazards associated

with operation of the facility." Furthermore, the ISA Summary states, "Honeywell Metropolis Works (MTW) is licensed by the NRC under the requirements of 10 CFR 40. Although not subject to the requirements of 10 CFR 70, Honeywell elected to analyze site risks using the ISA methodologies prescribed by 10 CFR 70..." Given this statement, the applicant could elect in the future not to analyze site risks using 10 CFR 70 ISA methodologies. In other words, should the USNRC approve the application, after renewal, the applicant could choose to prepare an ISA that is not in accordance with 10 CFR 70 or consistent with the guidance in NUREG-1520, "Standard Review Plan for Fuel Cycle Facilities License Applications."

Response:

1. The current License Renewal Application under review, has been developed specifically to meet the intent of NUREG-1520 "Standard Review Plan for Fuel Cycle Facility License Applications."
2. Ongoing and future compliance with commitments made in the License Renewal Application, specifically Section 3 (Integrated Safety Analysis) and Section 11 (Management Measures), reinforces Honeywell's commitment to the ISA process.
3. It is anticipated that the USNRC will impose a License Condition (LC) as a part of this renewal cycle, similar in language to existing LC 18D. This license condition is related to the development, use, and ongoing updates to the MTW ISA Summary. As discussed below, the imposition of a license condition makes the ongoing use and management of an ISA Summary an activity which is subject to inspection and potential enforcement.
    a. For reference, License Condition 18D is as follows:

        18. The licensee shall conduct authorized activities at the Honeywell Metropolis Works Facility in accordance with the statements, representations, and conditions in the following documents.....

        18.D. – Integrated Safety Analysis (ISA) Summary
4. Honeywell will modify language in the ISA Summary which suggests that MTW has "elected" to follow the ISA methodology. The word ***"elected"*** will be removed from the two locations in the ISA summary with this language:
    a. Page 1-1, "Purpose" - *Honeywell Metropolis Works (MTW) is licensed by the USNRC under the requirements of 10 CFR 40. Although not subject to the requirements of 10 CFR 70, Honeywell used the Integrated Safety Analysis (ISA) methodologies prescribed by 10 CFR 70, to analyze site risks since 10 CFR 40 does not provide comparable guidelines.*
    b. Page 3-1, "Applicable Regulatory Requirements / Guidance" - *However, MTW has used the ISA processes described in 10 CFR 70 to provide an industry-standard analysis of the hazards associated with operation of the facility*

5. Note that the language ***"elected"*** is nowhere to be found in the current License Renewal Application.

Planned License Renewal Application Revision

None

RAI 3-2

Justify exclusion of a discussion in the LRA on how the applicant will maintain or have access to an ISA team with appropriate training and qualifications to perform and maintain the ISA.

Response:

At its most basic level, development of the ISA and resulting ISA Summary is a two-step process. First, hazards associated with facility operations are evaluated using a series of Process Hazards Analyses (PHAs), consistent with OSHA regulatory requirements and guidance. Second, the output of the PHAs is evaluated to identify accident sequences requiring further analysis using the ISA process, in a manner generally consistent with 10 CFR Part 70 and associated guidance. Incidents arising from natural hazards are evaluated on a site-wide basis.

At MTW, PHAs are performed consistent with Honeywell corporate programs, which have been developed and are maintained to ensure consistency with OSHA requirements. Honeywell provides corporate-standard training for PHA Team Leaders to ensure consistent implementation of the PHA process. In turn, the PHA Team Leader is responsible for the performance of the PHA Team in its execution of the PHA.

Regarding development of the ISA Summary, including those portions of the ISA that do not arise from the PHA process, the MTW Regulatory Affairs Manager bears responsibility for ensuring the ISA Summary includes proper technical consideration of the various inputs. This responsibility includes maintaining awareness of appropriate regulatory requirements and guidance and assigning properly trained/experienced individuals to activities involving development and maintenance of the ISA Summary. To the extent that these activities require the use of specialized analytical techniques that are beyond the expertise available within the Honeywell corporate structure (e.g., specific radiological and seismic analyses), the Regulatory Affairs Manager is responsible for identifying and retaining the assistance of appropriate external resources to support accident analyses and development of material incorporated into, or supporting, the ISA Summary. The MTW Regulatory Affairs Manager is responsible for all revisions to the USNRC licensing documents to ensure the level of safety described is not reduced.

Planned License Renewal Application Revision

Honeywell will revise Section 2.2.3 of the License Renewal Application to include the following:

> The Regulatory Affairs Manager is also responsible for ensuring the ISA and ISA Summary are developed, maintained, and revised in a manner consistent with applicable USNRC regulatory and licensing requirements, adapted as necessary to reflect site-specific considerations.

Honeywell will revise the last paragraph of Section 3.3 of the License Renewal Application as follows:

> Honeywell develops and maintains one or more site procedures governing development and maintenance of the ISA Summary. Honeywell initiates and processes updates to the ISA Summary using the configuration management process described in Section 11.0 of this Application.

RAI 3-3

Justify exclusion of a discussion in the LRA of who manages and has the authority and the responsibility to update the ISA.

Response:

The MTW Regulatory Affairs Manager or his designee has the authority and responsibility to update the ISA.

Planned License Renewal Application Revision

Honeywell will revise Section 2.2.3 of the License Renewal Application to include the following:

> The Regulatory Affairs Manager is also responsible for ensuring the ISA and ISA Summary are developed, maintained, and revised in a manner consistent with applicable USNRC regulatory and licensing requirements, adapted as necessary to reflect site-specific considerations.

RAI 3-4

Describe the elements of the ISA program providing reasonable assurance of consistency and repeatability when determining the appropriate analysis methods, demonstrating the performance requirements are met, and designating Plant Features and Procedures (PFAP). The LRA references Process Safety Management Program and NUREG-1513, "Integrated Safety Analysis

Guidance Document" as sources for ISA methodologies; however, those sources enumerate numerous generic methods.

