#### December 6, 2012

MEMORANDUM TO: Yoira K. Diaz-Sanabria, Chief

Subsequent Renewal, Guidance,

and Operations Branch Division of License Renewal

Office of Nuclear Reactor Regulation

FROM: Robert F. Kuntz, Senior Project Manager /RA/

Subsequent Renewal, Guidance,

and Operations Branch Division of License Renewal

Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE MEETINGS TO RECEIVE COMMENTS ON

SUBSEQUENT LICENSE RENEWAL

The U.S. Nuclear Regulatory Commission (NRC) staff and interested stakeholders met on November 1, November 13, and November 14, 2012, to discuss issues for consideration for subsequent license renewal. Each day had two identical sessions; one in the morning and one in the afternoon. The slide presentations are available in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession Nos. ML12306A368, ML12313A235, and ML12319A528. Enclosed are summaries of each meeting and attendee lists for each meeting.

#### Enclosures:

- 1. Nov. 1 Meeting Summary
- 2. Nov. 13 Meeting Summary
- 3. Nov. 14 Meeting Summary
- 4. Nov. 1 Attendee List
- 5. Nov. 13 Attendee List
- 6. Nov. 14 Attendee List

cc w/encl: Reactor License Renewal

Stakeholder Group Listserv

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DATE	12/4/2012	11/27/12	12/3/12	12/6/12

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Memorandum to Y. Diaz-Sanabria from R. Kuntz dated December 6, 2012

SUBJECT: SUMMARY OF THE MEETING TO RECEIVE COMMENTS ON

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MGavrilas, RES/DE

GCarpenter, RES/DE

AHull, RES/DE

MSrinivasan, RES/DE

MSpencer, OGC

DLochbaum, Union of Concerned Scientists

AGundersen, Fairewinds Associates

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RReister, DOE (richard.reister@nuclear.energy.gov)

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KYhip, SCE

# SUMMARY OF NOVEMBER 1, 2012 MEETING TO RECEIVE COMMENTS ON SUBSEQUENT LICENSE RENEWAL

Bellow is a summary of the meeting held November 1, 2012, to receive comments on subsequent license renewal.

### 1. Timing of subsequent license renewal application

The staff presented the current requirements for when an application for renewal can be filed and the basis for the requirements. The staff then opened up the meeting for comments on whether the requirement is appropriate for subsequent renewal.

During the morning session, the staff received comments stating that the current regulations, ie., allowing up to 20 years prior to the expiration of the license for an application to be submitted is appropriate for subsequent renewal. The comments supported continuing the current regulation for subsequent renewals because the requirement is needed when considering: the time to potentially replace the energy produced if a plant is not renewed, to do decommissioning planning if not renewed, and to prepare, submit and have an application reviewed. The staff asked commenters supporting continuation of the existing regulation how operating experience could be demonstrated for new license renewal programs if they were just implemented at the time a subsequent renewal application is submitted. The commenters' response was that the majority of the license renewal programs were existing programs and that the few new programs would be based on operating experience from the first 40 years of operation similar to what is done for the first renewal period.

During the afternoon session a commenter stated that new programs would be verified as adequate similar to the first term and that the NRC license renewal 71003 inspections would verify the program effectiveness.

## 2. Duration of a subsequent renewal term

The staff presented the current requirements for the duration a renewed license can be granted and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session the staff received comments supporting continuation of allowing renewed licenses to be granted for up to 20 years. One commenter stated that a 20-year renewal period was needed for adequate planning and budgeting and to justify the cost of pursuing subsequent license renewal. The commenter stated that a 20-year period is justified because aging management programs will identify and manage the effects of aging on components and that the current licensing basis will continue throughout the subsequent period of extended operation ensuring the plant will safety operate. Another commenter stated that while the license may be granted for up to 20 years, there is no guarantee that operation will continue for the duration of the license because the plant would still have to meet the conditions of the license to ensure safe operation and would still have to request and be granted environmental permits to continue to operate.

3. Requirements for exemptions to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 requirements

The staff presented the current requirements for including exemptions to 10 CFR Part 50 requirements in the review for license renewal and the basis for the requirements. The staff then opened up the meeting for comments on whether the requirement is appropriate for subsequent license renewal.

During the morning session, the staff received comments supporting the continuation of the current requirement of only reviewing those exemptions that have a time dependency for license renewal.

During the afternoon session, no new comments were received.

