

November 1, 2012 AM Meeting

Speaker	Time	Topic: Timing of when an applicant is permitted to submit an application for renewed license.
Al Fulvio, Exelon	10:23:00	<p>There needs to be adequate time for energy planners to evaluate alternatives for replacement energy if needed. The 20 year term allows this sufficient time. Current regulations also require licensees to submit decommissioning plans on or about 5 years prior to the expiration of the operating license. If the renewal window were 10 years for example, the effective submittal and review time would only be 5 years until a decommissioning decision needs to be acted upon by the utility. This small window is inadequate for planning and likely result in unnecessary plant shut-downs due to the uncertainty, therefore Exelon's comment is yes to the question to keep 20 year window for submittal.</p>
Jason Remer, NEI	11:59:00	<p>The way we have right now is adequate - several reasons as far as the operation, most of the programs for aging management are based on programs that are already existing in most nuclear plants. Therefore, you do have at least 40 years of experience in running these programs even though it could be that you just started your subsequent renewal period or extended operating period, you do have at least 4 years of that experience to begin the SLR. Major consideration for seeking SLR 20 years in advance of the expiration date is it takes about 10 years to design, license. and construct major new generating facilities and long lead times required by energy planning decision makers. Although the NRC review of an SLR application is expected to take approximately 2 years, some reviews for SLR have taken more than 6 years. Given there time frames, NRC regulation provide prudent allowance of up to 20 years prior to license expiration. Since licensees must wait until after 40 years of operation to seek SLR and the majority of aging management activities are comprised of existing activities during the 40 year period, the adequacy of aging management activities will have been thoroughly demonstrated and site specific environmental issues will be well understood by the time an SLR application can be submitted to NRC. As far as decommissioning plans, you need at least 5 years prior to license expiration to notify NRC of you intent to decommission. So these times get really compressed given a 20 year time frame you have more room for the decision makers to understand how to go about that process.</p>

Allen Hiser, NRC	14:47:00	<p>Since there are some aging management plans (AMPs) that are only implemented for license renewal, that would mean that an application could be submitted in essence before the AMP is effectively implemented. How would an applicant be able to demonstrate effectiveness of that AMP that clearly is important for 40-60 would also be critical for 60-80 without having a sufficient time period to implement the AMP.</p>
Jason Remer, NEI	16:04:00	<p>Response to Heiser: As you mentioned most of the programs are existing programs and have operated for 40 years at the plant before they would apply for SLR. Given that there are few additional programs that are implemented the license process and safety oversight process is such that all of those programs are monitored continuously by the NRC. We don't review the plant 1 time every 10 years and then let them go off and do their own thing. We have a continuous credence, you have a continuous presence at the site. You also have safety metrics that you evaluate and so that each and every program, even though you are technically right that they maybe would just be started, they originate from good safety practices and maintaining of equipment which is required under 10 CFR 50 Appendix B.</p>
Bennet Brady, NRC	17:18:00	<p>How would NRC determine the effectiveness of these programs just being implemented at the time the application is being submitted.</p>
Gary Young, Entergy	18:47:00	<p>To add to the discussion we just had, on the programs that are implemented right at the time that the plant is 40 years old and which is the same time the applicant can submit their SLR, all those programs, of course the majority of the programs, are programs that have been in place for the first 40 years of operation. The few remaining programs that were new or added are based on the first 40 years of operation to there is considerable operating experience with the techniques and methods that are implemented for those new programs. And, in addition as mentioned earlier, our requirement on all aging management programs, whether they're existing or new, is that we continue to monitor the effectiveness of the program through our operating experience program and our corrective action program, so that would continue on for whatever the term of the license would be and the term of the aging management program. So I think there would be plenty of information to support the review of the application based on the operating experience and based on lessons learned and then that process would continue which is already required by the current license.</p>

Rothrn (?) USNRC	20:37:00	how would you handle handle lack of information or insufficient information for staff to consider
Albert Wong, NRC	21:44:00	question - not seeking a response
Jason Remer, NEI	23:30:00	In regards to reviewing the SLR application, it's a very extensive process. It takes a lot of manpower, a lot of effort on the license renewal staff's part. With a shorter operating period, say 10 years, what would be the affect on your manpower be to review those applications if they happened every 10 years versus every 20 years. Given that the main focus, your main focus, would be on safety, operating safety of the nuclear facilities, I would wonder would that have a negative impact of safety because of the churn required for all the processing of the paperwork. (He was told that this was the next question.)
		Topic: For how long a renewal should be granted.
Al Fulvio, Exelon	30:05:00	Our response to the question is yes. The current rule allows for a 20-yr extension of the period of extended operation (PEO). This time frame is appropriate to allow adequate planning and budgeting to support plant operation. The 20-yr terms necessary to economically justify the expenditures to replace or to refurbish large components such as turbines, generators, transformers, or steam generators that are required for the additional operation period. For these large components, a 10-yr term is inadequate to make the investment justification. There is no need to make it shorter because the aging management programs in place insure that the intended functions are maintained further the PEO. If inadequacies are fond the corrective action process will correct them. Additionally, our operating experience programs insure that significant conditions are communicated across the industry to allow each plant to evaluate for their own particular situation. Plants applying for SLR have a minimum of 40 years of operating experience and informs all the aging management programs. The current licensing basis is maintained throughout the PEO, period of extended operation, and the regulatory framework is adjusted as necessary when new safety concerns are identified. The NRC oversight process continues in the

		<p>period of extended operation to insure that safety concerns are addressed by the utilities.</p>
<p>Gary Young, Entergy</p>	<p>32:25:00</p>	<p>Additional comment on that is the 20-yr term of the license is really not a guaranty that the plant will continue to operate. There's a number of license conditions and requirements that must be met just as the requirements are required to be met for 40 years or 60 years. The same should apply for 80 years of operation. So getting a license for 20 additional years, you still have to meet all the requirements for safe operation and meeting environmental requirements, including technical specifications and any state regulatory requirements such as associated with water permits and so on. So getting the 20-yr term is no guarantee of continued operation which has been demonstrated by some recent announcements of plant shutdowns even though they have a license to continue to operate for many more years.</p>
<p>Jason Remer, NEI</p>	<p>33:40:00</p>	<p>First of all, NRC regulations provide for SLR term of 20 years based on factors such as legal limitations of the Atomic Energy Act and the need to provide supply sufficient time to plan for replacement generation facilities if the SLR is unsuccessful. The second response would be based on the conditions and terms of the LSR, the 20-yr renewed license term is appropriate, insures safety is maintained as a condition for continued operation, and does not unnecessarily distract the NRC from the important function of continuous oversight and inspection of all operating reactors. Third piece of my response is those who suggested that an SLR term of 10 years based on IAEA guidelines for performing periodic safety review every 10 years for some European and Asian nuclear plants. In 2011 the NRC documented an evaluation of the periodic safety review (PSR) process compared to the U.S. practices. The result was that the established NRC regulations and practices fully addressed the elements of a PSR on a continuing basis rather than 10 year intervals. The NRC did not adopt the PSR approach in part because the NRC regulatory programs, including the onsite resident inspector program, generic issue identification, operating</p>

		experience, systematic evaluation process afford adequate protection to the public. In fact the NRC programs of continuous oversight and evaluation of the current licensing basis result in a more comprehensive safety review that the regulatory program in most countries that utilize the PSR process.
		Topic: What exemptions that have been granted should be considered for renewal.
Al Fulvio, Exelon	39:57:00	The current rule requires that any exemptions be addressed and evaluated in the LRA. This will continue in the SLR or subsequent license renewal applications. Our experience with this in the present license renewal reviews have been very good. Each exemption is evaluated on its own merits and then disposition reviewed and approved by NRC. There is no reason to change this part of the rule at this time.
Jason Remer, NEI	40:38:00	10 CFR 54.21(c)(2) requires that plant specific exemption granted by the NRC and in affect that are based on time-limiting aging analysis shall be evaluated and justified for continuation as part of an SLR application. This regulatory requirement properly addresses the need to review of relevant exemptions that will be carried forward into the period of extended operation for SLR. Second part of my answer - For plant specific exemptions the NRC insures adequacy and appropriateness in accordance with 10 CFR 50 - any time during the term of operating license the NRC can and does modify previously granted exemptions, when needed, to address new or emerging safety issues. This continuous oversight and evolution of the current licensing basis insures safe continued operation for all phases of operation independent of SLR.
		Topic: What SSCs are within scope of license renewal as it relates to SLR