Response:

The ISA Summary describes (in Section 5.3) and analyzes (in Section 6.3) the processes of concern. This discussion addresses the major processes that are involved in the production of uranium hexafluoride (UF_6) from uranium ore. Process concerns are related to the loss of confinement of UF_6 or hydrofluoric acid (HF). Other concerns include radiation exposure (from uranium ore or compounds), worker safety, public safety, equipment damage and uncontrolled releases of hazardous chemicals to the environment. These incidents could be initiated because of failures in process components, human error, operational errors, or external events (e.g., seismic or tornado). The ISA elements of the ISA Program are as follows:

- Process Hazards Analysis (PHA) in accordance with MTW and Honeywell Corporate PHA written procedures to ensure consistency and repeatability of application. The PHA methodology used at MTW is based on the following references:
    - American Institute of Chemical Engineers, Guidelines for Hazard Evaluation Procedures, 2nd edition with worked examples.
    - 29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals
    - 40 CFR 68, Risk Management Program
    - NUREG-1520, Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility, U.S. Nuclear Regulatory Commission, Washington, DC, March 2002
    - NUREG-1513, Integrated Safety Analysis Guidance Document, U.S. Nuclear Regulatory Commission, Washington, DC, May 2001
    - NUREG/CR-6410, Nuclear Fuel Cycle Facility Accident Analysis Handbook, March 1998
    - NRC Information-Notice No. 88-100: MEMORANDUM OF UNDERSTANDING BETWEEN NRC AND OSHA RELATING TO NRC-LICENSED FACILITIES (53FR 43950, October 31, 1988)
    - NRC Information-Notice No 689: Chemical Exposures at Fuel Cycle Facilities (September 8, 2008)
- ISA Accident Sequence analysis in accordance with NUREG-1520 and NUREG-1513 and Section 4 of the ISA Summary
- Training of personnel responsible for changes associated with the ISA and ISA Summary

- Use of the Management of Change Procedure to obtain plant concurrence and approval on changes to plant configuration, procedures, and equipment and process changes
- Right of Approval Screening to determine impact to the MTW NRC Licensing documents

Planned License Renewal Application Revision

None

RAI 3-5

Describe the process or procedure whereby the applicant incorporated the hazards described in Section 6, "Process Hazards Analysis" of the ISA Summary into accident sequences. Include a discussion of the exclusion of accident sequences. As mentioned in D-RAI 3-4, the LRA references NUREG-1513 as a source for identifying credible accident sequences and performing and maintaining the ISA. Adequate application of NUREG-1513 would result in an ISA Summary that describes all accident sequences with intermediate or high consequences to which PFAPs are applied. [redacted]

Security-Related Information.
Withhold under 10 CFR 2.390

Response:

For each accident sequence, a consequence category is determined based on comparing the calculated chemical concentration and/or radiation dose to the limits listed in Tables 4-1 through 4-6 of the ISA Summary. Risk is then determined for each accident sequence based on the likelihood and consequence categories.

As documented in the ISA Revision 9 (10/31/2012), the following table provides an overview of the original accident sequences. [redacted]

Security-Related Information.
Withhold under 10 CFR 2.390

Table 9-1, Accident Sequence and Risk Index - Uncontrolled

Accident Identifier	Initiating Event Index	Likelihood Index T Note 1	Likelihood Category	Consequence Category	Risk Index (h=f x g)	Comments or Recommendations
	(a)	(e)	(f)	(g)	(h)	

Accident Identifier	Initiating Event Index	Likelihood Index T Note 1	Likelihood Category	Consequence Category	Risk Index (h=f x g)	Comments or Recommendations
[redacted]						

Security-Related Information. Withhold under 10 CFR 2.390

Note 1. The likelihood index equals the initiating event index, when no preventive features or mitigative features exist. The designation of Preventive Safety Features will decrease the likelihood index and potentially reduce the risk index.

Note 2. [redacted]

Security-Related Information. Withhold under 10 CFR 2.390

Planned License Renewal Application Revision

None

RAI 3-6

Clarify in the ISA Summary whether hazardous chemicals such as potassium hydroxide, sodium hydroxide, magnesium hydroxide and sulfuric acid physically or chemically interact with licensed

materials. If so, justify exclusion from the ISA Summary the accident sequences, quantitative standards, and PFAPs associated with these chemicals. According to the ISA Summary, those substances physically or chemically interact with licensed materials and are toxic, explosive, flammable, corrosive, or reactive to the extent that they can endanger life or health if not adequately controlled.

Response

Section 6.3 of the ISA Summary includes the results of the process hazard analysis (PHA) for the various plant systems at the facility. The hazardous chemicals interact with licensed material in the pre-treatment, ore concentrate preparation, cold trap and off-gas cleanup, and uranium recovery processes. Sections 6.3.2, 6.3.3, 6.3.7, and 6.3.9 of the ISA Summary identify the hazards and safety features associated with these processes. Table 9-1 of the ISA (Rev. 9) (as listed in RAI response 3-5) summarized the identified credible accident sequences associated with these processes. [redacted]

Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

Planned License Renewal Application Revision

None

RAI 3-7

PFAP 79 is an administrative control involving the calculation of the time required to overfill a uranium hexafluoride cylinder. According to the ISA Summary, the applicant credits the control with a failure probability index number (FPIN) of -2. The description of the control includes acquiring flow rate data. Clarify whether the FPIN is a conditional failure given the flow rate data is correct. Further clarify whether the FPIN is conditional on other factors such as verification of the calculation.

Response

PFAP 79 includes a manual calculation based on flow rate to determine when the cylinder has been filled to the plant administrative limit. Because PFAP 79 relies on flow rate input from the flow totalizers, PFAP 79 is a conditional failure based on correct flow rate data.

[redacted]

Security-Related Information.
Withhold under 10 CFR 2.390

Planned License Renewal Application Revision

None

RAI 3-8

The sole PFAP, PFAP 48, is an administrative control whereby an operator degreases a component prior to being placed in service. According to the ISA Summary, the applicant credits the control with an FPIN of -2. Clarify whether this FPIN is conditioned on other factors such as verification by another operator.