4. Systems, structures, and components within the scope of license renewal and subject to an aging management review

The staff presented the current requirements for determining the systems, structures, and components within the scope of license renewal and subject to an aging management review and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session, the staff received comments supporting the current regulations for determining the systems, structures, and components within the scope of license renewal and subject to an aging management review.

# SUMMARY OF NOVEMBER 13, 2012 MEETING TO RECEIVE COMMENTS ON SUBSEQUENT LICENSE RENEWAL

Bellow is a summary of the meeting held November 13, 2012, to receive comments on subsequent license renewal.

## 1. Consideration of severe accident mitigation alternatives (SAMA) analysis

The staff presented the current requirements for including SAMA analysis as part of the environmental report supporting a license renewal request and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session, the staff received comments supporting the current regulations which state that if the staff has not previously considered SAMA for an applicant's plant in an environmental impact statement or related supplement or in an environmental assessment, a consideration of alternatives to mitigate severe accidents must be provided. One commenter supported the continuation of the current requirements by stating that a SAMA analysis was unlikely to reveal any new information and that nuclear safety is an ongoing issue that is not unique to license renewal.

During the afternoon session, no new comments were received.

### 2. Mandating reduction in environmental impacts

The staff presented the current requirements for addressing environmental impacts and noted that the National Environmental Policy Act (NEPA) requires that Federal agencies review the environmental impacts of their actions but does not require that agencies mandate or minimize the environmental impacts. The staff also noted that the NRC does not have any specific NEPA-related authority to mandate reductions in environmental impacts. The staff then opened up the meeting for comments on whether the NRC should consider mandating reductions in environmental impacts for subsequent renewal.

During the morning session, the staff received comments that supported not imposing mandates to reduce environmental impacts. One commenter stated that consistent with NEPA, the agencies with responsibility should impose restrictions on environmental impacts.

During the afternoon session no new comments were received.

## 3. Consideration of terrorist threats

The staff stated that NEPA does not require the NRC, when assessing whether to license nuclear facilities, to analyze environmental impacts from terrorist attacks. The staff further stated that the NRC, in conjunction with several other Federal agencies, already addresses terrorist threats via extensive security requirements that seek to prevent terrorist attacks altogether and to minimize the harmful effects if such attacks do occur. The staff then opened up the meeting for comments on if the NRC should require

that terrorist threats be considered as part of an applicant's environmental report supporting subsequent renewal.

During the morning session the staff received comments that supported not requiring terrorist threats to be considered in the environmental report supporting subsequent renewal. One commenter stated that security threats, including terrorist threats, are considered as part of the ongoing current licensing basis

During the afternoon session no new comments were received.

### 4. Consideration of population demographics in plant vicinities

The staff presented the current requirements for addressing population demographics in environmental reports supporting license renewal and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session the staff received comments supporting the current requirements that, as part of the license renewal process, an environmental justice review is done to determine whether there would be any disproportionately high or adverse impacts to low-income or minority populations from continued plant operation.

# SUMMARY OF NOVEMBER 14, 2012 MEETING TO RECEIVE COMMENTS ON SUBSEQUENT LICENSE RENEWAL

Bellow is a summary of the meeting held November 14, 2012, to receive comments on subsequent license renewal.

### 1. Requirements for licensing basis

The staff presented the current requirements for the licensing basis in the renewal period and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session the staff received comments that supported continuing the current licensing basis (CLB) and requiring assessment and management of age-related degradation unique to license renewal into subsequent renewal periods.

One commenter supported continuing the current requirements by stating that the current requirements have been proven successful and imposing requirements to update the CLB to incorporate new standards would be an unnecessary duplication of effort without any benefit. The NRC staff questioned the commenter on how imposing new standards would not be an enhancement to safety. The commenter responded that the flexibility of the current structure adequately accounts for issues and that the issues are dealt with immediately.

During the afternoon session, no new comments were received.

## 2. Mandating equipment replacement or refurbishment

The staff presented the current requirements for the replacement and refurbishment of equipment and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session, the staff received comments supporting continuing the current requirement that replacement and refurbishment of equipment is not mandated for license renewal. One commenter noted that the aging management programs monitor the condition of the components within the scope of license renewal and would be replaced as needed and that the effectiveness of the programs was continuously monitored. The commenter also noted that licensees continuously monitor operating experience and incorporate lessons learned.