<p>Al Fulvio, Exelon</p>	<p>44:54:00</p>	<p>The scope of subsequent licensing applications should be exactly the same as it is now. The scoping criteria in the rule has been successfully applied to all of the licensing renewal applications that have been approved by the NRC for 20 additional years of operation. The requirements of the rule as a whole have been proven to be appropriate and effective to establish successful aging management programs for the periods of extended operation. Active components are adequately covered by the maintenance rule which is also in place during the period of extended operation as is all the current licensing basis requirements. Equipment associated with the Fukushima responses if it does not meet the scoping criteria of the current rule, is not required to be age managed to insure that intended functions are maintained in the period of extended operation.</p>
<p>Randall Boyd, Arizona Public Service</p>	<p>46:19:00</p>	<p>Yes, the current scope of license renewal is appropriate for subsequent license renewal. The scope of subsequent licensing renewal is addressed in 10 CFR 54.4 a and is consistent with the first license renewal review which includes all safety related structures, systems, and components (SSCs) as well as non safety related SSCs that could prevent satisfactory accomplishment of a safety function. In addition, SSCs relied on in safety analysis or plant evaluation to perform a function that demonstrates compliance with regulations for fire protection, environmental qualification, pressurized thermal shock anticipated transients without scram (ATWAS), and station black/white are included. Second comment - Although all safety related SSCs are in scope of subsequent license renewal, the aging management review for subsequent license review are limited to passive; they perform an intended function without moving parts, without a change in configuration and long lived. Those that are not subject to a replacement based on a qualified life or specified time period. SSCs in accordance with 10 CFR 54.21(a).</p>
<p>Jason Remer, NEI</p>	<p>47:49:00</p>	<p>I have a couple ore comments on that - I believe the scope is well managed. Aging management of active structures, systems, and components (SSCs) is addressed by the maintenance rule 10 CFR 50.65. In the success of that regulation has been demonstrated by licensing programs to continuously monitor reliability and availability of SSCs beginning in 1996. Therefore, change to the 10 CFR 54 to include aging management reviews of active SSCs for SLR would be an unwarranted and unnecessary duplication of regulatory activities already addressed in 10 CFR 50.65. The second part of my answer - Someone suggested that the entire current licensing basis should be included in the scope of SLRs similar to the scope suggested in the IAEA guidelines for performing a periodic safety review every 10yrs. In 2011, NRC documented an</p>

		evaluation of the PSR process - and I will repeat what I said before, basically you came to understand that our existing regulatory process we use in this country is superior to the periodic safety review and that's what you're staying with and we agree that that's the appropriate process. Third part of my answer - Someone suggested at the equipment added in response to the Fukushima event to address the beyond design basis events should be subject to an SLR review. At this time, the regulatory changes to address beyond design basis events are being developed. These regulatory changes will apply to all licensees, whether they seek SLR or not. Equipment added in response to the Fukushima event that meets the safety significance threshold defined in the scoping criteria of the license renewal rule will be evaluated for SLR.
		Additional questions
Al Fulvio, Exelon	51:15:00	Future meeting have same format with designated topics and will the topics be available prior to meeting?
Bosin, NRC	52:11:00	Follow up to Remer comment - lic renewal expected to take ~2 years - how was the 2yr time frame arrived at?
Rob Kuntz, NRC	52:50:00	Responded to above question - that it is the staff goal of ~22 months review time. Remer referred to lengthy reviews that involved contentions from stakeholders.

November 1, 2012 PM Meeting

Speaker	Time	Topic: Timing of when an application can be filed.
Jason Remer, NEI	9:08:00	We provided comments at the morning session at 9:00 and we would still agree with those same comments.

Jon Hornbuckle, Southern Nuclear	9:35:00	My comment is in regards to a question that was brought up on this area this morning concerning how can we show the programs that are new for the current renewal term and don't get implemented until the period of extended operation or shortly before that are adequate to manage aging for the subsequent license renewal term. The answer to that is that adequacy for such programs is shown that same way it is for current license renewal when new or enhanced programs are proposed. When an SLR application is submitted at year 40 or later and the utility does not already have much, if any, operating experience for that new program, the program description provides a basis for saying the program as described is expected to be adequate. Then there will be an IP71003 inspection prior to the new period of extended operation to demonstrate the adequacy of that program and at that time the program will have been in effect for 18 to 20 years, which should adequately allow the NRC to determine that that program is doing what it's supposed to do.
		Topic: How long a subsequent renewal period should be granted.
Jason Remer, NEI	16:02:00	We commented this morning and we'd like to note our same comments.
Bill Rogers, NRC	16:17:00	Referred to AM meeting - insure math is done for the 20-year license and the justification for that - there was roughly 5 years for preparation of the application and then there was 5ears for decommissioning and then there was also, separately you mentioned, 10 years for designing and construction of a replacement plan if that option wasn't available, and the 10 years for designing and construction; that does not overlap the decommissioning. Those two are not related.
Jason Remer, NEI	17:15:00	Right, correct. We didn't try to make an equation out of it. But the idea that you would need some time to decide what you wanted to do, then if you decided, then you would need 10 years to actually implement those plans. So there's just a lot of planning that has to go into deciding if you need an alternative energy source and it takes a long time to put these in place. And just to address another point that someone made - the consideration wouldn't be just a natural gas plant. There would be many other options that would take a long time to implement as well.
		Topic: What exemptions that have been granted to an applicant should be considered for renewals?

Jason Remer, NEI	22:11:00	We made comments this morning and we'd like them noted for this afternoon.
		Topic: What systems, structures, and components are within the scope of license renewal?
Jason Remer, NEI	25:00:00	I'd like to note that I think this is a good approach that you have laid out and we fully support that. And, we made comments this morning as well.
Bill Rogers, NRC	25:15:00	Follow up to your (Remer) statement this morning about plant modifications were an area you thought to be reconsidered in a future application. How are the plant modifications characterized since that information is readily available.
Jason Remer, NEI	25:48:00	Certainly if you made a mod that was a safety related mod or you added equipment to meet some safety requirement, then if it fell in the scope it would be, of course, in the scope. But all the plant mods are readily available to pull and look at from this period to that for every utility and is doable with the current systems we have.
Bill Rogers, NRC	26:15:00	Ok, the second question would be for the items that were not safety related.
Jason Remer, NEI	26:24:00	Everything is very tightly controlled in regards to documentation at our plants so that would be easy to find as well.
Al Fulvio, Exelon	27:03:00	Problems with dialing in and losing audio - but wanted to add onto what Jason said - The modifications that we have are part of our configuration control programs and requirements that are driven by all the Part 50 requirements and the Appendix B of Part 50. So as Jason stated, we all are required to keep a good configuration control of the plant no matter what the components are and certainly when we did the subsequent license renewal we would be identifying those that are in scope with the same scoping criteria that we used for the initial license renewal.
		Additional Comments
Albert Wong, NRC	29:11:00	Wanted to clarify that Additional safety topics was the topic to be discussed on Nov 14.

November 13, 2012 AM Meeting

Speaker	Time	Topic: Consideration of severe accident mitigation alternatives (SAMAs)
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Gene Carpenter	9:40:00	Accidentally entered queue - no comment
Kathleen Yhip, NEI	9:54:00	<p>In general the GEIS found that impacts of severe accidents are of small significance for all plants due to the measures that are put in place by licensees. SAMA is currently addressed as a category 2, i.e., site specific issue, as part of the license application. Because that reflects the plants have had different levels of analysis performed during their initial licensed period. Industry believes that the impacts of severe accidents are best considered as part of the on-going nuclear safety issue rather than as an issue unique to extended operation under license renewal.</p>
Nancy Ranek (Sr. Environmental Lead for License Renewal at Excelon Generation) speaking on behalf of NEI	11:24:00	<p>Each plant seeking subsequent license renewal will have already provided the NRC with extensive documentation about consideration given to SAMAs and the implementation of SAMAs during the initial licensing period and at the time of subsequent license renewal during the renewed license period. Another SAMA analysis at the point of subsequent license renewal would be unlikely to reveal any major cost beneficial plant modifications needed at that time. Numerous studies of ways to mitigate severe accidents are conducted over the life of each nuclear plant that may seek subsequent license renewal. These include analyses as part of industry programs such as Containment Performance Improvement (CPI), the Accident Management (AM) and the Individual Plant Examination (IPE), as well as the Individual Plant Examination of Externally Initiated Events (IPEEE). NEI and its members encourage the NRC to retain and apply the existing regulatory exemptions in 10 CFR 51.53 to plants seeking subsequent license renewal for which severe accident mitigation alternative analyses have been completed as part of the initial license renewal need for reviews or in the case of Limerick, Watts Bar and Comanche Peak, as part of initial licensing. The impacts of severe accidents are most appropriately considered in terms of ongoing nuclear safety rather than extended operation under license renewal. For Example, nuclear plants seeking subsequent license renewal will have implemented the severe accident mitigation measurements mandated by NRC in response to the 2011 Great East Japan Earthquake. In summary, every licensee performs multiple studies and implements mitigating strategies throughout the life of the plant and provides documentation to that effect to the NRC during plant operation and as part of license renewal application of operation for 40 to 60yrs. Given the requirement to</p>

		perform SAMA at earlier milestones in a plant's operation, the NRC should not require licensees to explicitly address SAMAs as part of the subsequent license renewal process or continue to apply the existing regulatory exemption in 10 CFR 51.53.
Rick Buckley, Entergy	15:26:00	Just want to reaffirm what my other two colleagues said that performing SAMA analysis during subsequent license renewal is really not necessary. However, I do want to point out is that any new information of severe accident mitigation alternatives could be addressed during subsequent licensing since that structure is available for licensee to do that.
		Topic: Mandating reduction of environmental impacts.
Kathleen Yhip, NEI	19:03:00	In direct response to the NRC's question about whether or not limits should be mandated if the NRC notes NEPA is an act that direct agencies to consider the environmental impacts of the proposed discretionary action. It does not however mandate action to reduce environmental impacts and so we would encourage the NRC to continue with that perspective. The NRC has also noted that nuclear plants are regulated not only by the agency itself, but by a host of other agencies, many of whom are responsible for granting permits or approvals for plant operation, including the continued operation through all the license renewal period that are approved by the NRC. Integral to those actions, each agency performs their own environmental review and inserts conditions or clauses requiring the agency to take actions necessary to protect the environment and public

