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THE NATIONAL MINING ASSOCIATION'S COMMENTS ON THE NUCLEAR REGULATORY COMMISSION'S STRATEGIC ASSESSMENT AND REBASELINING STRATEGIC PLANNING FRAMEWORK

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I. INTRODUCTION

The Nuclear Regulatory Commission (NRC) states that in order to respond to changing conditions that present both challenges and opportunities, NRC is attempting to establish a "clear strategic direction" that will enable it to achieve its mission effectively. The strategic "plan" or "framework" developed by the Strategic Assessment and Rebaselining Initiative (SARI) will guide future NRC decision-making and provide a basis for aligning NRC's budget and organizational systems with its mission and goals. As part of this effort, NRC solicits active stakeholder input into this "work-in-progress" project.

The National Mining Association (NMA) is pleased to comment generally on the SARI and specifically on a number of the "Direction-Setting Issues" ("DSI") papers. NMA comprises the producers of most of the nation's coal, metals, industrial and agricultural minerals; the manufacturers of mining and mineral processing machinery, equipment and supplies; and the engineering and consulting firms, financial institutions and other firms serving the mining industry. NMA is providing comments on behalf of its uranium recovery licensee members whose interests will be affected by the final results of the SARI.

II. GENERAL COMMENTS

NMA recognizes that NRC has attempted to address major issues of agency-wide importance that impact, to a greater or lesser extent, all classes of the Commission's licensees and all of the core components of its regulatory mission in this SARI. NMA also recognizes that NRC's uranium recovery licensees constitute but one relatively limited sub-group of NRC materials licensees. Nevertheless, NMA's uranium recovery licensees believe that the concepts underlying the SARI justify a strategic review and reconsideration of a variety of issues affecting uranium recovery licensees.

NRC has over time addressed a variety of issues that affect uranium recovery licensees and will continue to affect them in the future. Since NRC's treatment of these issues over time has evolved essentially in response to the appearance of a given issue rather than as part of a coherent, strategic assessment, the result is inconsistent, conflicting and confusing regulatory applications. The short and long term implications of this regulatory maze are potentially significant for licensees, NRC, Department of Energy (DOE) and Agreement State programs that address uranium recovery facilities.

NMA will not attempt to discuss these issues in any great detail in these comments due to their complexity. However, several brief examples follow:

- NRC's decision to assert jurisdiction over in situ leach (ISL) uranium mining operations combined with the Staff Guidance on effluent disposal (DWM-95-01) has led to the treatment of "process" (i.e., production) wastes as 11e.(2) byproduct material

while "restoration" wastes are considered as mine wastes. These wastes have been and are being commingled at ISL facilities. Traditionally, ISL 11e.(2) wastes are disposed in uranium mill tailings facilities (Criterion 2, 10 C.F.R. Part 40, Appendix A) but non-11e.(2) wastes are not to be disposed in such facilities pursuant to the "Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailing Impoundments." Thus, a regulatory dilemma that may impact NRC/Agreement State versus non-Agreement State jurisdiction and DOE acceptance of Title II uranium mill tailings facilities under the Atomic Energy Act (AEA), as amended by the Uranium Mill Tailing Radiation Control Act (UMTRCA), has been created.

- NRC Staff Guidance determining that non-Agreement States have concurrent jurisdiction with NRC under the AEA, as amended by UMTRCA, over the nonradiological components of 11e.(2) byproduct material threatens to create a "mixed waste-like" regulatory "sink" and is inconsistent with the maintenance of a "strong" Agreement State program. Additionally, this policy position may further exacerbate the problems noted in the preceding paragraph.

NMA is concerned that the dilemmas posed by NRC decisions, positions or guidance on a series of significant regulatory issues will affect uranium recovery licensees well into the future. Any attempt to address these issues in a patchwork fashion will only lead to more illogical, inconsistent and complex regulatory applications. A strategic reassessment and rebaselining effort to address these issues in light of current and likely future circumstances, including the

results of the agency-wide SARI, makes good sense. NMA, therefore requests that NRC consider these comments to constitute a "placeholder" for a strategic reassessment of these and other critical uranium recovery-licensee regulatory issues. At the present time, NMA's uranium recovery licensee members contemplate preparing a "White Paper" outlining these issues and identifying their significance to the uranium recovery program and, where relevant, to larger issues such as the Agreement State program, the low-level waste (LLW) program, risk-informed, performance-based regulation, the decommissioning of non-reactor facilities and the like.

Finally, NMA notes that, Director of the Utah's Division of Radiation Control, William J. Sinclair's testimony at the NRC's Colorado Springs hearing on the SARI echoes NMA's concerns regarding the necessity for a strategic assessment of uranium recovery issues as follows:

> Just another comment, and this is a State of Utah comment: One thing that I was disappointed in this area that I thought we might have looked at in more detail was the uranium mill program and some of the waste issues dealing with the uranium mill program. Even though it's not low-level waste -- call it a different thing -- there are a lot of issues in that program that I think would be valuable to look at as part of the strategic assessment, and I guess I was just disappointed that some of those issues that were raised and that I have seen raised at meetings such as the American Mining Congress meeting weren't raised as part of this paper.

In the interests of full disclosure, NMA notes that Mr. Sinclair's view regarding the uranium recovery issues that need to be strategically reassessed may differ substantially from those of NMA's uranium recovery licensee members.

III. SPECIFIC COMMENTS

a. DSI 2: Oversight of DOE

Question: Should NRC seek to expand its regulatory authority and responsibilities to include DOE facilities?

The DSI paper poses four options as follows:

Option 1: Support broad responsibility for NRC regulation of DOE:

- **a.** Advisory Committee framework;
- **b.** Existing division of responsibility for commercial nuclear facilities; and
- **c.** Modifying the existing division of responsibility to minimize jurisdictional conflicts;

Option 2: Support broad responsibility for regulating certain types of DOE facilities;

Option 3: Oppose broad NRC responsibility for regulating DOE facilities;

Option 4: Take no position on broad NRC responsibility for DOE facilities.