Response

MTW-ADM-OPS-0120 is the license-related/PFAP administrative procedure which provides direction regarding the requirements to maintain the internal surfaces of processing piping and components and UF_6 cylinders free of foreign materials, specifically hydrocarbons, anytime the systems are opened. The procedure lists the responsibilities of production and maintenance managers, operations and maintenance supervisors, and workers in Section 3.0. Section 3.2.4 states one of the responsibilities of operations and maintenance supervisors: [redacted]

Security-Related Information.
Withhold under 10 CFR 2.390

[redacted]

Planned License Renewal Application Revision

None

RAI 3-9

PFAP 39 is an administrative control whereby an operator manually shuts down the Reductor System. According to the ISA Summary, the applicant credits the control with an FPIN of -1. PFAP 36 is an administrative control whereby an operator manually shuts down the Reductor Feed. The applicant credits this control with an FPIN of -2. Describe the factors associated with these controls that justifies the difference in FPIN.

Response

[redacted]

Security-Related Information.
Withhold under 10 CFR 2.390

[redacted]

Security-Related Information.
Withhold under 10 CFR 2.390

Planned License Renewal Application Revision

None

RAI 3-10

Provide details of the accident sequences described in the ISA Summary. These details should be in a form that allows the reviewer to understand the mechanisms of each accident sequence such as fault trees, event trees, or failure mode effects or what-if analyses.

Response

NUREG-1520 states that the identification of accident sequences is acceptable if it uses methods of hazard identification and process hazard analyses in accordance with the criteria of NUREG-1513. NUREG-1513 specifies twelve methods which can be used to identify hazards. These methods are:

1. Safety Review

2. Checklist Analysis
3. Relative Ranking
4. Preliminary Hazard Analysis
5. What-If Analysis
6. What-If/Checklist Analysis
7. Hazard and Operability Analysis (HAZOP)
8. Failure Modes and Effects Analysis (FMEA)
9. Fault Tree Analysis
10. Event Tree Analysis
11. Cause-Consequence Analysis
12. Human Reliability Analysis

NUREG-1513 then states that the first five methods (Safety Review, Checklist Analysis, Relative Ranking, Preliminary Hazard Analysis, and What-If Analysis) are particularly useful when a broad identification and overview of hazards is required. The next three methods (What-If/Checklist, HAZOP, and FMEA) are more suitable for performing detailed analyses of a wide range of hazards, to identify potential accident sequences. The last four methods (Fault Tree, Event Tree, Cause-Consequence Analysis, Human Reliability Analysis) are best used to provide in-depth analysis of specific accidents that have been identified using other methods.

As stated in the ISA Summary, the MTW process hazard analysis (PHA) method is consistent with the guidance provided in NUREG-1513 and Occupational Safety and Health Administration's (OSHA) Process Safety Management (PSM) Standard 29 CFR 1910.119.

- For each potential hazard, the causes, including potential interactions among materials were considered. Then, for each cause, the consequences and consequence severity category for the consequences of interest (Chemical Releases, Radiation Exposure, Environment impacts) were considered. Maintenance problems or industrial personnel accidents were not evaluated since the consequences are not considered to be a safety issue.
- For each hazard, the existing safeguards designed to prevent the hazard from occurring were considered.
- For each hazard, the existing design features that could mitigate/reduce the consequences were considered.
- For each external event hazard, it was determined if the external hazard is credible (i.e., external event initiating frequency $>10^{-6}$ per year).

Honeywell employs the "What If" method as a formal technique for identifying the potential

hazards, evaluating the significance of the hazards, evaluating the adequacy of existing safeguards, and identifying preliminary recommendations for reducing the likelihood or severity of potential hazards. The "What If" method is appropriate for the plant because it is an extremely flexible technique which can be applied to a wide range of circumstances. The evaluation of credible accident sequences using the "What-If", methodology resulted in simple accident scenarios usually limited to a single event. Because the accident scenarios resulting from the "What-If" methodology are simple, fault trees, event trees, or failure mode effects analyses were not performed. The MTW accident sequences are described in Table 7-2 of the ISA Summary. Each identified accident sequence is discussed further below.

1. [redacted] Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

2. [redacted] Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

3. [redacted] Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

4. [redacted] Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

5. [redacted] Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

6. [redacted] Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

7. [redacted] Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

[redacted]

8. [redacted] Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

Planned License Renewal Application Revision

None

RAI 3-11

Section 6, "Process Hazards Analysis," of the ISA Summary discusses the results of the PHA, specifically hazards associated with cold traps. The accident sequences in Section 7, however, do not seem to include accidents associated with those hazards. Provide a justification for the omission of cold trap accident sequences in Section 7.

Response

Section 6 of the ISA Summary identifies the process hazards evaluated in the Process Hazard Analyses (PHA). Section 6.3.7, Cold Traps and Off-gas Cleanup, of the ISA Summary identifies the hazards and safety features associated with the cold traps. [redacted] No Plant Features and Procedures (PFAPs) are required to either prevent or mitigate the consequences of these accident scenarios; therefore, they are not included in the ISA Summary.

Security-Related Information. Withhold under 10 CFR 2.390

[redacted]

Planned License Renewal Application Revision

None

RAI 3-12

The licensee's Subpart H regulatory comparison states that 10 CFR 70.64 is not applicable for consideration because Honeywell MTW is not a new facility, and the LRA does not involve new processes. However, in seeking a renewed license, the licensee must provide adequate assurance that it will comply with regulations that may apply at any time through the renewed license term. Although MTW is not a new facility, the licensee may decide to implement new processes later in the license term. Furthermore, Sections 2 and 3 of the applicant's ISA Summary reference 10 CFR 70.64 in terms of applicable regulatory requirements. Therefore, clarify the reference to 10 CFR 70.64 in the ISA Summary given that the regulatory comparison states that 10 CFR 70.64 is not applicable.

Response:

Honeywell acknowledges the appearance of an inconsistency between its treatment of the applicability of 10 CFR 70.64 in the MTW ISA Summary and the submitted Subpart H regulatory comparison. However, the text of MTW ISA Summary Section 3 indicates that, due to MTW's licensing under 10 CFR Part 40, "Therefore, the ISA requirements of 10 CFR 70 are not applicable to MTW." The purpose of the table in MTW ISA Summary Section 3 is not to establish the applicability of specified sections of 10 CFR Part 70, but to provide a cross-reference to the sections of NUREG-1520, Section 3, that were used in development of the MTW ISA Summary.