		<p>health. The SLR process should continue to rely on the expertise and oversight of those agencies and should not attempt to mandate actions in an unnecessary duplication of those agencies' efforts.</p>
		<p>Topic: Should terrorist threats be considered as part of the environmental review</p>
<p>Jason Remer, NEI</p>	<p>22:55:00</p>	<p>Regarding terrorist threats security, including terrorist threats, is part of the ongoing operation of a nuclear generating facility in their license regardless of whether the plant is operating under their initial license or renewed license or second renewal of the license. As a proposed revision for the GEIS states, security issues, such as safeguards planning, are not tied to the license renewal action but are considered to be issues that need to be dealt with constantly as part of the current and renewed operating license. Security issues are periodically reviewed and updated for every operating plant. These reviews continue throughout the period of the operating license, whether the original or renewed license. If issues related to security are discovered at a nuclear plant, they are addressed immediately and any necessary changes are reviewed and incorporated under the operating license. As such, decision and recommendations concerning safeguards and security at nuclear power plants are ongoing and outside the regulatory scope of GEIS. Secondly, the NRC long-standing view is that NEPA does not require the NRC to consider the environmental consequences of hypothetical terrorist attacks on NRC licensed facilities. NEPA requires that there be a reasonably close causal relationship between the federal agency action and the environmental consequences. The NRC renewal of a nuclear power plant license would not cause a terrorist attack. A terrorist attack would be caused by the terrorists themselves. Thus the renewal of a nuclear power plant license would not be proximate cause of a terrorist attack on a facility. (8/8/2008 & 8/8/2008, the Attorney General of the Commonwealth of Massachusetts, the Attorney General of California in Denial of Petitions for Rule Making.) Finally, any potential inverse impacts resulting from plant security</p>

		and design basis threats have been and will continue to be appropriately addressed by multiple layers of defense rather than under NEPA environmental impact.
Kathleen Yhip, NEI	25:26:00	Nothing to add to what Jason just said.
Jim Thomas, Enercon Services	25:40:00	I would add that terrorist acts, while they are considered unlikely to succeed, could initiate a severe accident potentially. The consequences of a severe accident, regardless of initiating event, are already analyzed by licensees on an ongoing basis as has been previously indicated. These analyses evaluate the dose consequences due to radiological release from a severe accident scenario and are used to develop and implement measures to protect public health and safety through a defense and depth philosophy that has been adopted by the NRC. In summary, the NRC takes actions necessary to enhance protection of public health and environment. This applies to health, safety, common defense and security, and regardless of whether the plant is being operated under the initial license or renewed license or subsequently renewed license. These actions include the orders on additional security measures following the 9/11/2001 event and subsequent changes to 10 CFR Part 73.
		Topic: How population demographics in plant vicinities should be addressed.

Jason Remer, NEI	29:42:00	Existing regulations require consideration of population demographics near the nuclear generating facility prior to and during plant operation, including extended operation. Environmental assessment for license renewal includes evaluating whether the continued operation of the plant has impacts in terms of environment justice and socioeconomics. Per NRR Office of Instruction LIC 203, the census plot group is used as the recommended geographic area for determining the location of minority and low income populations. Census plot group contains information on income and socioeconomic data that is not collected from the smaller census block. In summary, the environmental reviews performed for license renewal already address potential impacts based on surrounding communities. Subsequent renewal activities should continue to utilize the existing process that's yielded an assessment of the overall impacts of continued operation on the populations living near their facilities and then provide the NRC with the information necessary to reach a reasonable conclusion.
Kathleen Yhip, NEI	31:15:00	No comment
		Additional comments
Kathleen Yhip, NEI	32:26:00	Just an overall comment - the license renewal process has proven to be so well reasoned and affective in assuring the potential environmental impacts of continued operation of a nuclear generating facility evaluated in a consistent and transparent manner. We as an industry and the regulators have extensive experience in the process and we have seen it work successfully in terms of the license renewal. We certainly need to maintain consistent regulatory requirements going on into the future and this process that exists today provides the regulatory stability that is necessary. But, it is my no means a stagnant process. It's a process that continues to expand to address emergent situations and to incorporate lessons learned. As you're certainly aware, under 10 CFR Part 51, the regulations technical basis document and the guidance are required to be updated every 10yrs, so we encourage the NRC to continue to use the existing process for future renewals.

Speaker	Time	Topic: Consideration of severe accident mitigation alternatives (SAMAs)
Kathleen Yhip, NEI	12:16:00	Just wanted to note that NEI provided comments this morning. Did you need us to repeat those or are those already part of the record?
Kuntz, NRC		Response: Lines are recoded so no need to repeat.
		Topic: Mandating reduction of environmental impacts.
		No Comments
		Topic: Should terrorist threats be considered as part of the environmental review
		No Comments
		Topic: How population demographics in plant vicinities should be addressed.
		No Comments
		No Additional comments

November 14, 2012 AM Meeting

Speaker	Time	Topic: Updating the current licensing basis (CLB)
Jason Remer, NEI	13:58:00	The current practice of continuously updating the current licensing basis as new and emerging issues arrive should be maintained as part of the operating license for all plants under 10 CFR Part 50. This process as been very effective in insuring ongoing plant safety. The current regulations for SLR under Part 54 are based on the adequacy of current processes for updating the licensing basis under Part 50 and any additional review for subsequent license renewal would be an unnecessary duplication with no additional benefit to ongoing plant safety. The NRC analysis of policy presented in NUREG 1362 are still valid and appropriate for subsequent license renewal.

Bill Rogers, NRC	15:09:00	Have your groups self identified during their research any plant modifications that would constitute a CLB change either for generic industry-wide mod or plant specific changes that you feel should be implemented during that extended period beyond 60yrs, and if so, is that something we should consider for our guidance? (They are being proactive and should NRC also be proactive in adopting in our guidance).
Jason Remer, NEI	16:30:00	I think that whole question points out the ruggedness and rigor of our current programs that we're operating under. Where when you find a safety issue, either the NRC or the industry identifies an issue, it's brought to light immediately and resolved at that point given to ground, discuss, and if things need to change then each plant takes responsibility for that issue as well as the overall industry within the existing framework of Appendix B programs. In other words, we don't see that the program would need to change. Events may happen and issues may come to light as we discover new things by age related degradation and as they are brought to light then the industry is very aggressive as you are, NRC, in driving those issues to ground and resolving them and restoring the licensing basis that we operate under today.
Rob Kunz, NRC	17:44:00	Your second point - to impose a change in CLB would be duplication of effort with no benefit. Aren't there numerous changes to regulations potentially that enhance safety? So how would imposing those for subsequent license renewal not be beneficial in terms of safety margin?
Jason Remer, NEI	18:09:00	It's due to the flexibility of the programs that we have that the regulations set out structures and frameworks for operating within and the current structures is more than adequate to deal with whatever issues that come up. So we wouldn't see that adding new regulations would in any way enhance what we're already doing. Given that, if an issue comes up we deal with it immediately, as you do. So additional regulations we wouldn't see that would add any safety benefit.
Bennett Brady, NRC	18:52:00	Similar to Bill's question - a lot of research is going on (containment, cables & RPC) and these are things that we would want to understand and predict failure long before they occur. Don't need to answer now, but shouldn't we be considering that if we need to make a change of these, to demand making change (replace cables) if there's indication that they may be approaching failure, before something happens?

Jason Remer, NEI	19:36:00	I fully agree with you. That as we find equipment that is degraded or has reached the end of its life, it has to be replaced or restored. That's always been a requirement of 10 CFR 50 Appendix B in regards to your quality program. So leaving equipment out there that has reached the end of its life is unacceptable and we don't do that. If equipment is found to be degraded or is degrading at a rate greater than we anticipated, then actions are taken to make sure that equipment is restored or replaced. I fully support what you're saying. We don't however believe we need additional regulations to do that. We're already doing that. There are indeed as that - we're performing as things, definitive items are understood better, hopefully it will go into our processes of predicting the life times of these various components and these will be incorporated back into their maintenance, operation, replacement and repair procedures process.
Albert Wong, NRC	20:37:00	Clarification question - has the industry, or NEI in this case, conducted any cost benefit analyses if any changes are made to current license renewal.
Jason Remer, NEI	21:31:00	I'm not aware that NEI has done a global review. Industry wide cost analyses are being done constantly on operating your facility and as long as the economics work, the facilities will keep operating. It's the same thing for subsequent license renewal. If regulations are added that make it less economically viable, then that will certainly be part of the equation for determining if we want to do subsequent renewal. The existing rule already covers license renewal and subsequent renewal, it doesn't put a limit on it, then we wouldn't have anything to do cost analyses against at this point.
Albert Wong, NRC	22:19:00	Your saying the cost benefit analyses has been done so far mainly looking at the plant rather than the whole industry going o subsequent license renewal and second period what would be the cost associated with that if make so many rule changes.
Jason Remer, NEI	22:38:00	Exactly, if additional rule changes come about for whatever reason that would certainly enter into the calculus of evaluating the economics of extending the operation.
Albert Wong, NRC	22:52:00	But so far none?
Jason Remer, NEI	22:54:00	Not that I'm aware of on a global stance.