The Commission's preliminary views favor Option 4, but if asked, NRC could provide the necessary oversight with adequate resources and a reasonable time schedule.

NMA agrees that it is appropriate for the Commission not to actively seek oversight of DOE facilities, but should NRC be the outside regulator for DOE, NMA supports Option 1B which reflects the current division of responsibility for commercial facilities .

The current division of responsibility has been thrashed out over the past several decades in various legislative, judicial and regulatory fora. While the current division of responsibility is still somewhat problematical and far from perfect, it would not be cost-effective or useful to

begin anew. For example, it makes little sense to thrust the Occupational Health and Safety Administration (OSHA) into radiological protection for AEA regulated facility workers or the Environmental Protection Agency (EPA) into site specific regulatory oversight -- tasks which those Agencies are at best ill-prepared to perform, especially when compared with NRC. Mixed waste issues can be solved readily under the existing division of responsibility as well. (See "Mixed Waste: A Way to Solve the Quandary," Anthony J. Thompson and Michael L. Goo, 23 ELR 10705-10719 (December 1993) ["Thompson/Goo," Attachment A.] To the extent that there exists a need for external regulation of DOE facilities (and there is significant agreement with that proposition), NMA believes that NRC's expertise places it in the strongest position of any existing federal or State agency to assume such responsibilities. NMA believes that there may be questionable benefits and potentially significant problems associated with authorizing Agreement State regulation of federal DOE facilities.

As one further note, NMA supports the concept expressed in Suboption 1C regarding the appropriate way to address the "mixed waste" issue -- Whether the waste is DOE or commercial low-level mixed waste, (DSI 2 at p. 23), if radiation poses the primary hazard, then NRC's current LLW standards in 10 C.F.R. Part 61 (and/or any modifications thereto pursuant NRC becoming DOE's external regulator) should govern the disposal of the waste. The expensive and unnecessary efforts to treat the hazardous waste component of mixed waste pursuant to RCRA requirements could be obviated with great cost savings and no loss of protection for public health, safety and the environment. Id. Similarly, if the chemical or other nonradiological component of the waste poses the primary hazard, then relevant hazardous waste or hazardous materials disposal criteria should govern the disposal of the waste.

b. DSI 4: NRC's Relationship with Agreement States

Question: What should be NRC's strategy regarding States becoming and remaining Agreement states?

The DSI paper poses five options as follows:

Option 1: Turn the Agreement States Program over to EPA;

Option 2: Strongly encourage States to become Agreement States;

Option 3: Continue the current Agreement States program, including adopting current incentives;

Option 4: Treat Agreement States as co-regulators; and,

Option 5: Devolve regulation of AEA, Section 274 materials to the States.

The Commission's preliminary view favors Option 3 including encouraging more States to become Agreement States through intangible incentives although perhaps providing some "seed-money" or grants as tangible incentives. The Commission also favors providing training to Agreement States without charge on a "space available" basis.

NMA is opposed unequivocally to Option 1 because it would destroy decades of continuity in NRC/Agreement State regulatory oversight of uranium recovery facilities as well as those of other AEA licensees. Additionally, EPA does not have either the quality or depth of expertise (particularly operations-related experience) on these issues at headquarters or in its regional offices.

NMA questions whether it is appropriate or wise for NRC to "strongly" encourage states to become Agreement States. As NRC notes, as more states become Agreement States, it will be difficult for NRC to maintain a critical mass of technical expertise to oversee a national level,

national quality regulatory program. "Strongly" encouraging additional Agreement States would seem to be inconsistent with the goal of a national regulatory program for radioactive materials as envisaged under the AEA. While some current (and perhaps future) Agreement States may have relatively sophisticated programs, others do not and likely will not. It is difficult to believe that even the most sophisticated Agreement State programs can or likely will bring to bear the resources and expertise that NRC can and has on complex issues such as site decommissioning (DSI 9) and low-level waste disposal (DSI 5). The very fact that Agreement States (including those with sophisticated programs) have objected so vigorously to any cuts in NRC funding for training of Agreement State personnel essentially proves this point.

NMA further objects to giving Agreement States credit for performing NRC inspections or to allowing Agreement States to provide reimbursable services to NRC licensees. The potential for "disconnects" between the state inspectors and NRC rule and policymakers would be too great. If there was a downside to NRC's Uranium Recovery Field Office (URFO) operations, it was precisely such disconnects between the "field operatives" and headquarters rule and policymakers. NMA believes that a national regulatory program is necessary under the AEA, as amended, and that, while NRC may discontinue direct regulatory control over Agreement State licensees, Agreement States exercising their sovereign authority may do so only within the bounds of NRC's defined national regulatory policies. The greater the flexibility and discretion afforded States, the greater will be the inconsistencies between State regulatory programs. Thus, while Agreement States do and should have some autonomy and independence, they are not "Co-Regulators" nor should they be considered as such. For these same reasons, therefore, NMA opposes both Options 4 and 5.

NMA generally supports Option 3, but continues its objection to NRC licensees funding Agreement State oversight and training. NMA supports changes to the Omnibus Budget Reconciliation Act (OBRA) that would either fund such activities from appropriated funds or permit NRC to charge Agreement States for such activities. In the latter case, however, some basis for reduced charges could be justified in the name of preserving a consistent national regulatory program.

NMA believes that Option 3 does strike a balance between maintaining a coherent national program and allowing states some flexibility to "accommodate individual state preferences, state legislative direction, and local needs and conditions." On the other hand, a coherent national program requires that in some instances States must have "identical" regulatory requirements.

