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OFFICE OF SECRETARY
RULEMAKINGS AND
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Pilgrim Watch Comments on RIN 3150-AH45, 10 CFR Parts 20, 30, 40, et al. Decommissioning Planning Proposed Rule

A. RESIDUAL RADIOACTIVITY

Pilgrim Watch recommends the following changes to sections of the proposed rule that address survey records of residual radioactivity in the subsurface and record keeping for decommissioning purposes.

1. Throughout the proposal we noted that the word "may" is used as opposed to "shall." Requirements need to be spelled out as requirements not simply as options for the licensee – change "may" to "shall" throughout.
2. Subsurface contamination is defined as at least 15 centimeters (6.0") at Section I. This is not adequate; instead it should be defined to, and inclusive of, the groundwater table. Contamination below 6.0" can impact the environment and human health by working its way down to the groundwater; being uncovered by storms and natural phenomena; and brought up to the surface by human activity or burrowing animals. For example, Pilgrim Station is located on the shores of Cape Cod Bay; it is predicted that sea levels will rise and storms will increase in intensity due to global warming. Presently, the groundwater is approximately 17 feet. We conclude that defining subsurface to a mere 6.0" would allow a superficial clean up job – the equivalent of treating a hemophiliac's wound with a band-aid. It saves industry money at public expense.
3. "Significant contamination" is left undefined. The NRC Groundwater Contamination(Tritium) at Nuclear Power Plants Task Force, Final Report, September 1, 2006 (hereafter "LLTF"),^[1] Section 3.2.1.4, page 22 stated that "[the staff should] clearly define "significant contamination." It is no less true today.
4. Survey requirements are not defined – no specification describing methods required to conduct surveys or their frequency.
5. The proposal says that survey requirements "may" include groundwater monitoring (Subsection J); not "shall," as it should say. Monitoring wells are not required at reactors unless the onsite water is used for drinking. It is clear from the epidemic of leaks that have been reported recently around the country [the reported leaks positively correlate with the aging of reactor components and the presence of monitoring wells on the site] that monitoring wells must be required.

Instead of requiring monitoring wells in response to tritium leaks at Braidwood, Palo Verde etc., once again the NRC acquiesced to the industry and allowed a *voluntary* NEI Groundwater Protection Initiative to take the

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place of a NRC required network. The result is that there is nothing the public can count on – no enforcement or accountability.

The problem is illustrated by the NEI voluntary initiative put in place at Pilgrim Station, November 2007. Pilgrim complied with NEI's program and installed 3 monitoring wells and counted, as part of the program, a monitoring well placed previously to keep track of a previous oil spill - making (4) wells the total for the 1600 acre site on the shores of Cape Cod Bay. Dr. David Ahlfeld independently evaluated this program for Petitioner's in Docket 50-293-LRA. He is a Professor in the Department of Civil and Environmental Engineering at the University of Massachusetts, Amherst who has taught, conducted research and worked on projects in the area of groundwater flow and contaminant transport in the subsurface and related topics for over 20 years. He said that,

Recently, Entergy reported finding tritium at levels up to about 3000 pCi/L in monitoring wells on site. These initial monitoring results highlight flaws in the monitoring system at PNPS and provide a contrast to appropriate monitoring design.

Based on the map provided by Entergy in its recent filing, four monitoring wells have been placed at the site. These are generally located between the reactor and the shoreline. The wells are spaced approximately 200 feet apart. I am not aware of any recent hydrogeologic studies that have been conducted to determine current groundwater flow directions and rates. Hence, the suitability of these wells to actually intercept plausible leakage transport pathways is unknown.

Based on my estimation of the locations of pipe runs and plausible leak locations, this number of wells is entirely inadequate to provide the assurance of detection called for in the NEI guidance and in industry practice. Given the short distance from likely pipe locations and the shore, it is highly likely that a leak of radiological contaminants could migrate through the groundwater and pass between these widely-spaced wells or perhaps flow beneath them without detection. It is useful to contrast the PNPS plan with Entergy's Indian Point NPS which has many times more monitoring wells. Indeed, a 4-well monitoring system is more typical of that used for a retail gasoline station or a small municipal (non-hazardous) landfill. That it should be considered adequate for a large industrial facility such as PNPS is unrealistic.