Allen Hiser, NRC	22:56:00	When safety issues are resolved at times cost benefit analyses come into play and clearly the license term of the plant of the fleet comes into play in terms of determining whether an action should be implemented or should not be implemented. It's not clear that potential for renewed operating period so that, for example you would have an additional 20yr operating term is considered in that when looking at the costs and benefits. What would your thoughts be on taking a look at some of the regulatory changes that have not been back fit(?) on the plants on part based on cost benefit to reassess whether the equation would tip towards making changes based on an operating period that goes out to 80yrs? What would your thoughts on that be?
Jason Remer, NEI	24:09:00	I think what you're describing, if I understand it properly, really points to the rigor of the aging management programs that are in place right now for license renewal. That they're flexible enough to allow you to not only keep the equipment maintained, but provide a view into the future of limited life items by sampling, by inspection, and by repair. And so, without an exactly specific item to look at, certainly if you add additional regulations that don't improve safety then that's not an economic nor a safety improvement in regards to a nuclear operating facility. I think we'd have to look at specific items to make that calculus - to make that evaluation.
Allen Hiser, NRC	25:01:00	I guess one of the premises would be that there would be clear safety benefits so it's not, this would not be necessarily a safety neutral or no safety benefit situation. But did I hear you say that there may be value in going back and working at some of these ...
Jason Remer, NEI	25:20:00	I don't think you heard that. For the record, however I think the existing regulation, if you look at them, are not a static set of requirements. They are living programs that require you to look the equipment, system structures and components and take the necessary action to either monitor their lifetime, restore them, repair them, replace them at the end of their life to keep nuclear safety at an adequate level.
Allen Hiser, NRC	25:55:00	OK. I guess within a per diem of time of subsequent renewal only being considered with aging management, then that may be. I think I would agree with you, but if one were to extend, say the consideration of subsequent renewal, then to really look at overall plant safety then maybe some of these things could be re-looked at and one may draw different conclusions that whether an improvement should be made or not based on looking at an additional 20yr period.

Jason Remer, NEI	26:29:00	<p>One thing I would say is if the NRC is concerned about an area of safety, that the period of time that would be requested for subsequent renewal would not necessarily be a magic key to look at reviewing that. In other words, if you have a safety issue, you should look at it for all plants today or right now. To wait until you renew the license for an additional 20yrs seems artificial and forced. As you even stated in the Statement of Consideration, if there are safety issues, they need to be looked at for everybody and not wait until the renewal period starts or we apply or whatever. Let's look at it now. That's what I would say about those issues.</p>
Allen Hiser, NRC	27:12:00	<p>I think the one objective based thought I'd just like to put on the table is looking at the cost benefit sorts of analyses that may, at times, determine whether we choose to implement or not implement regulation changes back fits, things like that with an additional operating period of 20yrs. It may appear to be arbitrary to use that timeframe, but clearly that end up modifying the calculation of cost benefits and maybe would tip a decision from being a no, no back fit, no change to now it's cost beneficial. Maybe one of the things that we would need to pursue in some manner.</p>
Seung Min , NRC	28:29:00	<p>We already discussed there might be potential need that due to the extension of the operation period the previously dispositioned resolved safety issue might need to be revisited. I think that one of the core question that we would like to further discuss - for example, as a preclosure activity in 1991 the NRC issued NUREG CR 5382 to revisit so called generic issues program to potentially identify there is a need to revisit the resolution basis for the previous safety issues. My understanding is that, for example that specific NUREG identified potentially beyond design basis accidents in spent fuel pool or BWR water (?) redundancy issues might be a candidate to revisit in terms of the adequacy of the safety resolution. I believe that the previous discussion is focusing on; then we need to revisit some previously determined safety resolution considering that the extension of operation up to 80yrs of operation , because at the time cost benefit analyses, so called value impact analyses has been based on certain specific lag time which were basically 40yrs of operation. So I think that one of the key passions(?) we would like to discuss in relation to the topic.</p>

Jason Remer, NEI	30:44:00	Thanks for the question - at this point I'm not prepared to discuss at that level of detail. Of course we haven't had time to prepare for that and I would welcome any of my associates on line to jump in. But I would say two things. Number one, NRC at any point in time has the flexibility to look at safety issues, bring up safety issues that are a concern. And issues that are specifically tied to time limited aging analysis or particularly aging issues are candidates for re-evaluation. But general safety issues and things like that, we don't see that they're necessarily tied to any particular license period other than the fact that you have a period of time where you're requesting and seeking a new license extension. Time limiting aging analysis (TLAA) issues, absolutely. Other safety issues, they should be brought up at any point in time that there's a safety concern. And if there's any other comments from my associates on the phone.
Rob Kunz, NRC	32:05:00	Follow up to Wong and Heiser question. If the stance is that the safety issues are identified they're handled independent of license renewal and that the current rule is adequate for subsequent renewal; potentially any renewal period after that. Would that then mean that as we encounter safety issues and do do a cost benefit analysis, that we should assume an indefinite time period when we're analyzing if they're cost beneficial? Meaning, if we identify the stance is that it should be independent license renewal(?) take a look whenever (?) occurs then we should assume an indefinite time frame if the renewal rule is good enough for in indefinite time frame, It seems to be the position.
Jason Remer, NEI	32:53:00	As you know, recent news, one of our facilities will be shutting down this next year. Just an economic consideration. It already has a renewed license, but it will be shutting down. For economic reasons. So at any point in time for economics, say that it's not economical to operate, then the plant will cease to operate. If we had particular time limited aging analysis that specifies X number of years, then we have to relook at those. There's no question. But the structure of Part 50, Part 54, and Appendix B is such that it doesn't really say X number of years that is a structure that allows you to operate safely.
Rob Kunz, NRC		reply

Jason Remer, NEI	34:50:00	Well I would say, and I'll be able to comment specifically in the particular issue, is that issues that are attached in the analysis is done with certain time frames on them have to be looked at again, and ones that aren't, then NRC is always free anywhere any time to bring up a safety issue and evaluate. And then the plant is responsible for keeping that equipment maintained, to a high level of performance, and if it reaches the end of its life it will be replaced. Or the plant will cease to operate.
Gary Young, Entergy	36:00:00	I just want to reinforce what Jason was saying - the current regulations under Part 54 do require that any generic safety issue that's got a time element to it is evaluated as part of the license renewal process, so all of those discussions that were just held about whether or not we need to go back and look at any of the resolutions of safety issues that may have been based on some time frame, that's already included in the regulations and is already being done as part of each license renewal application.
Allen Hiser, NRC	36:45:00	
Gary Young, Entergy	37:00:00	Yes, GSIs that have time elements to them, yes.
Gary Young, Entergy	37:28:00	Well if they don't have a time element to them, then I would not assume that the cost benefit would have a time element to it.
Gary Young, Entergy	38:20:00	Yes, I agree, and if that were the case, then that would need to be relooked at. But I'm not aware of any cases like that. If you have a specific example then we could go back and look at it and evaluate it.
Al Fulvio, Exelon	39:10:00	I got a question for Rob, on your question, when you talk about the economic analyses, cost benefit, are you talking about the cost benefit done by the NRC or done by the utility.
Al Fulvio, Exelon	40:19:00	I was just going to comment, when we do our analyses, we take the license period when we're doing those evaluations for the individual plant, and that's one of the reasons why we do these license renewals so that we can have a smart economic evaluation performed based on what our license is capable of doing.

Kim Green, NRC	40:10:00	Topic change: whether or not the NRC should consider requiring that licensees meet newer plant standards rather than just going with whatever standards are part of their current licensing basis
Gary Young, Entergy	43:50:00	On that question, we can't take an exception based on our CLB to a AMP, the only way we can take an exception if we can show the exception is equivalent to the aging management that's in the GALL report. But regarding any updating of requirements for aging management based on standards that are published, that's a common practice. You know our water chemistry program, for example, is based on industry guidance that's periodically updated for doing the water chemistry aging management program. Kim, as you mentioned, the ISI program is updated periodically based on changes to the codes. And I think that's throughout the GALL report, our references to standards that do periodically get updated. And when the update is based on operating experience or a issue that needs to be addressed, then that would automatically be folded into each plan'ts AMP for whatever term they continue to operate. If there are cases where that's not done, I can't think of any right now, the ones I'm thinking of are things like inspection activites, water chemistry, ISI, that sort of thing, they all get updated based on new informtion and revisions or changes to standards.
Kim Green, NRC	45:50:	reply to Gary
Gary Young, Entergy	47:00:00	Again, I think the current practice is that, if we don't meet the GALL program we have to defend it. And if there's a later standard that's not being met, we have to show that the older standard is as good or equivalent as far as aging management. So as long as our focus is on ensuring that the aging management program is effective, and that any aging effects are being managed, then using older standards should continue to be allowed, simply because some of the newer standards have requirements in them not related to aging managment that could create difficulties for the plant that would not benefit the continued safe operation. So the flexibility of evaluating each change to the codes and standards, and based on whether or not the program would continue to be effective, is I think the right way to go.

		Topic: Mandating equipment replacement or refurbishment
Jason Remer, NEI	50:49:00	Equipment replacement and refurbishment activities are already an outcome of the existing aging management programs. Based on the results of the inspection testing and surveillance activities, companies are replacing or refurbishing equipment as needed to maintain safety functions. Aging management program effectiveness is continuously monitored by the licensee and by the onsite NRC inspectors to ensure decisions of replacement and refurbishment are made in a manner to ensure continued safe operation. Aging management programs provide the data needed to make well informed decisions of when or if component replacements or refurbishment is needed. This includes factoring in operating experience (OE) and lessons learned throughout the life of the plant to ensure safe continued operation.
Jason Remer, NEI	53:25:00	I assume you mean, when you talk about qualification, are you referring to environmental qualification? To look at beginning to apply for another license period, all your equipment would have to be evaluated. And you have evaluate your plan and say, if a component is going to coming to the end of its useful life, like a turbine or a steam generator, or whatever, any component, a motor, that calculus is done all the time. In fact, industry has developed tools to help us with that ongoing process. It's not just going to go on because of subsequent renewal but happens every day. Because you're sitting there operating a plant, and your feedwater pumps needs to be a major refurbishment, that's part of your calculus to continue to operate. So, the process you mentioned happens continuously, it's part of the culture. It doesn't just start when you're thinking about renewing your license. You've got this license period that you hope to be able to operate, but in some cases, like one of our plants, their not going to be able to make it because the economics don't work. But what you're say there is a cultural process, it goes on continuously.
		NRC question: Does communication between NRC and industry need to be enhanced?