Finally, NMA notes that NRC's 1980 policy position to allow non-Agreement States to regulate the non-radiological constituents of 11e.(2) byproduct material runs directly counter to any policy to "strongly" support and maintain a viable Agreement State program. This issue is one that NRC should reconsider as part of the strategic reassessment of uranium recovery regulatory issues requested in several places in these NMA comments on NRC's SARI efforts.

c. DSI 5: Low-Level Waste

Question: What should be the role and scope of the NRC's low-level radioactive waste program?

The DSI paper poses six options as follows:

Option 1: Assume a greater leadership role;

Option 2: Assume a strong regulatory role in the National LLW program;

Option 3: Retain the current program;

Option 4: Recognize progress and reduce the program;

Option 5: Transfer the LLW program to EPA; and

Option 6: Accept "assured" long-term storage.

The Commission's preliminary views favor Option 2.

NRC has traditionally had a policy favoring disposal and discouraging long-term storage as a method of managing LLW. NMA concurs with this policy assuming that sound and cost-effective disposal alternatives are available. If such alternatives are not available then storage becomes a necessity for some period of time but long-term (i.e., permanent) storage should never become the goal both because of potential health and safety concerns and potential ongoing contingent liability concerns of licensees.

Option 6 ("assured" long-term storage) is a somewhat confusing concept. It raises questions of "perpetual" licensing that conflict with traditional assumptions regarding appropriate reliance on "institutional/active" controls. It could also cloud the issue of whether on-site disposal is a viable option and it appears to conflict directly with the assumptions underlying NRC's final regulations governing the "timeliness" of decommissioning. (59 Fed. Reg. 36026, July 15, 1994). (See also NEI Petition for rulemaking; 61 Fed. Reg. 43,193, August 21, 1996). Finally, it raises the obvious question that if "assured" storage is somehow different than long-term storage, how then is it different than disposal?

NMA believes that NRC needs to maintain a strong presence in the LLW field for a variety of reasons. First, as noted in its comments on DSI 4, NMA believes it is unlikely that any (or at best more than a few) Agreement states can bring to bear the necessary resources and expertise to maintain a sound, national quality program to address the many complex regulatory issues that are inherent in LLW disposal activities. As noted, NRC has done a significant amount of performance assessment work since the 1970's that should continue if LLW waste disposal practices are ever going to satisfy the concerns of the general public. Second, both NRC and Agreement State practices will have inevitable effects on uranium recovery licensee disposal practices and vice-versa and, finally, concerns about LLW disposal would only intensify greatly if NRC were to become DOE's external regulator.

If NRC were to withdraw from the field the resulting vacuum would almost inevitably be filled by EPA and not the Agreement States. NMA does not believe that EPA possesses the necessary experience and hands on expertise to handle such a program. NRC already has effective LLW disposal regulations in place that were developed in a major rulemaking proceeding involving all of the major stakeholders including DOE, EPA, Agreement States, industry and the general public. It makes no sense to abandon an existing program that is sound. Rather it makes more sense to aggressively address some of the LLW and related waste disposal issues (e.g., mixed waste, use of uranium mill tailings facilities for disposal of non-11e.(2) byproduct material and/or NORM, potential groundwater contamination issues, federal or state site ownership requirements, restricted use and on-site disposal) to find ways to resolve them with the Agreement States, DOE, EPA and the general public through Agency agreements or where necessary targeted regulatory or legislative changes.

NRC needs to take an active role in the continuing development of probabilistic and deterministic risk-informed, performance-based regulatory approaches to LLW disposal. In this regard, NRC and EPA have proposed radiological decommissioning criteria (15 mrem/y) to be effective for 1,000 years based on the cleanup of residual radioactive contamination and site use controls such as deed restrictions and zoning. The proposed 15 mrem/y limit is not a risk-informed regulatory limit. Additionally, these proposals ignore traditional assumptions regarding the reliability of institutional controls (even where government ownership is required), do not adequately consider the possibility of federal ownership of sites under §§ 151(b) and (c) of the Nuclear Waste Policy Act (NWPA) and leave unclear the credit for and undeniable benefits of engineered barriers and "waste form" requirements. As such, the NRC and EPA decommissioning proposals simplistically address the clean-up of residual radioactive contamination and arbitrarily ignore the "real world" implications that the proposals have for existing LLW disposal requirements and the potential impacts on existing and future LLW disposal capacity. NRC needs to work with its federal and state counterparts to encourage a coherent national approach to these issues and to explain to the general public how public health and safety is properly protected in the process.

d. DSI 9: Decommissioning -- Non-Reactor Facilities

Question: What should be NRC's strategy to take advantage of new and different approaches to optimize site remediation of the site decommissioning management plan and other problem sites?

The DSI paper poses nine options as follows:

Option 1: Continue the existing program;

Option 2: Change the decommissioning review process;

Option 3: Change residual contamination criteria and review scenarios;

Option 4: Adopt EPA's Superfund approach;

Option 5: Regulate source material consistently with naturally occurring and accelerator produced radioactive materials (NARM);

Option 6: Focus on decommissioning cases in which progress can be made; transfer stalled sites to the EPA's Superfund program;

Option 7: Take an aggressive position to develop regulatory frameworks for lower cost decommissioning waste disposal options;

Option 8: Develop a strong litigation strategy; and

Option 9: Seek Superfund authority.

The Commission's preliminary views favor a combination of options, including Option 2, Option 6, Option 7 and Option 8.

In combination, these options would place appropriate responsibility on licensees to remediate their sites while giving NRC appropriate tools to deal with problem sites and licensees. The Commission suggests that pilot projects be used to test implementation of Option 2 and with regard to Option 6, believes that, consistent with DSI 12, the staff should examine a level of risk associated with each site. Thus, the NRC would focus on the higher risk sites where progress is being made and place lesser emphasis on lower risk sites, while considering the feasibility of transferring the low risk, stalled sites to EPA's Superfund program on a case-by-case basis.