The selection of tritium as the indicator contaminant raises a problem since tritium may be present in several of the potential leak sources that are within scope (e.g. condensate storage tank and salt service water systems). Hence, tritium does not provide a unique indicator of the component which is the source of the leak. A better designed monitoring system would seek a range of radionuclides that, taken together, serve as specific source indicators.

6. In the proposal, NRC says that they expect that no additional surveys will be required of power reactors; because they assume that procedures are now adequate. The proposal says that it "may be necessary...to take further actions if significant residual radioactivity is identified – determined on a case-by-case basis" (Section J). This is meaningless. Because: a) what is/will be considered "significant residual radioactivity" is not defined, as discussed above at 3; and b) unless NRC requires effective survey techniques and transparent reporting requirements no one will know the extent of the "significant the residual radioactivity" – including the licensee.

It is clear that the NRC learned no lessons from NRC's own *Groundwater Contamination (Tritium) at Nuclear Power Plants Task Force, Final Report*.

The report's Executive Summary [at ii] said that,

- “The task force did identify that under the existing regulatory requirements the potential exists for unplanned and unmonitored releases of radioactive liquids to migrate offsite into the public domain undetected.
- Some of the power plant components that contain radioactive fluids that have leaked were constructed to commercial standards, in contrast to plant safety systems that are typically fabricated to more stringent requirements. The result is a lower level of assurance that these components will be leak proof over the life of the plant.
- Some of the components that have leaked were not subject to surveillance maintenance, or inspection activities by NRC requirements. ...relatively low leakage rates may not be detected by plant operators, even over an extended period of time.
- Leakage that enters the ground below the plant may be undetected because there are generally no NRC requirements to monitor the groundwater onsite for radioactive contamination.
- Contamination in groundwater onsite may migrate offsite undetected.

A later section on Radiological Environmental Monitoring Program reported that,

[The Branch Technical Division]...does not require ground water monitoring within the licensee’s site for general detection and monitoring purposes. Ground water monitoring within the licensee’s site is only required if the ground water is tapped for drinking or irrigation purposes. P. 18

The radiation detection capabilities specified in the BTP are the 1970’s state-of-the-art for routine environmental measurements in laboratories. More sensitive radiation detection capability exists today, but there is no regulatory requirement for the plants to have this equipment. The guidance primarily focuses on gamma isotopic analysis of environmental material and on tritium in water samples. There are minimal requirements for analyzing environmental samples for beta- and alpha -emitting radionuclides. P.18

The regulatory guidance provides built in flexibility in the scope of the REMP. It ...allows licensees to reduce the scope of and frequency of the sampling program, without the NRC approval, on historical data. ..if a licensee’s environmental samples have not detected licensed radioactive material in several years, then the licensee typically reduces the scope and sample frequency of the associated environmental pathway. NRC inspections have observed reductions in the scope and frequency of licensee programs... p.19

7. Reporting requirements: Section L states that there is no requirement for licensees to submit reports but only keep reports onsite (FR 3821). Reports should be submitted to NRC and made public on ADAMS, with proprietary trade information redacted as necessary. The public has a right to know what radioactive materials, whatever the amount, are being “inadvertently” discharged or leaked into the environment. Again NRC learned no lessons from NRC’s own *Groundwater Contamination (Tritium) at Nuclear Power Plants Task Force, Final Report*.

The report reviewed Reporting Requirements [p.19],

No specific regulatory requirements for licensees to conduct routine onsite environmental surveys and monitoring for potential abnormal spills and leaks of radioactive liquids. However, 10CFR 50.72(g) requires that licensees keep records of information important to the safe and effective decommissioning of the facility. These records include information about known pills [Added by PW, key word “known”].

The rule does not define the magnitude of the spills and the leaks that need to be documented by the licensee. Also the rule does not define “significant contamination” that needs to be recorded after the cleanup process. There is no requirement that this information must be submitted to the NRC. However, the records are available for review by NRC inspectors.

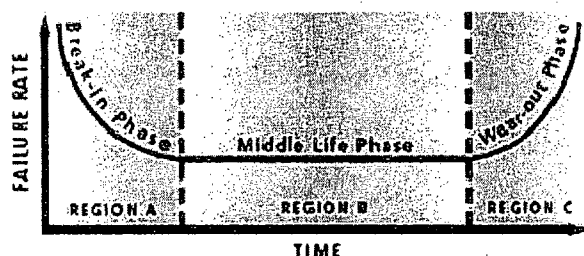
Although 10CFR50.75 (g) discusses the requirement for records of any remaining residual contamination, there are no regulatory requirements which require remediation while the power plant is operating. A licensee’s decision to remediate contamination before the plant is decommissioned is typically based on several factors, including ALARA considerations for potential worker and public dose, cost, feasibility, disposal options, and external stakeholder considerations. P.19

Reporting of all survey data must be required and made available to the NRC and the public and placed on NRC’s website for the public to access, just as the REMP is on an annual basis.