Jason Remer, NEI	55:28:00	I was in Arkansas for almost 20 years, and every day I was there, there were two NRC inspectors there all the time. They went to every meeting that we had. And they went to the mod meeting. They were there. They know everything that is going on. And you could walk into any one of our sites and go to those meetings as well. So the data is fully open to you to evaluate. There is nothing done ns secret in that regard. It is very much a planning for the outages, and how long is this equipment going to last. So this is a process that is very much open to anyone that is pertinent to NRC.
		NRC Question: how far ahead of time do you know when equipment needs to be replaced/refurbished? (reactionary vs. predictive)
Jason Remer, NEI	56:56:00	Thanks, Rob, for the question. I think that goes back to the strength of the whole aging managment program. Not only were implemented through license renewal, but were always part of the plant's operation/maintenance/repair program according to 10 CFR 50 Appendix B. Utilities always have to make sure they know the status of their equipment, and are monitoring that equipment, and upgrading things to maintain saftey. You're using operational experience, you're using, you know again I was at ANL for almost 20 years, and we have predictive and preventive maintenance programs that look at all the features of the equipment to determine is this equipment operating safely, is it reaching the end of it's life. I'm taking oil samples, I'm doing vibration, I'm doing all kinds of tests on this equipment. It's very much an interactive process, so it's not just a 'oh, wow, we're surprised, now we've got to replace this major equipment'. No, these things are thought about years and years and years in advance and for every major piece of equipment, every plant would very much know of where their equipment is in that life continuum.
Bill Rogers, NRC	58:25:00	Do you see there being an industry-wide recommendation associated with replacement guidance

Jason Remer, NEI	1:00:00:00	<p>I'll start off by answering that by a personal story. So I've got two, three vehicles at home, I've got a 1987 Ford pickup, and I've got a brand new Ford Flex. So at some point in time I made the decision to replace the Suburban with the Flex because, why, because it was starting to break down more often. Why do I have my 1987 Ford pickup? Well, because I've replaced all the parts, new engine, new transmission, new brakes every couple years, so I'm monitoring the situation of that vehicle. In the same way, it would be hard for me to imagine anybody coming up with a set of guidelines that could just say, well 'this pump can last X number of years', period. We really don't operate equipment that way. We monitor it. We maintain it. We have operators out in the field all the time monitoring that equipment. We have maintenance personnel that are performing the recommended preventive and predictive maintenance - oil analysis, vibration - all the things you have to do, and at some point, where the repairs, many would economically say, 'hey, you're spending more on repairing this thing than we would if we bought a brand new system', then the decision is made to replace it. For instance, a lot of the feedwater control systems. You'll pretty much see that most are (inaudible). Well why is that? Because the old ones need a lot of repair, parts are not available, the new ones work better, so the decision was made to replace those. So again, it points back to the strength of our existing regulations, Part 50 Appendix B and 54, that you're able to monitor those equipments and replace them at the appropriate time for their particular use and application. I can't imagine anybody saying 'well, all cables last this long, period'. No. It's a function of their environment, their usage, their condition, their maintenance, etcetera, etcetera. So, the point you're getting to, I think, we're in extremely good shape in regards to monitoring. There's never been a better time that we know what's going on with our equipment in our site. And we're able to make those decisions based on data. So to try to figure out a way to say you know 'a pump of this size can only last 42 and a half years' would be hard for me to imagine how anybody could come up with that.</p>
		<p>what about excelleration of occurrence of failures</p>

Jason Remer, NEI	1:03:15	I would say if you identify such a thing, then NRC and the industry would need to take action immediately. And it wouldn't have anything to do with license renewal. It would have to do with we've identified a safety issue, or a period of performance issue, or a degradation mechanism that has been unknown previously, or maybe characterized properly. And it would have to have action taken on it based on the safety significance at that time. We're not going to wait until license renewal to take action on a safety issue. Nor would you. And so it doesn't really have anything to do with license renewal. If we find a mechanism through R&D then it's going to be brought to light and brought forward. You have a research division as well that participates on all these research panels already. And so, those things are being known across the industry and to regulators as well. I hope that answers your question.
Rob Kunz, NRC		
Jason Remer, NEI	01:04:50	It would seem like that should already be being done. If it's challenging the safety systems and not being repaired or replaced appropriately, then the NRC has other mechanisms to deal with the licensee not meeting their safety requirements. We welcome that because we want to operate these plants safely. If we have a component that is challenging our safety systems, and we are not following our programs, then we should do that better. But license renewal doesn't need to impose that. That's an operation consideration for any plant any time. You track those [corrective action] numbers and we track them, and we are all striving to do better every day.
		NRC: equipment replacement models and tools are being developed to predict equipment life...are these models going to be provided to NRC.
Jason Remer, NEI	01:06:50	I'm actually going to call my associate, Gene Carpenter, from the division of research to address that, because I believe in most cases you are already involved in those programs.

<p>Al Fulvio, Exelon</p>	<p>01:07:17</p>	<p>I just wanted to add on to what Jason was saying, just from a little bit different perspective on this whole topic. Equipment reliability is absolutely necessary for our plants to perform properly, to be safe, and to have profitability. We are always looking at equipment reliability from the stand point of generator output. When we have good generator output, we have good safety. We know that. We have Institute of Nuclear Power Operations (INPO) that's getting on us all the time about equipment reliability standards, so we're constantly increasing our standards on equipment reliability. And we have confidence that we will be reliable because we are continuously monitoring these plant components, systems, and structures. And we do monitor continuously whether we're in the first 40 years, the next 20 years, or the 20 years after that. You can see what we're doing. Like Jason pointed out, your NRC inspectors are with us all the time. They know what we're doing in that regard. And we do do it continuously. We don't wait for a license renewal application to start monitoring our equipment and taking care of it and planning for refurbishments. Just in summary, in this regard, the statements of consideration conclusions are still valid today.</p>
		<p>Wong, NRC, no industry standard of when to replace equipment</p>
<p>Jason Remer, NEI</p>	<p>01:10:60</p>	<p>It's not a clearing house, but it's much much more than that. With Institute of Nuclear Power Operations (INPO), with the equipment reliability, performance based systems that we have like Al mentioned, a safe plant is a high availability plant. A high availability plant is a safe plant. We spend untold thousands of man-hours training our people on equipment reliability, condition assessment, material supply, operation of equipment, so not only do we have a clearing house, but we have much more than that. We have user groups, say, for this kind of pump, these guys get together, maybe every few months, and talk about that pump, and that motor. So it's not like you got a little guide that says this thing's going to last 7 years and 3 months. You're evaluating this lifetime based on its environment, its maintenance history, its operational experience (OE), not only domestically but internationally. So to think there is some kind of little checklist guide would be way over simplistic. If a company says a thing can operate 15 years but we're seeing that this is not operating well at 10 years, we're not just going to look at that and say well it should operate for 15 though. We're going to say we're going to</p>

		fix this thing. Or we're going to replace it. So the condition monitoring systems and your maintenance control systems and your training on these kind of predictive technologies, gives you so much more insight in your equipment's condition.
Jason Remer, NEI	01:12:45	There's users groups with our vendors. You have the PWR owner's group, the BWR owner's group, and you have the myriad of NEI users groups, the INPO groups, the other groups that are out there, so I wouldn't say it'd be all public , but that literature would be available, and those groups would in some areas be indispensible to you.
Jason Remer, NEI	01:13:25	That would be a real, real primitive and fundamental thing that we would use if we didn't have anything else. What you have is active equipment history, you got users groups that are, from really, literally, all over the world for this kind of particular equipment, and they know everything there is to know about that particular type of component. It may not be in a book somewhere, but you'd have active users groups and active people involved in predicting the remaining life of those things, or extending the life, or saying hey, it's time to replace this thing. I hope that answers the question. There's a whole lot more than just a list somewhere. I would send your site inspector out there to talk to the guy that system's in charge of that device and say tell me about it. And I bet he would be able to get you all you needed. It's not in one book or one list somewhere, but it's available.
NRC		
Jason Remer, NEI	1:14:45	My point is there's a very active R&D process going on. And EPRI's working it, DOE's working it, NRC's working it. In some cases the research is intertwined. NRC in a lot of ways is part of a party on those R&D projects. And so all I was going to say for Gene is that I know he's been actively involved in that, wanted him to give the group the

		benefit of maybe just hearing how he is involved. I know you've been involved as well.