The NRC staff questioned the commenter on whether there is ongoing activity to determine component life expectancy. The commenter responded that the Department of Energy (DOE) and the Electric Power Research Institute (EPRI) are developing tools and models for predicting the life of major components that may be time limiting for a nuclear power plant such as the reactor pressure vessel, containment, and cables. The commenter also noted that DOE and EPRI are also working on other components that may be time limiting and require replacement.

## 3. Identifying and implementing safety enhancements

The staff presented the current requirements for identifying and implementing safety enhancements and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session the staff received comments that supported continuing the current requirements that identify and implement safety enhancements for license renewal. One commenter supported not requiring applicants for renewal to identify and implement safety enhancements for license renewal by noting that the current license renewal requirements ensure that needed enhancements are done to support continue operation into the period of extended operation.

During the afternoon session no new comments were received.

### 4. Periodically assessing license renewal activities

The staff presented the current requirements for periodically assessing license renewal activities and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session, the staff received comments supporting the current requirements that do not require a periodic assessment of license renewal activities. One commenter noted that license renewal activities are continuously monitored to ensure the effectiveness and efficiency of the activities.

The staff questioned a commenter about the requirements for subsequent renewal and how utilities should provide an assessment of program effectiveness and if there should be a periodic assessment to determine program effectiveness. The commenter stated that utilities are planning to provide an assessment of its programs for subsequent renewal.

During the afternoon session, no new comments were received.

#### 5. Requiring probabilistic risk assessments (PRAs)

The staff presented the current requirements for submitting PRAs to support license renewal applications and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session the staff received comments supporting the current regulations which do not require applicants to submit a current PRA to support license renewal. One commenter noted that the industry standard requires updating PRAs every four or five years.

The staff questioned the commenter on why a revised PRA is not necessary if a program uses PRA perspectives for determining adequate aging management. The commenter stated that when a PRA is used, a summary is provided to outline the relative PRA analysis.

During the afternoon session, no new comments were received.

6. Requiring review of Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50 requirements

The staff presented the current requirements for review of 10 CFR Part 50 requirements for license renewal and the basis for the requirements. The staff then opened up the meeting for comments on if the requirement is appropriate for subsequent renewal.

During the morning session, the staff received comments that supported not requiring 10 CFR Part 50 requirements, such as emergency plans and physical security plans, be submitted for review to support license renewal. One commenter noted that the programs are independent of license renewal and requirements are updated as needed.

# ATTENDEES OF NOVEMBER 1, 2012 MEETING TO RECEIVE COMMENTS ON SUBSEQUENT LICENSE RENEWAL

# **Morning Session**

Name	Organization
Bart Fu	U.S. Nuclear Regulatory Commission (NRC)
Jim Gavula	NRC
Duc Nguyen	NRC
Alice Erickson	NRC
Bo Pham	NRC
Bryce Lehman	NRC
Bill Rogers	NRC
Evelyn Gettys	NRC
Rob Kuntz	NRC
Sylvia Woods	NRC
Yoira Diaz	NRC
April Pulvirenti	NRC
Allen Hiser	NRC
Albert Wong	NRC
Stuart Sheldon	NRC
Amy Hull	NRC
Makuteswara Srinivasan	NRC
Gene Carpenter	NRC
Jeremy Susco	NRC
Kathleen Yhip	Nuclear Energy Institute (NEI)
James Thomas	Enercon Services, Inc.
Eric Blocher	STARS License Renewal
Richard Tilley	Electric Power Research Institute (EPRI)
Robert Kalinowski	American Electric Power (AEP)
Gary Young	Entergy
Jon Hornbuckle	Southern Nuclear
Dan Grundman	AREVA
Michael Semmler	Westinghouse
Albert Fulvio	Exelon Nuclear
John Snooks	AREVA
Sing Chu	AREVA
Ted Ivy	Entergy Nuclear
Christopher Mallner	Duke Energy
Randall Boyd	Arizona Public Service (APS)
Terry Herrmann	Structural Integrity Associates
Dan Boulton	AREVA
Jason Remer	NEI