Regardless of the different purposes for which these two documents were developed, Honeywell acknowledges that disciplined development and maintenance of the MTW ISA and ISA Summary require implementation of basic design controls to the design of any new processes at the existing facility. In the absence of any corresponding requirements in 10 CFR Part 40, Honeywell has incorporated a configuration management program that is generally consistent with 10 CFR 70.64. The baseline criteria as defined in 10 CFR 70.72 form the basis for the site Management of Change Program as stated in Section 11.1.2 in the LRA. If any new processes are considered at the site, the process must be evaluated per the MTW Management of Change Program. This would include a detailed evaluation on the impact to the licensing basis as described in Section 11.1.3 of the LRA. For any change that meets the criteria stated in Section 11.1.3 of the LRA, Honeywell will be required to seek USNRC approval prior to implementation by submitting a license amendment request in accordance with 10 CFR 40.44.

Planned License Renewal Application Revision

None

RAI 3-13

In Section 11, "Management Measures," the applicant states that management measures will be applied to provide reasonable assurance that PFAPs will perform their intended safety function when needed to prevent accidents or mitigate the consequences of accidents to an acceptable level. In Section 2 "Organization and Administration", Honeywell International Inc. states that the management measures are implemented to provide assurance of the reliability and availability of PFAP as identified in the ISA. Modify the LRA to provide a consistent definition or statement of purpose of management measures.

Response:

10 CFR 70.4 indicates that management measures *include* "the functions performed by the licensee, generally on a continuing basis, that are applied to items relied on for safety, to ensure the items are available and reliable to perform their functions when needed." Honeywell will use

this definition, modified to reflect MTW's use of the term "Plant Features and Procedures (PFAPs)" in lieu of "IROFS," as a basis for statements addressing the purpose of PFAPs to ensure consistency with USNRC regulations.

Planned License Renewal Application Revision

Honeywell will revise the first sentence of LRA Section 2.4 as follows:

> Section 11.0 of this Application provides a description of the management measures that are applied to Plant Features and Procedures (PFAP), as identified in the MTW ISA Summary, to ensure the PFAP are available and reliable to perform their functions when needed.

Honeywell will revise the first sentence of LRA Section 11.0 as follows:

> Honeywell applies management measures specified in this Section to Plant Features and Procedures (PFAP), as identified in the MTW ISA Summary, to ensure the PFAP are available and reliable to perform their functions when needed.

RAI 3-14

Justify exclusion of a discussion regarding NRC approval for changes that create new types of accident sequences that, unless mitigated or prevented, exceed the performance requirements specified in 10 CFR 70.61(a) - (c) and (e), (f). As stated in 11.1.3 of the LRA, the applicant commits to seeking NRC approval for exceeding only the consequence element of the performance requirements.

Response:

Honeywell recognizes the omission of certain criteria requiring USNRC approval of a license amendment and will revise the LRA accordingly.

Planned License Renewal Application Revision

Honeywell intends to revise the first bulleted paragraph of Section 11.1.3 of the LRA as follows:

> Honeywell may implement changes to the site, structures, processes, systems, components, computer programs, and activities of personnel without prior USNRC approval if the proposed change does not:
>
> - Create new types of accident sequences that, unless mitigated or prevented, would exceed the performance requirements specified in 10 CFR 70.61 and that have not previously been described in the MTW ISA Summary; or
> - Use new processes, technologies, or control systems for which Honeywell has no prior experience; or
> - Remove, without at least an equivalent replacement of the safety function, a PFAP that is listed in the MTW ISA Summary and is necessary for compliance with the performance requirements of 10 CFR 70.61; or
> - Alter any PFAP, as listed in the ISA Summary, that is the sole item preventing or mitigating an accident sequence that exceeds the performance requirements of 10 CFR 70.61; or
> - Create any condition or configuration that is otherwise prohibited by license condition or order.
>
> For changes that require USNRC approval prior to implementation, MTW will submit a license amendment request in accordance with 10 CFR 40.44.

RAI 3-15

Section 11.1, "Configuration Management (CM)," describes the scope and process outline of the CM program for the applicant.

a. Provide a list of documents included in the document control process for Section 11.1 Configuration Management (i.e., drawings, procurement documentation).

b. Describe how changes to the facility are controlled and tracked in the documents described in the list provided in 15.a.

c. Describe how Honeywell's organizational structure for the configuration management program controls via procedures the approval and implementation of changes performed in the facility.

Response:

A. The following is a listing of the types of documents that are included in the MTW Document Control Process:

Name or Type of Record
Operational Incidents
Event Involving Releases of Radioactive Materials Beyond Regulatory Limits
Audits and Inspections
Radiological Monitoring Instrument Calibration
Seal source leak test results
ALARA Program
Environmental measurements (air, soil, vegetation and water)
Bioassay results (urinalysis and whole body counts)
Personnel and environmental TLD dosimetry results
Personnel radiation exposures
HP Summary Reports of records indirectly related to personnel exposures
Unusual events reportable to NRC (overexposures, excessive concentrations, etc.)
Contamination survey/smear results
Daily workroom air activity measurements
Daily gaseous and liquid effluent measurements
Fence line air sampling data
Health physics incident reports
NRC inspection reports
ALARA meeting minutes, actions, investigations, and results
HSE Council/Committee meeting minutes, actions, investigations, and results
"B" Council meeting minutes, actions, investigations, and results
Health Physics audit reports
Semi-annual radiological environmental report
Health Physics instrument calibration
Employee training records
Radiological surveys
Procedures
Record retention schedules
Management of Change program records, which may include
Facility changes
Process Hazards Analyses and resulting associated mitigating or corrective actions
Training associated with a change
Component or equipment tests associated with a change
Engineering analyses associated with a change

B. The following describes how changes to the facility are controlled and tracked:

Honeywell has established a configuration management program to evaluate, implement, and track proposed changes to the site, structures, processes, systems, components, computer

programs, and activities of personnel. The configuration management program provides assurance that PFAPs can perform their functions when needed.