Speaker	Time	Topic: Mandating equipment replacement or refurbishment
Jason Remer	0:00:00	I agree that programs need to be managed and maintained and integrated into the living systems of the plant for safety.
Bennett Brady	0:00:28	That's what we are looking for.
Kim Green	0:01:02	I have a question regarding TLAA and 54.21 C1 iii. When licensees come in for renewal they say whether or not they can meet 60 yrs with their current analysis or whether they will project their current analysis to 60yrs (i, ii); or if they were planning to manage aging (iii). Under iii, as limits are approached, licensees are allowed to repair, replace, re-evaluate or re-analyze. Should NRC reconsider iii and say you're only allowed to repair or replace if you approach your limit as opposed to reanalyzing (assuming your analysis was the best estimate to begin with)?
Gary Young, Entergy	0:02:30	Regarding the comment about the TLAA and the option to reanalyze as part of the aging management program: the majority of the calculations done for TLAA are extremely conservative and that's why the reanalyze option is available. Eliminating the option to reanalyze would not be prudent for most of the TLAA aging management programs since they involve an extreme amount of conservatism and once you reach the point where the analysis is close to a best estimate and you're still exceeding your limits, then reanalysis is no longer an option. You can't analyze the issue away. You have to repair or replace.
Seung Min	0:04:04	TRLA analysis might not fully cover the potential needs for replacement of components. If components are identified to be potentially replaced within the subsequent period of extended operation,

		should the industry or NRC prepare for that activity, the [wrap?], so that the reliable [?] are adequately managed?
Gary Young, Entergy	0:05:24	That's what we do presently. Part of the aging management program is predicting intervals between inspections and surveillance such that we do not have a loss of safety functions between inspections. When we reach a point where a component needs to be replaced to insure continued safe operations, then that is planned in advance. That's part of our long-range planning.
Kim Green	0:06:27	To expand the discussion on TLAAs, when a licensee applies for a license renewal, the TLAAs that the staff evaluates are based on current analyses and as you approach the best estimate case or limit, the NRC is not privy to those re-analyses. We could look at them during inspections by the regions, but if we don't get to look at those during the period of extended operations, should those be submitted to the NRC for review?
Gary Young, Entergy	0:07:32	The analysis that we are talking about, for example, metal fatigue where we calculate the cumulative usage factors. Those calculations are done with NRC-approved methodologies and those calculations are always available for inspection or audit by the NRC. And they are inspected periodically as part of the regional inspection activities and the component design basis activities throughout the life of the plant. So the extra step of submitted them to the NRC is certainly an option, but they are all already available in our review of inspection activities, and are available for audit if the NRC decides to do a special audit.
		Topic: Identifying and implementing safety enhancements
Jason Remer, NEI	0:11:24	The current practice of continuous updating of the COB as new and emerging issues arise, ensures needs safety enhancements are implemented as part of the operating license for all plants under 10 CFR 50. This regulatory process has been very effective in insuring ongoing plant safety. The regulations for SLR in Part 54 are based on the adequacy of the current regulatory process for addressing needed safety

		enhancement under Part 50 and any additional review for SLR would be an unnecessary duplication with no additional benefit to ongoing plant safety.
Albert Wong	0:12:23	Why would the agency not have any need to impose [?? newer safety measures??] to enhance the overall safety of the plant?
Jason Remer, NEI	0:13:40	Your question mirrors our previous discussion on equipment replacement. I think you have to evaluate safety features of all the plants, not just plants that are going for license renewal. If the safety issue needs to be addressed, such as the recent events in Japan, you have to look at all the plants. Just because a particular plant comes up for license renewal, that doesn't make that issue any worse or any better; it just happens to be a time where we're asking for another license. So, if the safety issue comes up, it should be evaluated across the fleet to determine if there are adequate levels of safety. NRC determines on an ongoing basis if the plants are safe to operate continuously, and we maintain these plants on an ongoing basis.
Albert Wong	0:16:04	Isn't it true that this would be a good opportunity at year's ? to look at all the safety standards ?? that have not been previously looked at. If there's some issue that doesn't rise up to the fleet level, but is at the individual plant level, and hasn't been looked at vigorously in the past, isn't this a good opportunity to examine that particular issue and bring it up to the current standard?
Jason Remer, NEI	0:16:46	If that issue is important enough to impact the plant, it should be looked at, at that time. I think the safer path is to look at the issues as they come up, continuously monitor safety, and make changes when they are required, rather than waiting for an arbitrary license date.
?	0:17:57	As plants age, would you expect the safety margin that a plant operates at to diminish, as aging issues cause inoperability of the system to increase? If so, wouldn't it be beneficial to compensate for diminished safety margins and implement some safety

		enhancement to offset the potential decrease in safety margin?
Jason Remer, NEI	0:18:47	As equipment ages, you have a capability curve, and the point of operating safely is to monitor that equipment and repair or replace it when it gets close to that minimum level of safe operability. Why would you wait until a license renewal? It would be unacceptable to have our equipment operate at very minimum levels just to get by. The maintenance rule does this, the aging management program does this, it requires us to go out and inspect, evaluate, monitor, and to make an assessment of remaining useful life for that equipment.
?Rob Kuntz	0:19:42	So what you are saying is because of the oversight of aging management, you are not necessarily increasing the safety margin because you'll replace equipment before it becomes an issue.
Jason Remer, NEI	0:19:56	On the whole you are maintaining an adequate level of safety at all times.
Bennett Brady	0:20:08	In addition to aging taking away the safety margins, plants are also upgrading. That is also accelerated aging if you have greater flow and a decrease in the safety margin. Do utilities take these into consideration when they're planning how they upgrade an operation?
Gary Young, Entergy	0:21:21	As a clarification, the plants that operate for longer periods, do not have a decrease in safety margin. The aging management programs were put in place, as well as all the other programs for maintenance and surveillance activities, to insure that we maintain the safety margin that's in the licensing basis for the plant. So, if the plants go forward there is no decrease in safety margin. That's the purpose of the aging management programs to maintain. It's not good to imply that older plants have reduced safety margin to what they were originally designed for. And as the plants age, and as equipment reaches that point where it needs to be repaired or replaced, or if systems are no longer performing at the level of reliability and availability, then that's dealt with as part of the current regulations for the

		<p>maintenance rule and the aging management programs.</p>
Seung Min	0:22:41	<p>One of the impressions might be as a component approaches the reliable life, a specific level of aging management activities might be insufficient to manage the aging effects of the specific component. I'm curious whether generic guidance for aging management might still be working well, especially for certain components which are approaching the reliable life? If so, there might be a potential niche to identify "delta" ?? aging management. This discussion is also related to proactive assessment and preparation activities to manage reliable lives of components. Should NRC and industry do more proactive actions and plans in place to manage a higher level of degradation in a greater ?? ? Cost benefit analysis is an important element to consider because previously the resolution for certain generic safety issues were based on specific time periods such as 40 or 50 years of operation. However, we are potentially extending the life of the period of operation up to 80 years. Then, the cost benefit analysis is affected by the change in assumptions.</p>
		<p>Topic: Periodically assessing license renewal activities</p>
Gary Young, Entergy	0:26:48	<p>I'd like to comment on the earlier discussion on the reliability of equipment and whether we should be monitoring that and be more proactive. The maintenance rule already requires that we set reliability and availability goals for our safety systems and monitor those to insure that our existing maintenance practices and aging management activities maintain those levels of reliability and availability that are needed for safe plant operation. If there's any indication that we're not going to be able to do that or if a particular component or system is not performing as expected, we go</p>

		into the corrective action program and we do proactively address that. Those actions may include repair or replacement or other changes to our aging management and maintenance activities. The existing regulations cover this area quite well and it's subject to continuous oversight and monitoring by the NRC under the requirements of the maintenance rule.
Bennett Brady	0:28:34	When looking at license renewal and planning for new aging management programs, how effective have the previous aging management programs been? What are the lessons we can learn from how they operated? Should this be part of the application for licensees to report to us how effective the aging management programs have been? Should NRC do inspections with NRC inspectors or audits, or should industry report to us and then we verify the information? Should this be done periodically, like periodic safety reviews, and look at the effectiveness of the programs every 10 years?
Jason Remer, NEI	0:29:48	License renewal activities are continuously assessed by the licensee and by onsite NRC inspectors. Activities such as QA audit, self assessment, OE reviews, NRC inspections, and continuous process improvements, insure license activities are effective and efficient in maintaining safe plant operations. There is no need for changes to part 54 to address this topic since it is already addressed by establishing regulations applicable to all operating nuclear plants, not just those seeking SOR. To Bennett's point, our whole regulatory structure is a continuous process versus an every 10-year process. To impose a 10-year process on our continuous process wouldn't yield what we're seeking. And we certainly do self assessments.
Albert Wong	0:31:36	To follow up on Jason's comment and Bennett's question, there are some European countries who do the 10-year periodic assessment PSR. A certain European country has a regulatory structure which follows a lot of maintenance rules similar to what we do here. In addition, they also follow the 10-year process. Don't you think it would be a more desirable regulatory

		structure from the public's point of view, to have more safety? You don't have to restrict yourself to one set of rules; they're not mutually exclusive.
Albert Fulvio	0:33:40	In regard to Bennett's question about self assessment, we perform self assessments to ensure plant safety, equipment reliability, and to identify continuous areas of improvement. We will continue to do them with our aging management programs and also perform them every 5 years in the future. Self assessment includes whether the program is effective and whether the intended functions will be maintained during the period of operation.
Gary Young, Entergy	0:35:09	Regarding Bennett's comment and expanding on what Albert Fulvio said on the aging management program effectiveness and whether we should address that as part of subsequent license renewal-- the answer is yes. In the current requirements for submitting an application, one of the elements of any aging management program is to document the operating experience of that program and whether or not it has been effective. On periodic safety review and the 10-yr interval that IEA recommends, that was specifically addressed as part of the integrated regulatory review service mission to the U.S. in 2011. IEA did a review and evaluation for the NRC and made recommendations, including for the U.S. to consider using the periodic safety review in lieu of the current practices. A document generated by the NRC responding to that comment from IAEA concluded that the continuous oversight process that is part of the U.S. practice is as good or better than the European or SIEA practice of periodic review every 10 years. In addition, continuously looking at safety issues as they come up is as good or better than the practice of only looking at them every 10 years.