# **Afternoon Session**

Name	Organization
Bart Fu	NRC
Bryce Lehman	NRC
Rob Kuntz	NRC
Evely Gettys	NRC
Sylvia Woods	NRC
Bill Rogers	NRC
Allen Hiser	NRC
Albert Wong	NRC
John Lubinski	NRC
Bennett Brady	NRC
Gene Carpenter	NRC
Jeremy Susco	NRC
Kathleen Yhip	Nuclear Energy Institute (NEI)
Jason Remer	NEI
James Thomas	Enercon Services, Inc.
Angela Krainik	APS/Palo Verde Nuclear Generating Station
Gary Young	Entergy
Jon Hornbuckle	Southern Nuclear
Albert Fulvio	Exelon Nuclear
Lori Hekking	Duke Energy Program Engineering
Ted Ivy	Entergy Nuclear
Jennifer Correa	Structural Integrity Associates

# ATENDEES OF NOVEMBER 13, 2012 MEETING TO RECEIVE COMMENTS ON SUBSEQUENT LICENSE RENEWAL

# **Morning Session**

Name	Organization
Albert Wong	U.S. Nuclear Regulatory Commission (NRC)
Evelyn Gettys	NRC
Bennett Brady	NRC
April Pulvirenti	NRC
Melanie Wong	NRC
Bill Rogers	NRC
Jeffrey Rikhoff	NRC
Emily Larson	NRC
Nancy Martinez	NRC
Sylvia Woods	NRC
David Wrona	NRC
Elaine Keegan	NRC
Bill Rautzen	NRC
Yoira Diaz	NRC
Robert Kuntz	NRC
Melanie Galloway	NRC
Nnaerika Okonkwo	NRC
Gene Carpenter	NRC
Jason Remer	Nuclear Energy Institute (NEI)
Rick Buckley	Entergy Nuclear
Gary Young	Entergy
Jerry Riggs	enercon
Terry Hurrmann	Structural Integrity Associates
Albert Fulvio	Exelon Nuclear
Kathleen Yhip	NEI
Jim Thomas	Enercon Services, Inc.
Nancy Ranek	NEI
Randall Boyd	Arizona Public Service
Ray Kuyler	Morgan Lewis

# **Afternoon Session**

Name	Organization
Albert Wong	NRC
Bennett Brady	NRC
Melanie Wong	NRC
Jeffrey Rikhoff	NRC
Emily Larson	NRC
Nancy Martinez	NRC
Sylvia Woods	NRC

# Afternoon Session cont.

Name	Organization
Elaine Keegan	NRC
Bill Rautzen	NRC
Yoira Diaz	NRC
Robert Kuntz	NRC
John Lubinski	NRC
Kim Green	NRC
Emmanuel Sayoc	NRC
David Drucker	NRC
Carmen Fells	NRC
Jason Remer	NEI
Rick Buckley	Entergy Nuclear
Gary Young	Entergy
Gary Young	Entergy
Richard Meshell	Enercon Services

# ATTENDEES OF NOVEMBER 14, 2012 MEETING TO RECEIVE COMMENTS ON SUBSEQUENT LICENSE RENEWAL

# **Morning Session**

Name	Organization
Andrew Prinaris	U.S. Nuclear Regulatory Commission (NRC)
Michael Marshall	NRC
Nnaerika Okonkwo	NRC
Amy Hull	NRC
Gene Carpenter	NRC
Duc Nguyen	NRC
Angela Buford	NRC
Makuteswara Srinivasan	NRC
Rob Kuntz	NRC
Bill Rautzen	NRC
Bennett Brady	NRC
Evelyn Gettys	NRC
Ata Ista	NRC
Duc Nguyen	NRC
Yoira Diaz	NRC
Bill Rogers	NRC
April Pulvirenti	NRC
Cliff Doutt	NRC
Kim Green	NRC
Albert Wong	NRC
Allen Hiser	NRC
Seung Min	NRC
Roger Kalikian	NRC
James Medoff	NRC
Rachel Voucher	ASN
Randal Boyd	Arizona Public Service
Nah-yoon Shin	MIT
Partha Ghosal	TVA
Gary Young	Entergy
Terry Herrmann	Structural Integrity Associates
Albert Fulvio	Exelon Nuclear
Angie Krainik	APS/PVNGS
Richard Meshell	Enercon Services
Ken Brune	TVA
Eric Blocher	STARS License Renewal

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James Medoff	NRC
Bill Rogers	NRC
Evelyn Gettys	NRC
Jason Remer	NEI
Ken Brune	TVA
Nah-yoon Shin	MIT
Gary Young	Entergy
Elizabeth Poole	USEPA R5
Andrew Burmeister	
Ted Ivy	Entergy