The NRC Task Force, LLTF, and Pilgrim Watch conclude that the “status quo” is unacceptable today and will be unacceptable at the time of decommissioning.

8. Prevention: Clearly the best way to avoid legacy sites is to prevent leakage from occurring in the first place and to catch any leaks when small before they grow to larger ones. This is especially important as reactors age because corrosion is not linear but instead follows what is known as a “bathtub curve.”

Figure 1 The Bathtub Curve



Source: N454, 2001.

The wear-out phase begins approximately when a component is 20 years old. Maintenance can retard deterioration but it cannot prevent it – all metals/ materials corrode eventually, coatings perforate, linings fail. Therefore robust inspection schedules should be required as reactors age, but they are not.

Reactors are applying for license renewal to operate from 40-60 years. But the relicensing guidance NUREG 1801, M-34 simply requires a one-time inspection during the 10-years prior to re-licensing and another one-time inspection during the 10-years after re-licensing. Cathodic protection should be required (NUREG 1801, M-28) but it is not – NRC again caved to NEI pressure not to do so. And as we have discussed, at 5, a monitoring well program is not required either – instead NRC relies on NEI’s voluntary initiative.

Despite the epidemic of leaks already witnessed across the country; contamination far-in-excess than anticipated at decommissioned sites such as Yankee Atomic, Connecticut Yankee; on-site storage of spent fuel rods and so-called low level waste at sites because of the unavailability of appropriate offsite alternatives, NRC now proposes a rule that it knows, and we know, is totally inadequate.

B. FUNDING

1. The proposed rule would also require certain licensees to report additional details in their decommissioning cost estimates and amend some financial assurance mechanisms for decommissioning planning. It is important that this is done correctly so that communities are not stuck with the costs and an inadequate clean-up.
2. Decommissioning costs are currently underestimated. At ENVY, for example, independent estimates of the likely cost of decommissioning that site are approximately twice what Entergy put forward. Costs at Connecticut Yankee are now estimated about double what anticipated.
3. A full report of the licensee's fund analysis, including full disclosure of assumptions (for example, assumed rate of inflation and yield from stock investment of the fund) and amount set aside to date must be required to be posted annually on ADAMS. Lessons learned from the current review by the VT Legislature and PBS indicates that Entergy's assumptions are unrealistic and calculations "creative" and overly optimistic.
4. NRC must assure that the licensee honors its promise to the community for "Greenfield" at the end of operations. Lessons learned from ENVY are that Entergy had promised "Greenfield" but had a different idea in mind. In Entergy's filing with the VT PSB Entergy said that they intended to leave behind any structure three feet below ground level, underground service tunnels and site utility and service plumbing. All structures should be removed from the site and all contamination remediated to make it possible for the site to be returned to full use. NRC in its rulemaking must make that plain.
5. **Changes to 10 CFR § 50.82:** We support the requirement of providing additional details of decommissioned power reactor licensees in the PSDAR under proposed 10 CFR 50.82(a)(4)(i); and reporting to NRC the actual costs of decommissioning before license termination as proposed under 10 CFR 50.82(a)(8)(v) to enable NRC to apply the information in reviewing similar decommissioning activities that are planned or in progress. (FR 3322 Section L) This is conditioned upon required public disclosure of all yearly reports on decommissioning fund status and funds spent. (See FR 3843).
6. The public has the right to know the amount of funds accumulated to cover the current cost of managing spent fuel; the projected costs of spent fuel management until the Department of Energy takes title to the spent fuel; and the plan to obtain additional funds if the accumulated funds do not cover the projected costs to be identified. Reports should be submitted to NRC and made public on ADAMS. The decommissioning fund should never be allowed to pay for onsite spent fuel storage as proposed by Entergy for ENVY in Vermont. These are to remain as totally separate "buckets."
7. **Changes to 10 CFR § 72.30** (which apply to dry cask storage facilities): Pilgrim Watch supports additional requirements for decommissioning funding updates, especially given the inevitability of long-term onsite storage of spent fuel at reactor sites as they continue to be re-licensed to produce one-half again as much high-level radioactive waste. Yucca Mountain has not been approved and the federal government has no other realistic plan to establish a long term repository for nuclear waste. Even if Yucca Mountain is eventually opened, despite lengthy litigation from Nevada and states through which the waste will be transported, there is only enough space in the repository to store spent fuel produced by all nuclear plants in the U.S. through 2009 or perhaps 2011. At that point the repository will reach its capacity.^[2] As a result, waste will be stored on site or in a second, as yet unnamed repository that might be built sometime in the very distant future. Reprocessing is yet another pipe dream. Again separate funding accounts must be maintained.
8. **Changes to 10 CFR § 72.50:** Pilgrim Watch joins others in the Northeast in our concern that with increasing number of nuclear power plants operating as merchant plants especially in the New England areas, new requirements for license transfer applications to contain financial assurance pursuant to §72.30 would not apply. Under the old rules without this requirement, merchant plants would be left without sufficient funds for