With respect to Option 1, NMA believes that continuing the existing SDMP program is a reasonably viable option. It represents a comprehensive effort to address decommissioning problems on a site-specific basis, the only way in which such problems can be addressed meaningfully. The entire SDMP program, however, raises one major concern that ultimately led to the

"back fit" rule in the reactor sector and which has been called the "movable regulatory goal post" or in the Superfund context the "reopener." There is an ongoing concern as represented by the SDMP program, that one may never be able to finally decommission a site and terminate a license because some GAO report or EPA initiative will cause NRC to reopen decommissioning decisions. There must be some finality to these decisions. Barring some clearly identified imminent and significant threat to public health and safety, NRC cannot continue to reopen decommissioning decisions merely because policies or standards change at a later date. Accordingly, since throughout this strategic assessment document, materials licensee sites are routinely referred to as *low risk* sites, it would appear highly unlikely, absent extraordinary circumstances, that reopeners could be justified for such sites.

Option 2, at least with respect to the materials licensee sector, including uranium recovery licensees, likely would not be acceptable. Given the problem noted above with respect to the SDMP program, and given the experience of all NMA member company uranium recovery licensees with regulators, it is highly unlikely that licensees would proceed to develop decommissioning programs and to implement them without some NRC blessing. The potential for expending enormous resources and then having to "begin all over again" as a result of the Agency changing its view is simply too large a risk to accept. Additionally, the potential for continuing contingent liability unabated by a "blessed" closure plan is not something that most licensees would like to have hanging over them after license termination. Therefore, NMA members would expect and require NRC's "blessing" which finally will be demonstrated by termination of their licenses.

With respect to Option 3, NMA heartily agrees that NRC should modify its proposed residual contamination criteria in a number of respects including an exclusion for "uranium recovery facilities" as opposed to just uranium mill tailings facilities and a 500 mrem/y intruder dose associated with a failure of institutional controls at a "restricted use" site. NRC also should allow more realistic and less conservative dose assessment scenarios and it should not finalize its proposed 15 mrem/y annual dose limit. The 15 mrem/y dose limit is not "risk-informed" in any way. It is unreasonable because of implementation difficulties, because it represents a tiny fraction of annual average natural background exposure, and because NRC (and for that matter, EPA as well) has no evidence suggesting that members of the public are likely to receive multiple exposures from nuclear fuel cycle facilities (including decommissioned sites) the cumulative impact of which likely would exceed the 100 mrem/y per year annual dose limit. NMA recognizes that EPA has the authority to effectively force NRC to adopt a 15 mrem/y dose under its authority to set "generally applicable standards" under the Reorganization Plan #3 of 1970, however, it is up to NRC, perhaps with DOE as an ally, to forcefully argue within the higher councils of government for a realistic residual radiation limit.

NMA's view of Option 4 is that it would be absurd to adopt EPA's approach for site closure at sites involving radioactive contamination. Both EPA and NRC have developed extensive regulatory standards covering operations and decommissioning of uranium recovery facilities through a decade of rulemaking and judicial activities. NRC has developed and Agreement States are implementing the requirements of 10 C.F.R. Part 61 for regulation of low-level radioactive waste disposal facilities. NRC has vigorously opposed EPA proposing additional criteria for low-level waste sites. The standards for control of chemical contaminants are different and

and in many instances inconsistent with those for uranium recovery and low-level waste disposal facilities. [See Thompson/Goo, Attachment A].

With respect to Option 5, NMA categorically opposes the transfer of regulatory authority over source material to EPA and to the states. Again, with NRC having developed extensive regulatory programs over decades, and having the expertise and experience to manage a national level program for control of source material, it would make no sense to transfer jurisdiction over those materials from NRC to EPA, states or any other agency. If anything, it might make sense to modify the AEA to provide NRC with the authority to regulate *discreet* NARM as opposed to diffuse NORM, which is a component of NARM.

With respect to Option 6, NMA cautions NRC that it may not be a wise precedent to regularly transfer or attempt to transfer stalled decommissioning cases to EPA's Superfund program. At present, it is EPA's policy to not put NRC licensed sites on the National Priorities List (NPL). To the extent that NRC regularly seeks to have sites under its jurisdiction placed on the NPL list, it may erode the basis for EPA's current policy. In the end, it could lead to any and all NRC regulated sites, including reactor sites, becoming more readily subject to Superfund. This would pose an entirely unattractive alternative to reactor licensees and could lead to NRC becoming a somewhat useless governmental appendage over the long term. If absolutely necessary, NRC should seek to transfer sites only in situations where there are *no* funds available for site closure. A better alternative in such cases would be for NRC to seek to obtain funds from Congress to supervise closure of such sites. Solving the problem of lack of funding should be addressed directly with Congress rather than by conceding authority given to NRC by the AEA.

NMA supports the basic concept which underlies Option 7 which is to allow licensees to propose alternatives for final decommissioning of sites based on site specific circumstances. NMA will address some of the specifics associated with the discussion of Option 7 hereinafter.

With respect to Option 8, NMA is somewhat confused by NRC's discussion of this option. To the extent that NRC is suggesting that it can (or should) modify its basic regulatory approach (i.e., the so called "audit" approach), wherein it can react swiftly to imminent and acute threats to public health and safety, but otherwise must rely on the primary responsibility of the licensee to protect public health and safety, NMA would object. The NRC regulatory process, which has been in place for many years and applicable to a broad spectrum of licensees, is generally speaking more risk-informed and performance-based than that of most of its sister agencies, particularly that of EPA. NMA would object to any basic change in the NRC's regulatory posture. NMA would not object to NRC developing policies and guidance, or rules with the involvement of the regulated community, to address potential concerns about licensee bankruptcy, surety or other nonperformance issues to avoid situations in which the capability to decommission sites is dissipated actively or passively by a licensee.