The configuration management program is documented in approved written procedures.

Honeywell's Management of Change program includes the following elements:

1. A proposed change request is initiated and submitted addressing the following criteria:
   - The technical basis for the change;
   - Impact of the change on safety and health and control of licensed material;
   - Modifications to existing operating procedures including any necessary training or retraining before implementation of the change;
   - Modifications to PSI;
   - Authorization requirements for the change;
   - For temporary changes, the approved duration of the change;
   - The impact of the change on the facility's licensing basis documents; and
   - Any required changes to the facility's USNRC license.
2. A cross-functional review of the proposed change package is performed (If necessary, a PHA is conducted with validated recommendations from the PHA included within the ISA and the scope of the field work package).

3. A review is conducted in accordance with procedure MTW-ADM-REG-0122 to determine if the change requires USNRC approval before the change is implemented. There is a specific process consisting of answering the following questions:

   A. Does the change create any new types of accident sequences that, unless mitigated or prevented, would exceed regulatory requirements and that have not previously been described in the ISA Summary?

   B. Does the change use new processes, technologies, or control systems for which Honeywell-MTW has no prior experience?

   C. Does the change remove, without at least an equivalent replacement of the safety function, a PFAP that is listed in the MTW ISA Summary and is necessary for compliance with the performance requirements of 10 CFR 70.61?

   D. Does the change alter any PFAP, as listed in the MTW-ISA Summary, that is a sole item preventing or mitigating an accident sequence (PFAP–Class A) that exceeds regulatory requirements?

   E. Create any condition or configuration that is otherwise prohibited by license condition or order?

   Once the determination and subsequent additional analysis is complete, the

conclusion of whether the change proposed has a negative impact on the license application, ISA Summary, and SDR must be made. If the proposed change has a negative impact, [i.e., increases the consequences or the probability of an existing accident sequence, reduces the mitigation of known accident sequences, or introduces a new accident sequence which is not previously mitigated, or results in a reduction in safety (license application and/or SDR)] a proposal of prevention and/or mitigation must be prepared as part of the submittal for U.S. NRC's approval.

4. Honeywell may implement changes to the site, structures, processes, systems, components, computer programs, and activities of personnel without prior USNRC approval if the proposed change does not:
   - Create new types of accident sequences that, unless mitigated or prevented, would have consequences that would exceed the performance requirements specified in 10 CFR 70.61 and that have not previously been described in the ISA Summary; or
   - Use new processes, technologies, or control systems for which Honeywell has no prior experience; or
   - Remove, without at least an equivalent replacement of the safety function, a PFAP that is listed in the ISA Summary and is necessary for compliance with the performance requirements of 10 CFR 70.61; or
   - Alter any PFAP, as listed in the ISA Summary, that is the sole item preventing or mitigating an accident sequence that exceeds the performance requirements of 10 CFR 70.61; or
   - Create any condition or configuration that is otherwise prohibited by license condition or order.
5. For changes that require USNRC approval prior to implementation, MTW will submit a license amendment request in accordance with 10 CFR 40.44.
6. For any change approved by Honeywell for implementation, Honeywell promptly updates affected site documentation (e.g., policies, procedures, drawings, and training materials).
7. Honeywell maintains records of changes to the facility in accordance with internal document management and control policies. These records include the written evaluation that provides the bases for the determination that the changes do not require prior USNRC approval.

C. The following describes how the Honeywell organizational structure for the configuration management program controls the program via procedures for the implementation of and changes to the facility:

By the requirements of the procedure the Regulatory Affairs Manager specifies the minimum approval level and implementation actions. The Management of Change procedure, in conjunction with MTW-ADM-REG-0122, *Right of Approval*, MTW-ADM-PRO-0100, *Development and Implementation of Policies and Administrative Procedures*, and MTW-ADM-PRO-0103, *Development and Implementation of Plant Technical Procedures*, controls permanent or temporary changes to process chemicals, technology, equipment, procedures, and utilities by identifying and reviewing the changes prior to their implementation. In the case of temporary changes, this procedure also controls the removal of that temporary change. This procedure is intended to sustain or enhance the level of safety within the operating unit by controlling the life-cycle of changes. This is accomplished by addressing and documenting technical basis for the change and supporting documentation, and its impact on safety and health, documentation of internal or external authorization/notification prior to implementation, updating of process safety information (PSI) and operating procedures, training of affected employees, pre-startup safety review (PSSR), and post-startup validation (PSV) prior to closure. Also, this procedure implements the requirements of Configuration Management (CM) related to maintaining consistency among the design requirements, the physical configuration, and documentation of the facility. The Management of Change procedure describes the organization for the approval of different levels during the management of change process. The organization includes specific individuals that have Area, Department, Pre-Safety Startup Review (PSSR), and Post Startup Validation arrival rights.

Planned License Renewal Application Revision

None

RAI 3-16

Section 11.2, "Maintenance," provides a description of how the program is implemented by the applicant. Clarify the organizational structure for the oversight and authorization of activities described in this section.

Response:

MTW procedure MTW-ADM-MT-0001 - *Control of Maintenance and Modification Activities Associated with PFAP-Related Equipment (LR-1)* controls maintenance and modification activities on systems, structures, and components associated with the Plant ISA (Rev 9). This procedure implements a portion of the management measures for PFAPs associated with maintenance activities described in Section 4.5 of the ISA Summary. The maintenance management measures are designed to ensure the structures, systems, and components associated with accomplishing PFAP functions are maintained as necessary to ensure they are available and reliable to perform

their function when needed, to comply with the performance requirements stated in the ISA Summary.

The Maintenance Organization for control of the above procedure consists of the following personnel. This list provides the title and brief description of the individual's responsibilities as defined in procedure MTW-ADM-MT-0001.