decommissioning. Pilgrim Watch is concerned about Entergy's plan to "spin-off" Pilgrim and 4 or 5 other reactors into a new entity called ENEXUS. The Vermont Legislature's proposal that Entergy must determine that its decommissioning fund has enough assets and financial guarantees to pay for immediate restoration of the site upon closing of Vermont Yankee makes sense to us as a requirement for all other reactors affected by the spin-off. If the fund currently is adequate, require nothing further. If the fund is inadequate, the deficiency can be alleviated by either adding funds or supplying a letter of credit or other guarantee.

9. Permissibility of "fee incentives" in 10 CFR § 171.11(b): "Fee incentives," as permitted in 10 CFR § 171.11(b), cannot be used to induce licensees to characterize subsurface residual radioactivity while their facility is operating instead of waiting until the facility is in decommissioning. To use the exemption of annual fees as a "fee incentive" would go against Congress' requirement that NRC collect user fees.

10 CFR Part 171 was promulgated as "necessary to comply with the statutory mandate of the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA)."^[3] COBRA requires the NRC to assess and collect annual charges from persons licensed by the Commission pursuant to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) in an amount to approximate 33 percent of the Commission's estimated budget.^[4] Because, "[t]he charges assessed pursuant to this authority shall be reasonably related to the regulatory service provided by the Commission and fairly reflect the cost to the Commission of providing such service."^[5]

At the urging of Congress the NRC examined the impacts of the annual fee on power reactors with operating licenses to determine if exemptions should apply.^[6] The only exemption stated in the final rule is Section 171.11 and provides that:

[T]he holder of a license to operate a power reactor who believes that the annual fee is unfair or overly burdensome may apply to the Commission for partial relief from the annual fee. The Commission may grant such relief, if it is persuaded by the licensee that factors such as age and size of the plant and size and impact on its customer rate base substantially reduce the NRC's regulatory costs for that plant and the benefits bestowed on that licensee below that of the other power reactors. Nevertheless, the agency's intent is to grant exemptions sparingly.^[7]

The NRC specifically addresses the amount of annual fee to be collected stating that although the Budget Reconciliation Act provides the estimated amount of fees to be assessed is estimated to be equal to 33 percent of the costs incurred by the NRC (on its face creating a ceiling), "[t]he legislative history clearly indicates that Congress expected the NRC to charge the full amount authorized by the statute."^[8]

Furthermore, the annual fee is "consistent with the President's request to Congress that the NRC recover a far greater amount of its budget from user fees."^[9] In the past 20 years, 10 CFR Part 171 has been amended to revise the fee schedules in response to COBRA amendments which has increased the total percentage of the Commission's budget required to be collected from power reactor licensees by the NRC.^[10]

The NRC states that "no public policy would be served by reducing a power reactor's annual fee because a utility violated NRC's requirements. We are unwilling to attribute such an intent to Congress."^[11]

Respectfully submitted,

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Duxbury, MA 02332

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31 Deerpath Trail, North
Duxbury, MA 02332

^[1]Groundwater Contamination (Tritium) at Nuclear Plants-Task Force – Final Report, Sept 1, 2006, ADAMS Accession No. ML062650312.. The Liquid Radioactive Release Lessons Learned Task Force (LLTF) was established by the NRC Director of Operations on March 10, 2006, in response to incidents at Braidwood, Indian Point, Byron and Dresden related to unplanned, unmonitored releases of radioactive liquids into the environment. The scope of the task force work included reviews of industry experience, associated public health impacts, the NRC regulatory framework, related NRC inspection and enforcement programs industry reporting requirements, past industry actions following significant releases, international perspectives, and NRC communication with public stakeholders. The focus of the Task Force was on releases of radioactive liquids that were neither planned nor monitored.