With respect to Option 9, NMA does not believe that Congress is likely to give NRC Superfund authority in the same fashion as it has been so unwisely doled out such authority to EPA. However, as noted above, NRC may be able to make a case at some point in time for amendments to the AEA to allow NRC to request appropriated funds for decommissioning of some sites where there simply is no licensee or no licensee resources for site closure. It is presumed

that in virtually every case the risk to public health and safety would not be imminent or NRC would have moved to take some form of protective action.

As noted above, DSI 9 begins with an introduction and summary of Commission views. Included in the summary is the following statement:

> In decommissioning non-reactor facilities, NRC must balance the need to proceed expeditiously to provide assurance of long-term protection of public health and safety against the need to cost-effectively use its resources and, as appropriate, those of the licensees.

NMA takes exception to the above statement because it represents an inappropriate regulatory posture. This can be highlighted by asking the following question: When is it appropriate for the NRC to waste the resources of a licensee? NMA would expect that there may be times when NRC staff and a licensee disagree about the use of resources, however, arbitrarily and capriciously forcing a licensee to waste its resources is unacceptable regulatory action. In terms of licensees authorized to possess and dispose of byproduct material, Section 84a.(1) of the AEA, as amended, states:

> 84a. The Commission shall insure that the management of any by-product material, as defined in section 11e.(2), is carried out in such a manner as (1) the Commission deems appropriate to protect the public health and safety and the environment from radiological and nonradiological hazards associated with the processing and with the possession and transfer of such material taking into account the risk to public health, safety, and the environment, <u>with due consideration of the economic costs</u> . . . (emphasis added).

NMA, therefore, recommends that the summary statement be amended as follows:

> In decommissioning non-reactor facilities, NRC must balance the need to proceed expeditiously to provide assurance of long-term

> protection of public health and safety against the need to cost-effectively use its resources, with due consideration of the economic cost to licensees.

NRC notes (DSI at p7) that where non-radioactive hazardous or solid wastes are involved, remediation time tables and options are sometimes dictated by state or EPA requirements. "Because non-radioactive hazardous and solid wastes requirements are based on somewhat different objectives and requirements, differences have resulted in project delays because of the use of schedules and administrative processes mandated by EPA requirements and technical provisions that placed additional conditions on licensees." Id. As NMA noted above, the differences in the approach to disposal of hazardous and solid waste versus low-level radioactive waste and uranium mill tailings, are significant and NRC needs to take a far more aggressive posture on these issues. The conflicts between the two systems have led to a virtual dead-lock in the disposal of mixed waste that is unnecessary and extremely costly. [See Thompson/Goo, Attachment A]. Additionally, the NRC's position with respect to non-Agreement State authority over the non-radioactive constituents in 11e.(2) byproduct material, poses the potential or developing a similar "mixed waste conundrum" for uranium recovery licenses. NMA is requesting, as part of these comments on NRC's strategic assessment, a reconsideration of a variety of regulatory issues and decisions effecting uranium recovery licensees on a strategic basis. Again, NMA is making this request for Commission consideration as a placeholding component of its comments in this proceeding.

NRC also notes (DSI at p.8) that in general, Agreement States use similar decommissioning criteria as NRC, but several have terminated licenses using deed or other zoning restrictions. It is also true that NRC has allowed the waiver by a state of one of the basic components of its 10

C.F.R. Part 61 regulations (the requirement for state or federal government ownership of low-level waste disposal sites) without a thorough examination of whether this precedent strikes at one of the fundamental underpinnings of the 10 C.F.R. Part 61 regulations. [See Umetco Minerals Corporation's comments to NRC's advanced notice of proposed rulemaking (ANPR) on land ownership requirements for low-level radioactive waste (LLW) sites, Attachment B]. For example, NMA believes that with respect to NRC's and EPA's proposed decommissioning regulations where complex sites are involved , the requirement to assure that no individual receives more than 15 mrem/y for 1,000 years based on institutional controls such as deed restrictions and zoning restrictions is fatuous.

Although the proposed rule does not purport to require (or proscribe) the use of any particular type of institutional control to achieve the 15 mrem/y or 100 mrem/y default standards, NRC does provide the following examples of possible controls: deed restrictions on future use, such as restrictive covenants, equitable servitudes and easements, land use regulation through zoning, deed notices, government ownership of property, trustee arrangements, other restrictions such as site-access restrictions, soil-excavations, and groundwater use restrictions, and cooperative agreements. (NUREG-1496, p. F-1.) In any event, as noted above, the proposed 100 mrem/y default standard should be changed to a 500 mrem/y default standard.

Some of these institutional controls are inherently speculative and clearly inadequate to provide the long term assurance of control and maintenance required for a "restricted use" site. For example, zoning restrictions can be easily modified by the local zoning authority (or the state legislature), meaning that zoning restrictions lack the durability needed to assure long-term

control over restricted use sites. Moreover, the zoning process is highly susceptible to political and economic pressures that may be completely divorced from any concerns for radiological safety. As one commentator has noted, "[t]he essence of modern zoning is the pervasive sacrifice of permanent property rights to transient property values." (James Bovard, "Lost Rights" as quoted by The Washington Times, June 11, 1994, p. D3.) These factors combine to make zoning particularly ill-suited for controlling the use of a site to provide long-term protection against possible exposure to radioactive materials.

Other types of controls discussed by NRC, in particular, equitable servitudes and easements, are facially more appealing and were viewed favorably by NRC. However, these two mechanisms also have substantial limitations. Broadly speaking, both of these mechanisms lack consistency and predictability. For example, the types of controls that can be imposed through an equitable servitude or easement, the mechanics of imposing a particular restriction, and the enforceability of restrictions imposed through these devices will vary from one jurisdiction to the next. In addition, the meaning and scope of a particular restriction imposed through an easement or servitude will depend entirely upon the intent of the drafters of the relevant property documents and on the local courts that interpret those types of documents.