- Maintenance Manager

  Responsible for process and facility maintenance activities, including preventive and corrective maintenance and management of the maintenance staff. Ensures Reliability Engineering maintains an effective PM program for PFAP-related equipment to properly balance reliability and availability considerations. Ensures hydrocarbon controls are utilized during maintenance of UF_6-bearing equipment and piping, including extensive degreasing of replacement equipment or piping and administrative controls in the form of increased supervision. Refer to MTW-POL-PD-0101, *Hydrocarbon Control* and MTW-ADM-OPS-0120, *Foreign Material Control.* Ensures maintenance work on PFAP related equipment is completed in accordance with this procedure. Ensures maintenance activities associated with PFAP related equipment/components are planned, scheduled, supervised, inspected, tested, and documented as required. The Maintenance Manager is the "owner" of this procedure.

- Reliability Engineering Group Leader

  Ensure Reliability Engineering properly plans and reviews all preventive and predictive maintenance tasks on LR-1 classified equipment. This includes creating and updating task lists and job plans; identifying required resources, materials, manpower, equipment, specialty tools and services; planning and scheduling work orders; maintaining required records; reviewing and evaluating completed PM work orders; and performing final closure of all PM work orders. Also, included in his responsibilities is the specification of test/inspection requirements, ensuring that testing/inspections are properly performed, review of test results and documentation of testing and test results.

- Maintenance Planning Leader

  Responsible for the overall planning of maintenance work including conversion of notifications to work orders with work instructions, ordering of repair parts, and scheduling based on input from Operations Coordinators. The Maintenance Planning Leader has overall responsibility for ensuring planned job packages for corrective maintenance are planned in accordance with applicable codes, standards, and procedures.

- Maintenance Planner

  The Maintenance Planner assigned to perform planning for UF_6 processes and support related notifications and work orders is responsible for ensuring that work packages are developed for work on LR-1 equipment/components.
  The work package must be approved in accordance with this procedure, and the assigned Planner is responsible for obtaining the required approvals.

- Maintenance Superintendent

  The Maintenance Superintendent is responsible for the overall execution of planned and emergent work. The Maintenance Superintendent has the overall responsibility for managing maintenance craft personnel and ensuring work performed by maintenance personnel is performed in accordance with applicable codes, standards, and procedures.

- Maintenance Supervisors

  Ensure respective workers take appropriate precautions during the performance of their work to prevent introduction of foreign materials into the systems or components being worked. Ensure hydrocarbon controls are utilized during maintenance of UF_6-bearing equipment and piping, including extensive degreasing of replacement equipment or piping and administrative controls in the form of increased supervision. Refer to MTW-POL-PD-0101, *Hydrocarbon Control* and MTW-ADM-OPS-0120, *Foreign Material Control.*

Planned License Renewal Application Revision

None

RAI 3-17

Section 11.3, "Training and Qualification," provides a description of training and qualification requirements for new employees, operations, maintenance, and contractor personnel. Please elaborate on how training and qualification apply to the personnel that have the authority and responsibility to verify, approve and incorporate ISA changes.

Response:

The training and qualification of persons responsible for verifying, approving and incorporating changes to the ISA and ISA Summary consists of computer-based training, experience and education. The remainder of this response provides details on the Regulatory Affairs Manager

and the Regulatory Affairs Specialist. These two positions have primary responsibility to make changes to the ISA and ISA Summary, with the Regulatory Affairs Manager as the final approval authority for those changes.
Refer to Section 2.2.3 of the LRA for the qualifications for the Regulatory Affairs Manager.

The Regulatory Affairs Specialist is responsible for reviewing and changing the ISA Summary as needed.

Qualifications for the position of Regulatory Affairs Specialist include:

- Four-year degree or equivalent experience in Engineering, Science, or related discipline
- Six to eight years of diversified experience in chemical or nuclear industry, including supervisory, management, or oversight experience
- Knowledge of ISA methodologies
- Experience in Radiation and Chemical Safety

Planned License Renewal Application Revision

None

RAI 3-18

Section 11.4, "Procedures," describes the Procedure Process Program for the applicant. This process includes the elements of identification, development, verification, review and comment resolution, approval, validation, issuance, and change control. State organizational responsibilities for the review and approval of procedures, and specify criteria for the review and periodic review of procedures.

Response:

The organizational responsibilities for the review and approval of procedures is dependent on the plant operational area associated with the procedure. Plant procedures are also subject to a review as per the MTW Management of Change Procedure (MTW-ADM-REG-0120). This review requires that each procedure is reviewed at 4 distinct levels. The levels include the Area approval, Departmental Approval, Pre-Safety Startup Review, and finally Post Startup Validation. Upon completion of the MOC review, the procedure is ready for implementation. MTW procedures require that they have three approval signatures prior to implementation. These include the following:

- Technical Authority - The person responsible for maintaining or supporting a program or system. Technical authority may be a member of Engineering; a specialist or supporting Subject Matter Expert (SME); a senior lead, manager, or program owner responsible for the process covered by the procedure.
- Technical Writer – The person authorized to develop and makes changes to a procedure, policy, or document.
- Approval Authority (this depends on the area of the Manager – For example NRC license related procedures are approved by the Regulatory Affairs Manager)

Procedures are reviewed and revised as needed on a periodic basis. The periodic review cycles are as follows:

Procedures requiring a yearly periodic review:

- Emergency Plan Implementing Procedures (EPIPs)
- Process Safety Management (PSM)-related procedures, policies, and documents.
- Operator Aids

Procedures requiring a periodic review every 5 years:

- All other procedures, policies, and controlled documents.

The following are specific elements that are included in the periodic review of procedures, policies, and documents:

- Policy/Procedure Requirements
- Validity
- Purpose
- Function
- Regulatory Requirements
- Roles/Responsibilities

Planned License Renewal Application Revision

None

RAI 3-19

Section 11.6, "Incident Reports and Investigations," of the LRA describes the Incident Report and Investigation Program for the applicant. The program describes general procedures and a management structure for investigating incidents and completing appropriate corrective actions. Clarify the statement "the proper and timely completion of required investigation, unless otherwise assigned by the Plant Manager.