^[2] App. A, Tbl. A-7, Vol. II, *Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High Level Radioactive Waste at Yucca Mountain, Nye County, Nevada*, February, 2002.

^[3] 51 Fed. Reg. 33224 (Sept. 18, 1986).

^[4] Pub. L. 99-272 (1986)(Section 7601 of the Budget Reconciliation Act states that the charges assessed shall be established by rule and, specifically, in paragraph (b)(I) that: the Nuclear Regulatory Commission shall assess and collect annual charges from its licensees on a fiscal year basis, except that--

(A) the maximum amount of the aggregate charges assessed pursuant to this paragraph in any fiscal year may not exceed an amount that, when added to other amounts collected by the Commission for such fiscal year under other provisions of law, is estimated to be equal to 33 percent of the costs incurred by the Commission with respect to such fiscal year; and (B) any such charge assessed pursuant to this paragraph shall be reasonably related to the regulatory service provided by the Commission and shall fairly reflect the cost to the Commission of providing such service. The legislative history shows that Congress intended the authority of this mandate to go beyond that contained in the Independent Offices Appropriation Act (IOAA) of 1952 (65 Stat. 290; 31 U.S.C. 9701)).

^[5] See 132 Cong. Rec. H879 (Daily Ed. March 6, 1986); 132 Cong. Rec. S2725 (Daily Ed. March 14, 1986).

^[6] *Id.* at 33227, see Proposed Rule 51 Fed. Reg. 24078, 24082.

^[7] *Id.* at 33228, see 10 CFR 171.11 The Commission may, upon application, grant an exemption, in part, from the annual fee required pursuant to this part. An exemption under this provision may be granted by the Commission taking into consideration the following factors: (a) Age of the reactor; (b) Size of the reactor;

(c) Number of customers in rate base;(d) Net increase in KWh cost for each customer directly related to the annual fee assessed under this part; and (e) Any other relevant matter which the licensee believes justifies the reduction of the annual fee.

^[8] *Id.*

^[9] *Id.*

^[10] See 53 Fed. Reg. 30423 (Aug. 12, 1988)(Interim Rule); 53 Fed. Reg. 52632 (Dec. 29, 1988)(Final rule action necessary for the NRC to collect under 10 CFR Part 171 not less than 45 percent of the Commission's budget for each of the Fiscal Years of 1988 and 1989 to comply with Section 5601 of the Omnibus Budget Reconciliation Act (COBRA) of 1987. The plain meaning of COBRA (of 1987) states: "in no event shall such percentage be less than a total of 45 percent of such costs in each such fiscal year.").

^[11] *Id.*

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May 8, 2008

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The report's Executive Summary [at ii] said that,

- "The task force did identify that under the existing regulatory requirements the potential exists for unplanned and unmonitored releases of radioactive liquids to migrate offsite into the public domain undetected.
- Some of the power plant components that contain radioactive fluids that have leaked were constructed to commercial standards, in contrast to plant safety systems that are typically fabricated to more stringent requirements. The result is a lower level of assurance that these components will be leak proof over the life of the plant.
- Some of the components that have leaked were not subject to surveillance maintenance, or inspection activities by NRC requirements. ...relatively low leakage rates may not be detected by plant operators, even over an extended period of time.
- Leakage that enters the ground below the plant may be undetected because there are generally no NRC requirements to monitor the groundwater onsite for radioactive contamination.
- Contamination in groundwater onsite may migrate offsite undetected.