At a more fundamental level, equitable servitudes and easements are inappropriate for assuring long-term control over restricted use sites because they permit, and in fact contemplate, that site ownership will remain in private hands following decommissioning. However, private ownership or restricted use sites is inherently unstable, particularly when compared with the option of government ownership.

Among other things, private ownership means that restricted use sites are owned by entities that are motivated by economic concerns and subject to economic pressures, which may at times conflict with concerns for long-term radiological safety. Moreover, in a system of private ownership, the same entities that own a decommissioned site will also be in a position to undermine the restrictions on site use imposed by these institutional controls. (For example, a state government might be lobbied to assume ownership of a site through exercise of its eminent domain powers, which could have the effect of nullifying any restrictions contained in an equitable servitude.)

In addition, there can be no assurance that the owner of a restricted use site will remain in existence over the extended time frame required for the control of the site. For example, NRC has not fully evaluated how the durability and enforceability of these institutional controls would be effected if a site owner declares bankruptcy. It is conceivable, and perhaps even likely, that a trustee in bankruptcy would not want to retain the restricted use site. NRC has not addressed the consequences of this scenario, and the possibility that the property in question might revert to the state -- which might not be bound by an equitable servitude, or which, as the beneficiary of an easement, might be in a position to terminate the easement.

Finally, private ownership has the potential to complicate enforcement of applicable site restrictions. To enforce a use restriction, the government would be required to bring suit against the private owner -- who could be expected to resist such an enforcement attempt. Indeed, NRC states that "[w]hatever type of [institutional] controls are proposed by the licensee, the licensee must demonstrate that the controls proposed have a reasonable expectation of enforcement." (59

Fed. Reg. at 43,225.) In light of the above discussion, how could a licensee comply with such a requirement? How could a licensee demonstrate that the likelihood of enforcement for 1,000 years is not "speculative" when the ultimate decision will be in the hands of an unknown federal, state or local judge?

Most, if not all, of these uncertainties about the "permanency of restriction" would be eliminated to the maximum extent practicable if the federal government were to assume ownership of restricted use sites following decommissioning. Under this scenario, the government would exercise direct control over the use of the site. Clearly, the federal government would be immune from the types of profit and loss motives that animate private owners, and that have the potential to conflict with concerns over the long-term control of exposure to radioactive materials from the site. Moreover, government ownership would provide a more durable and stable mechanism for control than could be achieved with shorter-lived private entities. For example, there would be no concerns over whether the actions of a trustee in bankruptcy would be compatible with the long-term controls required for restricted use sites. In addition, government ownership would largely eliminate potential difficulties pertaining to enforcement of the use restrictions against third parties, since the government would be the owner of the site in question.

Accordingly, NMA believes that the most effective and most appropriate mechanism for imposing long-term controls over restricted use sites (particularly those candidates for on-site disposal and/or indefinite licenses) would be for the federal government to be able to assume ownership of these sites following decommissioning. NRC should consider a mechanism similar to that already in place for government ownership of low level waste disposal sites under the

NWPA of 1982. (42 U.S.C. § 10,101 et seq.) Under Section 151 of this Act, the government is authorized to take ownership of a site after the licensee has met NRC's requirements for site closure and if the Commission determines that "federal ownership and management of the site is necessary or desirable in order to protect the public health and safety, and the environment" (42 U.S. § 10,171(b).) Land and waste acquired by the government must be maintained so as "to protect the public health and safety, and the environment." Id. NRC should consider seeking an interpretation of this legislation that would enable DOE to take title to decommissioned sites that are to be released for restricted use.

NRC acknowledges that "[g]overnmental ownership provides for ultimate controls over the use of land [for restricted use sites];" however, the Commission concludes that this option is too expensive -- presumably because of maintenance costs and potential the liability for off-site damages. (NUREG-1496, Vol. II, pp. F.15, F.17.) NMA disagrees with NRC's conclusion that government ownership of restricted use sites is "too expensive." In the first place, the proposed regulations would require the licensee to provide adequate financial assurance to enable a third party to "assume and carry out responsibilities for any necessary control and maintenance of the site." (59 Fed. Reg. at 43,229) These financial assurances should be adequate to address most if not all of the costs of site ownership that NRC contends are "too expensive." Thus, there is simply no support for NRC's conclusion that federal ownership of restricted use sites would be too expensive to implement.

It would be arbitrary for the Commission to dismiss this option without thorough analysis and adequate support in the record.

As another threshold matter, NRC should clarify that "passive," "engineering" controls as well as institutional controls should be permitted to be used to achieve the 15 mrem/y standard (and the default standard) for "restricted use" sites. As currently drafted, the proposed rule is ambiguous on this point.

For example, in addressing the 15 mrem/y standard, the proposed rule focuses solely on institutional controls, stating that a licensee seeking release of a site for restricted use must provide for "institutional controls that provide reasonable assurance that the [15 mrem/y limit will be achieved];" and that "[i]nstitutional controls must be enforceable by a responsible government entity or in a court of law." (59 Fed. Reg. 43,229 (emphasis added) Similarly, in the context of the 100 mrem/y default standard, the proposed regulations focus on institutional controls (or the breakdown of those controls), addressing passive engineering controls only in exclusionary terms. Specifically, the regulations would provide that residual radioactivity must be:

> reduced so that if the institutional controls were no longer in effect, there is a reasonable assurance that the [100 mrem/y limit will be achieved]. Calculations used to show compliance with this provision may not assume any benefits from earthen cover or other earthen barriers unless specifically authorized by the Commission. (59 Fed. Reg. at 43,230)

Despite this language in the proposed rule, there is some question whether NRC intended to exclude engineering controls when considering whether the 15 mrem/y and default standards for restricted use have been satisfied. First, in the preamble discussion of the restricted release provision, the Commission explains that one criterion that must be satisfied before a site can be released for restricted use is that "[t]here are adequate provisions for institutional and/or other passive controls to provide reasonable assurance that the [15 mrem/y standard will be met]." (59

Fed. at 43,220 (emphasis added). See NUREG-1500, p. E-2.) The clear implication of this language is that passive engineering controls may be used in addition to institutional controls in order to achieve the 15 mrem/y standard. Similarly, the language in the proposed rule that excludes the use of earthen barriers to achieve the default standard suggests, albeit by negative inference, that passive engineering controls other than the use of earthen barriers can be used to attain the default standard without the specific authorization of the Commission (and that earthen barriers can be used, with NRC's consent).