Describe criteria used for the evaluation of incident investigation and timeline requirements, e.g. thresholds that need to be met by the incident to perform an investigation. Describe the organizational structure from the establishment, execution and oversight of the Incident Report and Investigation Program. Describe how you retain these records, e.g. electronically, hard copy, database, and the retention period for them.

Response:

The statement in the first paragraph refers to the Plant Manager being able to assign responsibility to someone other than the HSE and Regulatory Affairs Managers. It does not mean that he can arbitrarily change the due date or severity of an action.

To evaluate incidents, MTW holds a Management Review Committee (MRC) meeting periodically to discuss and determine the appropriate path forward for the resolution of the incident. The MRC consists of the Plant Manager, Regulatory Affairs/HSE Manager, Maintenance Manager, Engineering Representative, and Human Resources Manager. A quorum is needed to make decisions in the meeting, this quorum consists of the Regulatory Affairs/HSE Manager, Maintenance Manager, and Engineering Representative. Incidents are reviewed and given a priority designation based on the safety or environmental significance of the incident. After the completion of the MRC review, the incidents are assigned to a specific person in the plant and action items are given to the owner of the action so there is a path forward to close the incident. The current incident levels include the following:

Level A and Level B - Requires that a Root Cause Analysis (RCA) be performed within 30 days and Action Items developed to prevent recurrence (in addition to actions to correct the problem reported).

Level C - Requires Apparent Cause Analysis and Action Items to reduce the likelihood of recurrence as a minimum (in addition to actions to correct the problem reported). RCA is optional per MRC direction. Action items timeline to be determined by the incident owner based on resources required for implementation, effectiveness, corrective actions, and the level of significance

Level D - Does not require cause analysis. IRs may be closed with only actions to correct the problem reported. Some problems in this category may be reported for record/trending only (no corrective actions necessary).

Records related to Incident Reports are uploaded to an electronic database for retention.

Planned License Renewal Application Revision

Section 11.6.1 will be revised by replacing the third paragraph with the following:

To evaluate incidents, MTW holds a Management Review Committee (MRC) meeting periodically to discuss and determine the appropriate path forward for the resolution of the incident. Incidents are reviewed and given a priority designation based on the safety or environmental significance of the incident. After the completion of the MRC review, the incidents are assigned to a specific person in the plant for resolution.

RAI 3-20

Section 11.7, "Records Management," describes the applicant's Records Management Program. In this section, the applicant provides a list of categories and the retention period. Provide a list of the type of records under these categories. For example, enumerate the category of records under which PFAPs information regarding failures, procurement documentation, equipment qualification, and equipment maintenance would be recorded.

Response:

Based on the MTW Records Management Procedure (MTW-ADM-PRO-0108), the following is the type of records under each of the categories in Section 11.7 of the LRA:

- Management of Change Program records (5 years)
  - Request for Change (RFC) Descriptions
  - Training
  - P&ID Changes
  - Procedure Changes
- Operational incidents (5 years)
  - Incident Investigation Reports
  - Corrective Action Descriptions
  - PFAP failures and corrective actions
- Events investigations (including events involving releases of radioactive materials beyond regulatory limits) (until license termination)
  - NRC NOVs
  - NRC URI reports
  - NRC Compliance orders
  - PFAP Investigations
- Audits and inspections (5 years)
  - Internal Periodic Audits
  - NRC inspection Reports
  - PFAP Procurement and equipment maintenance
- Employee training (5 years)
  - B Council Training Records
  - ERT Training Records
  - Respiratory training Records
- Environmental measurements (until authorized by NRC).

- Out fall water sample results
- Air Monitoring results

Planned License Renewal Application Revision

Section 11.7 will be revised as follows:

> Honeywell implements a program to ensure the proper production, storage, and retention of records related to plant configuration, health and safety, and other plant activities. Included in this program are records of:
>
> - Management of Change Program records (5 years), e.g., Request for change (RFC) Descriptions
> - Operational incidents (5 years), e.g., PFAP failures and corrective actions
> - Events investigations (including events involving releases of radioactive materials beyond regulatory limits) (until license termination), e.g., PFAP investigations
> - Audits and inspections (5 years), e.g. – PFAP Procurement and equipment maintenance
> - Employee training (5 years); e.g., ERT training records
> - Environmental measurements (until authorized by the NRC), e.g., Air monitoring results

RAI 3-21

Describe the process for reporting to the NRC events that describe acute chemical exposures that exceed the 10 CFR 70.61 performance requirements or conditions such that PFAPs for a given sequence documented in the ISA Summary were unavailable or unreliable.

Response:

Because MTW is licensed under the requirements of 10 CFR Part 40, Honeywell complies with the reporting requirements of 10 CFR Part 40.60 through 40.67, not the requirements of 10 CFR Part 70, Subpart G. Although the reporting requirements of 10 CFR Part 40 are not as specific as those of 10 CFR Part 70, Honeywell believes that the intent of the Part 70 reporting requirements may be satisfied through compliance with the corresponding Part 40 requirements.

Regarding acute chemical exposures as discussed in the RAI, 10 CFR 70, Appendix A, Section (a)(3) identifies a one-hour reportable event as "(3) An acute chemical exposure to an individual from licensed material or hazardous chemicals produced from licensed material that exceeds the quantitative standards established to satisfy the requirements in § 70.61(b)(4)." 10 CFR 70.61(b)(4) provides two "quantitative standards" as follows:

> An acute chemical exposure to an individual from licensed material or hazardous chemicals produced from licensed material that:

(i) Could endanger the life of a worker, or

(ii) Could lead to irreversible or other serious, long-lasting health effects to any individual located outside the controlled area identified pursuant to paragraph (f) of this section. If an applicant possesses or plans to possess quantities of material capable of such chemical exposures, then the applicant shall propose appropriate quantitative standards for these health effects, as part of the information submitted pursuant to § 70.65 of this subpart.