Duc Nguyen	0:37:57	<p>A follow-up question for Gary Young-- ?? does the assessment to determine the effectiveness for the AMP. The ?? plan commits to the GUL rev0, and currently the staff issued rev1 and rev2, so we have additional ?? For the subsequent license renewal and for those that follow the rev0, do you have to implement an additional aging management program? For example, for rev0, we do not require them to have the low voltage cable in the ?? and we don't require them to have the fuel holder? or the cable connection program. Some of the programs sum up the plan that have rev0. They may not implement additional programs.</p>
Gary Young	0:39:30	<p>Some of the earlier license renewal plans, the GALL rev0 and the pre-GALL plans, did not commit to some of the aging management programs that are in GALL rev2. For the aging management programs, for example burried piping, the burried Piping operating experience that came out subsequent to the early license renewal applications indicated a need for considerably more inspection and surveillance activities consisting of opportunistic inspections on a 10-year frequency than what were committed to by the first applicants. Those programs have been implemented for all of the plants in the U.S. as part of applying the operating experience element of the aging management programs which is part of existing part 50 requirements, as well as part of the credit that we take for license renewal for an aging management program if we continue to monitor operating experience and make changes as needed. I think any time there is a situation where there is an aging effect that may not have been identified, or there were new and expanded information based on operating experience, it would indicate a need for more inspection or more frequent inspection that is factored in as part of the current license and part of the requirements to maintain safe continued operations. I can't say all rev2 aging management programs have been implemented on all plants, but I can say that all plants have evaluated</p>

		operating experience that indicates a need for changing programs and if there is a safety issue or concern, that operating experience is incorporated and changes are made to those programs on a continuous basis.
		Topic: Requiring probabilistic risk assessments (PRAs)
Albert Fulvio	0:44:55	There is an industry standard, ASME/ANS RA-SA-2009, used by utilities to update their PRAs typically in a 4-5 yr time frame. There is also a reg guide 1.200 that addresses guidance for certain submittals that involve a PRA.
?	0:45:49	Al, given that there is a reg guide that describes the requirements for when you're using a probabilistic assessment for support of an amendment for example, how would that relate to license renewal if there are aging management programs that rely on probabilistic assessment?
Albert Fulvio	0:46:14	The statements of consideration are still valid today in that PRA is not used for license renewal, and we're not advocating that we do. We believe the statements of consideration are still valid. I was reacting to the statement that there is no industry standard, because there is.
?	0:46:42	I don't believe we were trying to say there was no standard. We were saying there is no requirement to provide a PRA update when applying for renewal. The statements of consideration say the PRA shouldn't be used for determining the scope of license renewal. But it does allow the provision for using risk assessment in aging management.
Albert Fulvio, Exelon	0:47:06	We don't do that. I understand it says that, but, we do not do that.
Kim Green, NRC	0:47:23	I think, although we're discussing this on the safety side of the issue, areas are used to support SAMA analyses. Do you have any

		opinion on whether or not an update should be required if it is determined later that SAMA analyses should be provided as part of subsequent license renewal?
Albert Fulvio, Exelon	0:48:02	I think the SAMA discussion yesterday certainly applies, I believe our position is you only need to do the SAMA once. Are you asking if a subsequent license renewal should require a subsequent SAMA analysis?
Kim Green	0:48:38	That would be predicated on if the Staff determined that a subsequent SAMA analysis was required for subsequent renewal. If we determine that you have to consider new and significant information, or that we require another SAMA analysis for subsequent renewal, what are your thoughts on us requiring an update to the PRA in terms of that SAMA analysis? I'm not saying we're going to go that route because we haven't gone through our full deliberations on that. But if it was determined by the Staff and made a requirement that SAMA analysis was required for subsequent renewal, what are your thoughts on the Staff requiring a PRA update for that purpose?
Albert Fulvio	0:49:36	My experience with this in terms of the NRC reviews for license renewal of SAMAs is that they do inquire about the PRA and when it was done, and how current it is. We typically keep our PRAs current to the plant configurations and analyses, and the PRA that's current supports the SAMA. So I don't see any real issue there, we already do it. I think the NRC expects it when they're doing their reviews.
Kim Green	0:50:23	The plant specifically provides a list of the major changes or updates to their PRAs since the time the Staff reviewed the last PRA that was submitted. That was the IPE and the IPEEE back in 1988 and 1990 time frame. So the Staff is able to see just a glimpse or summary of the update to the PRA with changes that had been made over time. This suggests why your CDF? has changed over time. But if the plants are going to come in, and SAMA analysis is required for subsequent license renewal, would there be any benefit to having all plants come up to a recent version of their

		PRA, and have that be required, so everybody is at a similar starting point?
Albert Fulvio, Exelon	0:52:02	We update our PRAs every 4-5 years, and when we know that we're doing a license renewal submittal we earmark that point in time for that plant to do a PRA update to support the SAMA analysis.
?	0:52:27	Don't the sample populations for some of the programs rely on risk ranking to determine what components are inspected?
Albert Fulvio, Exelon	0:52:49	Not in our applications for Exelon.
Jason Remer, NEI	0:52:55	The existing regulatory requirements for the use of PRAs are currently adequate.
Albert Wong	0:53:15	To follow up on Rob and Fulvio's comments on updating PRAs, and Gary Young's comments on PSR?-- Europe does an IEA PSR standard. Updating PRAs is part of the 14 safety factors. Given that Rob just told us that when the agency looked at the issue back in the early 90's, we didn't have a good PRA standard, and at the time the PRA technology wasn't mature enough to ?? better sense of telling us where the risks were at the time. But now we're 20 years later. I want to get the industry's thoughts on this since we now have better technology, a standard, and reg guide 1.200. Wouldn't it be beneficial for society to incorporate later technologies to make the plant safer? Also, to clarify something Gary said earlier, yes, NRC did prepare a white paper response to the IRS mission 2010. The general conclusion of that paper was the NRC's current approach was comparable to the safety results of the IRS, but it never said we were superior.

Gary Young, Entergy	0:56:39	<p>To clarify using PRAs in risk ranking, there is some use of that in our aging management programs. For example, for the in-service inspection program, some utilities use risk informed information to select the locations for doing the inspections. So, it's a better use of our resources to look in those places where either the risk or the probability having a concern with an aging effect is the focus of those inspections, rather than taking sample locations at random. Also in the Barry Piping inspection program, we used some risk ranking to identify those systems that have the highest risk and also are more susceptible to potential aging, and we focus on those areas. Again, this is a clarification that we do in fact use some of our PRA and risk informed methods in our aging management programs where appropriate. We do not use it in scoping in accordance with part 54 regulations. Regarding the question about PRAs and whether they should be required to be updated for subsequent renewal, the current requirements for PRAs address that. The maintenance rule was put into effect in 1996 and it's based on using our PRA models to evaluate system reliability and availability in accordance with the latest version of the model. We do periodically update the model to keep it current with plant configuration and with modifications to the plant. Part of the reason is that model is used in day to day operations as part of the maintenance rule requirements. I believe the regulations are already in place to ensure that the PRA models are up to date and current. If they are subsequently used for a license renewal, then it would be a model that's current and based on existing NRC regulations.</p> <p>Regarding the comment on making the plant safer as they continue to operate, that is certainly our intent, and that is the reason we use operating experience in our aging management programs and in all other activities at the plant. When new information becomes available that would make it possible to operate the plants even more safely, we take advantage of that and implement it as part of our ongoing</p>
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		corrective action program, and upgrading based on part 50 regulatory requirements. I agree that as the plants continue to operate, we should look for opportunities to operate safer, and I think we are doing that with the activities that are currently in place.
Rob Kuntz	1:00:10	Mr. Young, I want to follow up with a similar question such as I posed to Al Fulvio. My understanding is if you were coming in for a risk based amendment you would provide some PRA update to support it. You stated the Barry Piping program relies on some risk ranking determining how much to bury, how much to dig up, and where to look. If that's the case, what would the difference be for license renewal? if you are using risk based to determine adequate aging management, why wouldn't you provide PRA submittal in support of that?
Gary Young, Entergy	1:01:01	Buried piping does not use the PRA model, it uses risk informed information. The PRA model doesn't get down to that kind of detail of individual links of pipe. So there is a combination here of using PRA for the bigger picture activities of system reliability and availability that is in place, but when it gets down to a component level, then we use some of the techniques of risk informed, but we don't use the PRA model. It's too complex and not down to the level of detail of individual components.
Rob Kuntz	1:01:39	So would there be no examples in the aging management that would be that finely cut? For instance, you're saying ISI would be plant specific and risk informed potentially

		for the plant. If that's the case, would a PRA review for that be appropriate?
Gary Young, Entergy	1:02:06	Yes, if we credit the PRA, for example, in the risk informed ISI, it is reviewed as part of our ISI program submittals. It's also reviewed under the maintenance rule on a continuous basis, since that's the basis for setting goals for our system and plant performance that's required by the maintenance rule. So the PRA does get evaluated and reviewed by NRC on an ongoing basis, and it is updated in order to keep current with the requirements of programs like the maintenance rule program.
Rob Kuntz	1:02:44	Right, that's specific to the maintenance rule then. So, if it were specific to support of the license renewal review, why wouldn't you want to do a PRA review when you would do it in other licensing actions?
Gary Young, Entergy	1:03:09	If the PRA is credited in some license renewal aging management programs, or in the case of SAMA, if we have to redo the SAMA, it gets reviewed by the NRC as part of the application.
Rob Kuntz	1:03:26	Would you view that as a RAI question? If the ?? program was not supplied it would just be a matter of needing to supply the support of whatever the aging management program is?
Gary Young, Entergy	1:03:44	Again, I think we do supply a certain amount of information in the application, but we don't submit the entire PRA model as part of the application, just as we don't submit the entire aging management program documents. We provide a summary and general information that's sufficient to outline what is in the program. Then, it's subject to the audits and inspections that are part of the license renewal review, and are of course subject to RAI.
Seung Min	1:04:24	In a PRA analysis, Gary includes active components performance too. However, our current license renewal rule does not specifically address the aging effects on active components. In addition, aging degradation might have some effects on the ?? of specific components. Has the industry considered potential effects of aging on the