Moreover, it would be inappropriate and inconsistent for the Commission to exclude passive engineering controls in assessing whether a site satisfies the 15 mrem/y and default limits (or whatever final limit(s) might be established) for restricted use. In other contexts where NRC and EPA have sought to limit potential long term exposure to radioactive materials, both agencies have relied upon a mix of institutional controls and passive engineering controls. For example, the regulatory programs set out at 10 C.F.R. Parts 40 and 61 rely upon passive engineering controls to minimize potential long term exposure to radioactive materials. Implicit in both of these programs is the assumption that institutional controls alone, even government ownership of a site -- arguably the single most reliable and effective type of institutional control -- is inadequate to provide the requisite long term protection from potential public exposure.

Finally, NRC has not articulated any rationale for abandoning the use of passive engineering controls as a means of achieving the 15 mrem/y or the default standard for restricted use sites, and it would be arbitrary for the Commission to take that position in the final rule.

Despite NRC's intention to the contrary, many complex sites may become "de facto disposal sites because large volumes of waste will be generated as sites try to comply with the criteria." (59 Fed. Reg. at 43,215.) NRC does not consider the generation of large volume waste disposal issue in any depth except to note that "decommissioning to radiation levels approaching background may produce large volumes of low-level waste which could affect the availability of regional disposal capacity." (59 Reg. at 43,210.) Presumably, NRC did not evaluate this issue realistically because any such analysis would have to consider that there is not now, and is not likely to be in the near future, sufficient disposal capacity for any significant quantity of such wastes. NRC's generic analyses then would have to confront directly one of the numerous problems raised by setting a standard at the low end of the variations of natural background. Before these criteria are finalized, NRC must find real world solutions to the waste disposal problems created by the 15 mrem/y limit.

As noted, one solution is on-site disposal for sites with large volumes of low-level radioactive waste. Assuming the appropriate restrictions, passive and institutional, are in place and access to the site limited, on-site disposal may be the most viable means of protecting the public health and the environment. Such a scenario is particularly true where the risks and costs to the public and those involved in the removal and transportation activities of moving the contaminated material off-site outweigh the benefits to the public health and the environment.

Therefore, as discussed above, NMA suggests that Sections 151(b) and (c) of the NWPA or similar amendments to the AEA should be the focus of NRC and other federal agency activity with respect to assuring government ownership of complex sites where "restricted use" and on-

site disposal is expected. The provisions of the NWPA and the similar provisions of UMTRCA that respectively allow or require government ownership of such sites make entirely too much sense to be ignored. If the basic assumptions underlying the development of uranium mill tailings and low-level waste regulations are that institutional controls, including those of the federal government, cannot be relied upon for periods in excess of 100 years, then relying on deed restrictions and zoning restrictions is flimsy at best. Thus, either the fundamental assumptions need to be changed or looking to NWPA and UMTRCA precedent seems logical. It is time to recognize that restricted use (which may include on-site disposal areas) of major portions of large, complex commercial licensee facilities that have wide ranging contamination, as well as major portions of federal DOE facilities similarly contaminated, is a reasonable, cost-effective component of controls necessary to protect public health and safety. And, if there truly is concern about long term protection of public health associated with on-site disposal at such sites, then federal or perhaps state ownership makes the most sense.

NMA also notes that a very important open issue with EPA at materials licensee sites, including uranium recovery facilities, is groundwater protection. There is an extensive regulatory program under UMTRCA, based on EPA regulations to which NRC has conformed its 10 C.F.R. Part 40, Appendix A criteria, that addresses groundwater protection at uranium recovery sites. At a recent Commission briefing by the Uranium Recovery Branch staff, Chairman Jackson asked whether or not the uranium recovery staff's experience with groundwater protection and control issues could be relevant "to other parts of our program?" The staff acknowledged that it could and NMA agrees. The Title I and Title II uranium mill tailings programs have developed, and are continuing to develop, a great deal of experience with respect to addressing groundwater

protection issues including the use of "alternative concentration limits (ACLs)," "supplemental standards," and possibly other alternatives that give regulators and licensees significant flexibility in addressing what are likely to be the most problematic issues associated with site decommissioning at complex materials licensee sites. In keeping with the importance of groundwater issues, as noted above, NMA is requesting as part of a requested strategic review of a variety of uranium recovery licensee related issues, that NRC reconsider its policy to allow non-Agreement States co-regulatory authority over the non-radiological components of 11e.(2) by-product material.

NRC raises several subsumed issues for comment and discussion.

Subsumed Issue No. 1. What is the optimum rate of removal of sites from the SDMP?

The optimum removal rate is that rate which *finally* removes sites from the list in a cost-effective manner. Since there is no imminent hazard associated with virtually any of these sites, it is far better to take whatever time is necessary within reason to close such sites once and for all, than it is to develop some artificial "optimum rate" of removal.

Subsumed Issue No. 2. What is the best strategy to implement NRC's non-reactor decommissioning regulations?