A later section on Radiological Environmental Monitoring Program reported that,

[The Branch Technical Division]...does not require ground water monitoring within the licensee's site for general detection and monitoring purposes. Ground water monitoring within the licensee's site is only required if the ground water is tapped for drinking or irrigation purposes. P. 18

The radiation detection capabilities specified in the BTP are the 1970's state-of-the-art for routine environmental measurements in laboratories. More sensitive radiation detection capability exists today, but there is no regulatory requirement for the plants to have this equipment. The guidance primarily focuses on gamma isotopic analysis of environmental material and on tritium in water samples. There are minimal requirements for analyzing environmental samples for beta- and alpha -emitting radionuclides. P.18

The regulatory guidance provides built in flexibility in the scope of the REMP. It ...allows licensees to reduce the scope of and frequency of the sampling program, without the NRC approval, on historical data. ..if a licensee's environmental samples have not detected licensed radioactive material in several years, then the licensee typically reduces the scope and sample frequency of the associated environmental pathway. NRC inspections have observed reductions in the scope and frequency of licensee programs... p.19

7. Reporting requirements: Section L states that there is no requirement for licensees to submit reports but only keep reports onsite (FR 3821). Reports should be submitted to NRC and made public on ADAMS, with proprietary trade information redacted as necessary. The public has a right to know what radioactive materials, whatever the amount, are being "inadvertently" discharged or leaked into the environment. Again NRC learned no lessons from NRC's own *Groundwater Contamination (Tritium) at Nuclear Power Plants Task Force, Final Report*.

The report reviewed Reporting Requirements [p.19],

No specific regulatory requirements for licensees to conduct routine onsite environmental surveys and monitoring for potential abnormal spills and leaks of radioactive liquids. However, 10CFR 50.72(g) requires that licensees keep records of information important to the safe and effective decommissioning of the facility. These records include information about known pills [Added by PW, key word "known"].

The rule does not define the magnitude of the spills and the leaks that need to be documented by the licensee. Also the rule does not define "significant contamination" that needs to be recorded after the cleanup process. There is no requirement that this information must be submitted to the NRC. However, the records are available for review by NRC inspectors.

Although 10CFR50.75 (g) discusses the requirement for records of any remaining residual contamination, there are no regulatory requirements which require remediation while the power plant is operating. A licensee's decision to remediate contamination before the plant is decommissioned is typically based on several factors, including

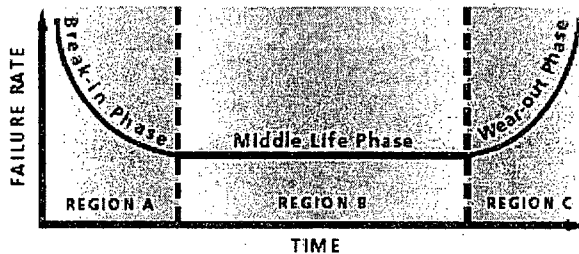
ALARA considerations for potential worker and public dose, cost, feasibility, disposal options, and external stakeholder considerations. P.19

Reporting of all survey data must be required and made available to the NRC and the public and placed on NRC's website for the public to access, just as the REMP is on an annual basis.

The NRC Task Force, LLTF, and Pilgrim Watch conclude that the "status quo" is unacceptable today and will be unacceptable at the time of decommissioning.

8. Prevention: Clearly the best way to avoid legacy sites is to prevent leakage from occurring in the first place and to catch any leaks when small before they grow to larger ones. This is especially important as reactors age because corrosion is not linear but instead follows what is known as a "bathtub curve."

Figure 1 The Bathtub Curve



Source: N.A.S.A., 2001.

The wear-out phase begins approximately when a component is 20 years old. Maintenance can retard deterioration but it cannot prevent it – all metals/ materials corrode eventually, coatings perforate, linings fail. Therefore robust inspection schedules should be required as reactors age, but they are not.

Reactors are applying for license renewal to operate from 40-60 years. But the relicensing guidance NUREG 1801, M-34 simply requires a one-time inspection during the 10-years prior to re-licensing and another one-time inspection during the 10-years after re-licensing. Cathodic protection should be required (NUREG 1801, M-28) but it is not – NRC again caved to NEI pressure not to do so. And as we have discussed, at 5, a monitoring well program is not required either – instead NRC relies on NEI's voluntary initiative.

Despite the epidemic of leaks already witnessed across the country; contamination far-in-excess than anticipated at decommissioned sites such as Yankee Atomic, Connecticut Yankee; on-site storage of spent fuel rods and so-called low level waste at sites because of the unavailability of appropriate offsite alternatives, NRC now proposes a rule that it knows, and we know, is totally inadequate.

B. FUNDING

1. The proposed rule would also require certain licensees to report additional details in their decommissioning cost estimates and amend some financial assurance mechanisms for decommissioning planning. It is important that this is done correctly so that communities are not stuck with the costs and an inadequate clean-up.