		reliability of components, which might be input to PRAs? We have been discussing current maintenance rule and regulations to reinforce or substitute the aging effect management. Is there any area the subsequent license renewal application might need to address regarding a portion of the maintenance rule activities as part of aging management review?
Gary Young, Entergy	1:06:06	The maintenance rule is the aging management program for active components, and sets the reliability and availability standards based on the PRA models for the plant to insure that the plants continue to operate within the requirements of the current licensing basis. Whenever there's an issue with equipment reliability or availability, it can be due to aging. If aging is determined to be the cause in reduction of reliability or availability, then it's addressed as part of the corrective action program which may involve changes to the aging management activities. That's currently the requirement of part 50 regulations. It's subject to continuous oversight and inspection, and the maintenance rule program itself is periodically assessed by the NRC as part of normal plant operations. I would not see a benefit to doing a redundant review of maintenance rule for license renewal or subsequent license renewal when it's already being very thoroughly reviewed and inspected as part of the current license, and has been since 1996.
		Topic: Requiring review of Title 10 of the Code of Federal Regulations (10 CFR) Part 50 requirements
Jason Remer, NEI	1:10:00	The programs for emergency preparedness and physical security apply to all operating nuclear plants and require specific levels of protection from each licensee regardless of license date. These requirements will continue to apply to facilities seeking SLR. NRC reviews emergency security plans throughout the life of the facility and assures adjustments are made when needed due to changing demographics or other site related factors. There is no need for an additional redundant review or SOR since these Part

		50 requirements are adequately addressing existing regulations.
Kathleen Yhip, NEI	1:10:55	The NRC updates requirements for both emergency planning and physical security on an as-needed basis. A case in point, the recent updates to the regulations in 50.47 that went out in November of last year. Also, the security orders that were issued and now regulations that follow the September 11th event.
Rob Kuntz, NRC	1:13:42	The topics today have all related to the staff's review of safety review for license renewal.

November 14, 2012 PM Meeting

Speaker	Time	Topic: Requirements for licensing basis
James Medoff, NRC	0:01:25	I looked at whether we need to change the 10 CFR Part 54 provision for identifying exemptions in the LRA?? The current requirement is that a license renewal applicant only need identify those exemptions that were granted under the exemption request acceptance provisions of 10 CFR 50.12 and were based on a time limit aging analysis. The concern was that if it was based on a time limit analysis, the basis for the exemption might change, based on a time dependent parameter. So, that was covered by the latest statement of consideration on license renewal rule 1995. An applicant shouldn't have to identify every exemption that was granted in its licensing basis, but we may want to extend the scope a little, because we have had some applicants where exemptions played into basis for aging management programs. There are also some exemptions that aren't based on TLAs, but are related to TLAs, that are incorporated into codes that would no longer be applicable. It would be important to identify those exemptions for the applications. For the first case, where it's related to taking exception on aging management activity, we're not telling the applicant to change its licensing basis for the exemption. If there's an aging effect for

		that component where the exemption is getting him out of aging management under part 10 CFR 54 21 A3, they would still be required to manage the aging effects and provide an alternative for aging management relative to what the exemption is getting them. The other case would be exemptions in the COB related to PT limits or based on ASME code cases. The basis in the code cases may be worked into the codes on subsequent revisions of the code additions. Those code additions would get endorsed into 10 CFR 50.55A, and then on the next 10-year interval updated for the plant. The next revision of the PT limits would be based on the code addition, not on the code case, and the exemption would no longer be needed.
		Topic: Mandating equipment replacement or refurbishment
		no comments
		Topic: Identifying and implementing safety enhancements
		no comments
		Topic: Periodically assessing license renewal activities
		no comments
		Topic: Requiring probabilistic risk assessments (PRAs)
		no comments
		Topic: Requiring review of Title 10 of the Code of Federal Regulations (10 CFR) Part 50 requirements
		no comments
		Open floor for any comments
Bill Rogers, NRC	0:11:34	As we consider what the application might look like, I don't know what format would be providing input. Some of the things we were talking about and are interested in are operating experience and amp effectiveness like Bennett discussed. From my point of view, the front end of the application should begin with the current method that people use. All applicants are not identical in their front end set up of the application, but there

		are general similarities. Do you have any thoughts on how to approach and document it, as in the form of reports and drawings that are needed? You might like us to consider formulating the structure of the application.
James Medoff	0:13:18	A lot of that would depend on what happens to the license renewal rule and if we change it, then the guidance documents including 95 10 would have to be updated to align to the rule change.
Bill Rogers	0:13:40	If you have a subsequent rule application, there will be a new licensing action. Typically in NRC we don't delta review for licensing action. We experienced that in 1990 during the advanced reactor ? With that in mind, in my opinion, it would not be a delta review. However, that wouldn't preclude having information packaged in a different way. Jim, do you agree with that?
James Medoff	0:14:28	I think all Bill is saying is you wouldn't see the application as being what's different since first renewal. It would still need to meet the requirements of the rule and demonstrate compliance, not through a delta what's changed since the first renewal, but rather the license ? application.
?	0:14:49	Highlighting things is different than presenting a delta. So, I don't think we would ask for a delta at all. We might ask for packaging and identification in ways it would make a review efficient and effective.
Bennett Brady	0:15:15	Yes, we're open to suggestions from industry for discussion on the format of the application.
?	0:15:28	And if we're near to the CLP that may affect aging, in addition to what you have ??
Jason Remer	0:15:41	I'm interested in any feedback on these public meetings, suggestions on future interactions with the staff, on work that the industry is doing, and on items for the staff to consider for subsequent license renewal. These webinars were a first attempt. There's certainly ways to improve our interaction. If anyone has suggestions, they can certainly send them to the website.

?	0:16:25	Along the lines of how the license renewal application is going to be packaged, I think we also need to know how communications supporting your research is going to be presented to the NRC. Are there going to be topical reports for the NRC to review? What is the time frame for the first special application?
Roger Kalikian	0:17:25	Typically we do acceptance when a new application is done for subsequent renewals. When we do our acceptance, should we include a performance of the plant? A high performing plant or a low performing plant, and call them 3 or 4 of the reactor oversight process. They're going to need resources to get out of, and license renewal requires resources 12, so we may end up starting our review and then maybe region will fill in. So, should we consider that?
Albert Fulvio	0:18:20	I want to comment on Bill's comment about the packaging of the subsequent license renewal license rule application. When we first started talking about this a couple years ago, one of our first activities was to think about, what does the next application look like? We had a couple ideas, but my recollection of what we ended up with is that we would just follow the current rule, and therefore, the package would be what you see today. What you seem to be suggesting is there may be certain ways of presenting the information in the application that would make it easier for the reviewers. One of our assumptions was that the NRC would not rely on the previous application or previous SER, but instead would do each application on its own merits totally. That may have been a wrong assumption on our part to make, but what would help is if there are some things that you are thinking of that would make it easier for the reviewer to come to their conclusions for the SER. We're certainly willing to entertain anything of that nature and we need to have some meetings on that in the future. Again, we just assumed that this was going to be several years down the road, that the reviewers would all be new, and that they wouldn't want to take credit for the previous SER.

Bill Rogers	0:20:30	<p>I might have mischaracterized a bit. As far as the information in the application, I think you're correct on that it would most likely be the same information with some additions. I'd like to speak about your thoughts on possibly changing the formatting of the information to make the review more efficient. We've had the applications look a certain way for a while and if you had a comment that format of the application could have been better in some ways, this would be an opportunity to bring that up. You could bring it up during current license renewal process too. This is an opportunity considering a second renewal review that gives us an opportunity to do it more efficiently. To reiterate, it would be the same information, plus additional information, possibly reformatted.</p>
Albert Fulvio	0:22:03	<p>Yes, we can do whatever you want that makes it easier for the review. One of the tenets that we were relying on is that we as an industry do not advocate a rule change for the subsequent license renewal because we believe everything is certainly adequate or more than adequate now. But that doesn't preclude us from presenting additional information in a manner that makes it easier for the reviewer. So, if you included that in some kind of communication to us, obviously we would want to have discussions on it first, but if we ended up with an addendum to the GALL or whatever is appropriate, we could do that.</p>
James Medoff	0:23:01	<p>Jason, if everything is ideally perfect and there is no rule change, then NEI 95 10 row 6 with maybe some slight modification, should be good enough. But if we start making a few adjustments with the license renewal rule for subsequent renewal rule, where we don't entirely agree with industry perspective, and we do make some changes to the rule, then NEI is going to have a document for formatting of license renewal applications, kept up to date, addressing changes in the rule and getting that into the format. Then we would look it over and review it to see if we will endorse it. Once endorsed, then use that as new basis for formatting the ?? Correct?</p>

Jason Remer?	0:24:06	That's correct.
James Medoff	0:24:13	I think we have NEI helping us out with our formatting document.
?	0:24:21	Once we get some feedback from you about what could happen, we plan to do that, so that's a good discussion.
Bill Rogers	0:24:28	So, it looks like the documents that Bennett, Rob, and I have spoken about that have potential to be altered would be the GUL report, the standard review plan, and the way the drawings are represented, which are not part of your official package, but certainly help with the review, and ultimately the LRA.
Bennett Brady	0:25:19	We would be open to suggestions for changes to the GUL. It's a large and in some places redundant document. Is this what people like and are used to or would they prefer some other changes to make it more useful?
Jason Remer	0:25:42	We hope to provide some feedback to you based on our annual review project and other activities that will shift into that and allow you to at least look at what we're asking.