Similarly, 10 CFR 70, Appendix A, Section (b)(3) identifies a 24-hour reportable event as, "(3) An acute chemical exposure to an individual from licensed material or hazardous chemicals produced from licensed materials that exceeds the quantitative standards that satisfy the requirements of § 70.61(c)(4)." 10 CFR 70.61(c)(4) provides two "quantitative standards" as follows:

(4) An acute chemical exposure to an individual from licensed material or hazardous chemicals produced from licensed material that:

(i) Could lead to irreversible or other serious, long-lasting health effects to a worker, or

(ii) Could cause mild transient health effects to any individual located outside the controlled area as specified in paragraph (f) of this section. If an applicant possesses or plans to possess quantities of material capable of such chemical exposures, then the applicant shall propose appropriate quantitative standards for these health effects, as part of the information submitted pursuant to § 70.65 of this subpart.

Although MTW is not subject to the requirements of 10 CFR 70.65, Honeywell has conducted an ISA appropriate for the hazards inherent in MTW's operations and developed and submitted an ISA Summary which has been approved by USNRC. The MTW ISA Summary identifies the relevant "quantitative standards" used in the performance of the MTW ISA.

Honeywell does not believe that an exposure of this magnitude due to licensed material or hazardous chemicals produced from licensed material is credible under the current idle state operations. In reference to the quantitative standards under 10 CFR 70.61(b)(4)(i) and 10 CFR 70.61(c)(4)(i), the worker health effects resulting from such an exposure would require immediate offsite transport; worker decontamination would be deferred to accommodate lifesaving medical treatment. Such an event would be reportable within 24 hours under 10 CFR 40.60(b)(3), as follows:

(b) Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(3) – An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

Regarding the 10 CFR 70.61(b)(4)(ii) and 10 CFR 70.61(c)(4)(ii) quantitative standards for exposure outside of the controlled area, during uranium hexafluoride production operations, the MTW Emergency Response Plan would require classification of such an event as an emergency and subsequent reporting of the event to the NRC Operations Center within one hour of occurrence.

Therefore, reporting under the 10 CFR Part 40 requirements and the MTW Emergency Response Plan would satisfy the intent of the 10 CFR 70, Appendix A reporting requirements for the listed acute chemical exposure criteria.

Regarding a situation in which a PFAP is unavailable or unreliable as discussed in the RAI, 10 CFR 70, Appendix A, Section a.4 identifies a one-hour reportable event as follows:

> (4) An event or condition such that no items relied on for safety, as documented in the Integrated Safety Analysis summary, remain available and reliable, in an accident sequence evaluated in the Integrated Safety Analysis, to perform their function:
>
> (i) In the context of the performance requirements in § 70.61(b) and § 70.61(c), ...
>
> [Note: Subsection (a)(4)(ii), which has been omitted, addresses criticality incidents, which are not possible at MTW.]

Similarly, 10 CFR 70, Appendix A, Section b.2 identifies a 24-hour reportable event as, "(2) Loss or degradation of items relied on for safety that results in failure to meet the performance requirement of § 70.61."

Although MTW is not subject to the requirements of 10 CFR 70.61, Honeywell has conducted an ISA appropriate for the hazards inherent in MTW's operations and developed and submitted an ISA Summary which has been approved by USNRC. Honeywell believes that the identified 10 CFR Part 70 reporting requirements can be satisfied, with clarification, through compliance with the requirements of 10 CFR 40.60(b)(2) which requires a 24-hour report as follows:

> (2) An event in which equipment is disabled or fails to function as designed when:
>
> (i) The equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;
>
> (ii) The equipment is required to be available and operable when it is disabled or fails to function; and
>
> (iii) No redundant equipment is available and operable to perform the required safety function.

In the "Planned License Renewal Application Revision" provided below, Honeywell identifies proposed LRA language that would clarify application of the reporting requirements of 10 CFR 40.60(b)(2) to possible losses of PFAP function. In developing the proposed clarification, Honeywell conducted a review of the development of the 10 CFR Part 70 reporting requirements to ensure the regulatory intent would be satisfied. Honeywell notes that, in the original publication of the 10 CFR Part 70, Appendix A reporting requirements (65 FR 56231, September 18, 2000), USNRC indicated that the new approach would "establish a timeframe for reporting that is scaled per risk." Honeywell believes that the level of risk associated with the identified events at MTW may be significantly lower than that occurring at 10 CFR Part 70 licensees due to: 1) the absence of scenarios involving criticality events; and 2) the capability to immediately shut down MTW's production processes following identification of an adverse condition. In addition, any of the listed events that resulted in an actual significant release of radioactive material or hazardous chemicals would likely require immediate reporting in accordance with the MTW Emergency Response Plan. Therefore, Honeywell believes that retention of the 10 CFR 40.60(b)(2) 24-hour reporting timeframe is appropriate,

Planned License Renewal Application Revision

Section 11.6.2 of the License Renewal Application will be revised in its entirety as follows:

> Honeywell maintains specific site procedures for investigating, recording, reporting, and following up on reportable incidents as required by applicable regulations, including 10 CFR 40.60 (Ref. 2), 10 CFR 20, Subpart M (Ref. 3), and 10 CFR Part 21 (Ref. 4).
>
> Regarding the reporting requirements of 10 CFR 40.60(b)(2), Honeywell utilizes the following clarifications to ensure compliance:
>
> - Equipment required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident" (10 CFR 40.60(b)(2)(i)) refers to Plant Features and Procedures (PFAP) that are classified as "Passive Engineered Controls" or "Active Engineered Controls" in accordance with the MTW ISA Summary.
> - Equipment is required to be available and operable when it is disabled or fails to function" (10 CFR 40.60(b)(2)(ii)) means that the PFAP was disabled or failed to function during a period in which the PFAP is required to function to ensure prevention or mitigation of the postulated accident, consistent with the intent of the designated PFAP.
>
> The Regulatory Affairs Manager is responsible for oversight of these activities.

RAI 3-22

Confirm that the definitions and stated purpose of "integrated safety analysis" and integrated safety analysis summary are consistent among the ISA Summary, license renewal application, and implementing procedures such as management of change, process hazard analysis, and changes to licensing documents.

Response:

The documents mentioned in the RAI will be revised as necessary under MTW's configuration management program to ensure consistent use of terminology.

Planned License Renewal Application Revision

Any identified inconsistencies will be revised in the LRA and its supporting documents.