2. Decommissioning costs are currently underestimated. At ENVY, for example, independent estimates of the likely cost of decommissioning that site are approximately twice what Entergy put forward. Costs at Connecticut Yankee are now estimated about double what anticipated.

3. A full report of the licensee's fund analysis, including full disclosure of assumptions (for example, assumed rate of inflation and yield from stock investment of the fund) and amount set aside to date must be required to be posted annually on ADAMS. Lessons learned from the current review by the VT Legislature and PBS indicates that Entergy's assumptions are unrealistic and calculations "creative" and overly optimistic.

4. NRC must assure that the licensee honors its promise to the community for "Greenfield" at the end of operations. Lessons learned from ENVY are that Entergy had promised "Greenfield" but had a different idea in mind. In Entergy's filing with the VT PSB Entergy said that they intended to leave behind any structure three feet below ground level, underground service tunnels and site utility and service plumbing. All structures should be removed from the site and all contamination remediated to make it possible for the site to be returned to full use. NRC in its rulemaking must make that plain.

5. Changes to 10 CFR § 50.82: We support the requirement of providing additional details of decommissioned power reactor licensees in the PSDAR under proposed 10 CFR 50.82(a)(4)(i); and reporting to NRC the actual costs of decommissioning before license termination as proposed under 10 CFR 50.82(a)(8)(v) to enable NRC to apply the information in reviewing similar decommissioning activities that are planned or in progress. (FR 3322 Section L) This is conditioned upon required public disclosure of all yearly reports on decommissioning fund status and funds spent. (See FR 3843).

6. The public has the right to know the amount of funds accumulated to cover the current cost of managing spent fuel; the projected costs of spent fuel management until the Department of Energy takes title to the spent fuel; and the plan to obtain additional funds if the accumulated funds do not cover the projected costs to be identified. Reports should be submitted to NRC and made public on ADAMS. The decommissioning fund should never be allowed to pay for onsite spent fuel storage as proposed by Entergy for ENVY in Vermont. These are to remain as totally separate "buckets."

7. Changes to 10 CFR § 72.30 (which apply to dry cask storage facilities): Pilgrim Watch supports additional requirements for decommissioning funding updates, especially given the inevitability of long-term onsite storage of spent fuel at reactor sites as they continue to be re-licensed to produce one-half again as much high-level radioactive waste. Yucca Mountain has not been approved and the federal government has no other realistic plan to establish a long term repository for nuclear waste. Even if Yucca Mountain is eventually opened, despite lengthy

litigation from Nevada and states through which the waste will be transported, there is only enough space in the repository to store spent fuel produced by all nuclear plants in the U.S. through 2009 or perhaps 2011. At that point the repository will reach its capacity.² As a result, waste will be stored on site or in a second, as yet unnamed repository that might be built sometime in the very distant future. Reprocessing is yet another pipe dream. Again separate funding accounts must be maintained.

8. Changes to 10 CFR § 72.50: Pilgrim Watch joins others in the Northeast in our concern that with increasing number of nuclear power plants operating as merchant plants especially in the New England areas, new requirements for license transfer applications to contain financial assurance pursuant to §72.30 would not apply. Under the old rules without this requirement, merchant plants would be left without sufficient funds for decommissioning. Pilgrim Watch is concerned about Entergy's plan to "spin-off" Pilgrim and 4 or 5 other reactors into a new entity called ENEXUS. The Vermont Legislature's proposal that Entergy must determine that its decommissioning fund has enough assets and financial guarantees to pay for immediate restoration of the site upon closing of Vermont Yankee makes sense to us as a requirement for all other reactors affected by the spin-off. If the fund currently is adequate, require nothing further. If the fund is inadequate, the deficiency can be alleviated by either adding funds or supplying a letter of credit or other guarantee.

9. Permissibility of "fee incentives" in 10 CFR § 171.11(b): "Fee incentives," as permitted in 10 CFR § 171.11(b), cannot be used to induce licensees to characterize subsurface residual radioactivity while their facility is operating instead of waiting until the facility is in decommissioning. To use the exemption of annual fees as a "fee incentive" would go against Congress' requirement that NRC collect user fees.

10 CFR Part 171 was promulgated as "necessary to comply with the statutory mandate of the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA)."³ COBRA requires the NRC to assess and collect annual charges from persons licensed by the Commission pursuant to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) in an amount to approximate 33 percent of the Commission's estimated budget.⁴ Because, "[t]he charges assessed pursuant to this authority shall be reasonably related to the regulatory service provided by the Commission and fairly reflect the cost to the Commission of providing such service."⁵

² App. A, Tbl. A-7, Vol. II, *Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High Level Radioactive Waste at Yucca Mountain, Nye County, Nevada*, February, 2002.

³ 51 Fed. Reg. 33224 (Sept. 18, 1986).

⁴ Pub. L. 99-272 (1986) (Section 7601 of the Budget Reconciliation Act states that the charges assessed shall be established by rule and, specifically, in paragraph (b)(1) that: the Nuclear Regulatory Commission shall assess and collect annual charges from its licensees on a fiscal year basis, except that-- (A) the maximum amount of the aggregate charges assessed pursuant to this paragraph in any fiscal year may not exceed an amount that, when added to other amounts collected by the Commission for such fiscal year under other provisions of law, is estimated to be equal to 33 percent of the costs incurred by the Commission with respect to such fiscal year; and (B) any such charge assessed pursuant to this paragraph shall be reasonably related to the regulatory service provided by the Commission and shall fairly reflect the cost to the Commission of providing such service. The legislative history shows that Congress intended the authority of this mandate to go beyond that contained in the Independent Offices Appropriation Act (IOAA) of 1952 (65 Stat. 290; 31 U.S.C. 9701)).

⁵ See 132 Cong. Rec. H879 (Daily Ed. March 6, 1986); 132 Cong. Rec. S2725 (Daily Ed. March 14, 1986).

At the urging of Congress the NRC examined the impacts of the annual fee on power reactors with operating licenses to determine if exemptions should apply.⁶ The only exemption stated in the final rule is Section 171.11 and provides that:

[T]he holder of a license to operate a power reactor who believes that the annual fee is unfair or overly burdensome may apply to the Commission for partial relief from the annual fee. The Commission may grant such relief, if it is persuaded by the licensee that factors such as age and size of the plant and size and impact on its customer rate base substantially reduce the NRC's regulatory costs for that plant and the benefits bestowed on that licensee below that of the other power reactors. Nevertheless, the agency's intent is to grant exemptions sparingly.⁷

The NRC specifically addresses the amount of annual fee to be collected stating that although the Budget Reconciliation Act provides the estimated amount of fees to be assessed is estimated to be equal to 33 percent of the costs incurred by the NRC (on its face creating a ceiling), “[t]he legislative history clearly indicates that Congress expected the NRC to charge the full amount authorized by the statute.”⁸

Furthermore, the annual fee is “consistent with the President’s request to Congress that the NRC recover a far greater amount of its budget from user fees.”⁹ In the past 20 years, 10 CFR Part 171 has been amended to revise the fee schedules in response to COBRA amendments which has increased the total percentage of the Commission’s budget required to be collected from power reactor licensees by the NRC.¹⁰

The NRC states that “no public policy would be served by reducing a power reactor’s annual fee because a utility violated NRC’s requirements. We are unwilling to attribute such an intent to Congress.”¹¹

Respectfully submitted,

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⁶ *Id.* at 33227, see Proposed Rule 51 Fed. Reg. 24078, 24082.

⁷ *Id.* at 33228, see 10 CFR 171.11 The Commission may, upon application, grant an exemption, in part, from the annual fee required pursuant to this part. An exemption under this provision may be granted by the Commission taking into consideration the following factors: (a) Age of the reactor; (b) Size of the reactor; (c) Number of customers in rate base; (d) Net increase in KWh cost for each customer directly related to the annual fee assessed under this part; and (e) Any other relevant matter which the licensee believes justifies the reduction of the annual fee.

⁸ *Id.*

⁹ *Id.*

¹⁰ See 53 Fed. Reg. 30423 (Aug. 12, 1988)(Interim Rule); 53 Fed. Reg. 52632 (Dec. 29, 1988)(Final rule action necessary for the NRC to collect under 10 CFR Part 171 not less than 45 percent of the Commission’s budget for each of the Fiscal Years of 1988 and 1989 to comply with Section 5601 of the Omnibus Budget Reconciliation Act (COBRA) of 1987. The plain meaning of COBRA (of 1987) states: “in no event shall such percentage be less than a total of 45 percent of such costs in each such fiscal year.”)

¹¹ *Id.*

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