NMA notes that NRC has promulgated timeliness in decommissioning regulations which ostensibly are designed to provide NRC the enforcement authority to promote and to alert licensees to the necessity to promote site decommissioning. NMA has noted in its settlement of

litigation with NRC and in its comments on NEI's petition for rulemaking that the timeliness in decommissioning regulations are unrealistic. They do not provide for "standby authority" for licensees who demonstrate through maintenance of appropriate surety and fulfillment of license requirements that they are adequately protecting public health and safety and that their operations are in the public interest. The concept of "assured storage" discussed in DSI 5 for Low-Level Wastes seems to raise the possibility (which also is discussed in NRC's proposed decommissioning regulations) of *perpetual licensing*, which is antithetical to the concept of aggressively using legal tools to promote prompt decommissioning. Thus, NRC has muddied the waters considerably as a result of its proposed decommissioning regulations versus the discussion in other portions of the SARI. As noted above, NMA would agree that developing tools to enable NRC to move quickly in the event of a "midnight dumper," or if a licensee to plans to "leave the keys in the mailbox" and jump ship, would be appropriate as long as there is adequate stakeholder involvement from the very beginning of the "scoping " process to develop such tools. This could include a reconsideration of the surety requirements, including ways to protect unused surety funds from bankruptcy proceedings, which may assist licensees in getting more reasonably priced surety arrangements.

Subsumed Issue No. 3. What is the best strategy for dealing with unlicensed possessors of licensable material?

It is NMA's understanding that NRC, (witness the SDMP program), asserts that it has the authority under the AEA to proceed against former licensees to require them to re-open sites or to complete decommissioning if left incomplete in some fashion. NMA again raises the concern

regarding the "movable goal post" which denies finality to the decommissioning process. With respect to property that is contaminated based on legal releases, NMA would assume that such releases would be essentially an anomaly and may no longer be subject to the authority of the NRC under the AEA. With respect to contamination of an innocent party's property by the illegal act of a former licensee, the NRC should certainly proceed against such licensee, however, if the licensee cannot be determined, it should be the responsibility of the federal or state government to clean up the site and not that of the innocent land owner.

Subsumed Issue No. 4. How can NRC assure the bankrupt or non-viable corporations appropriate use their assets to complete site remediations?

NRC cannot assure that bankrupt or non-viable corporations will appropriately utilize their assets to complete site remediation. NRC can, as noted above, consider modifying the provisions of the standby trusts and reevaluate its surety requirements to provide that surety funds are placed in a trust that is protected from bankruptcy proceedings. This would protect surety funds from being used for other purposes than site closure, and to the extent that funds left over from forfeiture of a surety instrument are returnable to the surety and are not subject to bankruptcy proceedings, it should improve the basis upon which licensees can get surety arrangements.

The other prime means by which NRC can assure that nonviable and bankrupt operations can achieve closure of sites is to provide those responsible whether it be a trustee or the "non-viable corporation" with the utmost flexibility to propose alternatives for site closure. NRC and Agreement States will have to be realistic with respect to what can be done with resources

available, and particularly in view of the low-level risk that is associated with a large number of materials licensee sites, including uranium recovery facilities. An example of NRC taking a flexible approach, can be seen in the context of the NRC's treatment of the State of Wyoming's efforts to decommission the formerly operated American Nuclear uranium mill tailings facility in Wyoming.

Subsumed Issue No. 5. How much flexibility should be given to licensees who want to propose alternative approaches for complying with decommissioning regulations?

NMA has noted above that much that has been learned in conjunction with the development, and more recently the application, of the uranium recovery decommissioning and reclamation regulations is relevant to other types of materials licensee decommissioning decisions. Experience at closing Title I and Title II sites indicates that flexibility is one of the most critical elements of licensee and NRC efforts to finally close sites. Section 84(c) of the AEA, as amended by UMTRCA, explicitly provides licensees with the authority to propose alternatives to requirements of the Commission, based on site-specific considerations such as local or regional conditions, including geology, topography, hydrology and meteorology, as long as the alternatives will provide essentially equivalent protection of public health and the environment. The provisions of 10 C.F.R. Part 40 Appendix A similarly provide for flexibility and licensee alternatives as follows:

> In many cases, flexibility is provided in the criteria to allow achieving an optimum tailings disposal program on a site-specific basis...Licensees or applicants may propose alternatives to the specific requirements in this appendix. The alternative proposals may take into account local or regional conditions, including geology, topography, hydrology and meteorology.

> Moreover, the Commission acknowledges that in making a licensing decision based upon the criteria set out in the Appendix (or based upon alternatives proposed by the licensee), it is appropriate for the Commission to consider economic costs as well as impacts on health, safety and the environment.
>
> All site specific licensing decisions based on the criteria in this Appendix or alternatives proposed by licensees or applicants will take into account the risk to the public health and safety and the environment with due consideration to the economic costs involved and any other factors the Commission determines to be appropriate. (10 C.F.R. Part 40, Appendix A)

As noted above, with respect to groundwater contamination and protection issues, the flexibility provided under the provisions of Appendix A which conform to EPA requirements is critical, particularly, where a licensee may be looking at on-site disposal which may be the only cost-effective means of decommissioning a complex materials site. Licensees should be able to seek to utilize ACLs, supplemental standards, some mix of the two, and perhaps other alternatives. Therefore, NMA urges NRC to consider modifying its rules or developing policy guidance for other materials licensees that would permit them to apply for ACLs, supplemental standards and other alternatives that the licensee can demonstrate provide an equivalent level of protection. This means either NRC must propose regulatory changes or change its current posture with respect to allowing exceptions and exemptions to the rules. If there is to be risk-informed, performance-based decommissioning, then this kind of flexibility is critical.

With respect to NRC (and EPA's) current proposed decommissioning standards, to the extent that they are relevant to the uranium recovery facilities, NMA urges that they be reconsidered. The facilities, as NRC acknowledges, essentially will not address decommissioning of complex sites. Thus, the Agency is in the position of proposing regulations which will be

effective for ninety to ninety-five percent of the sites that pose five to ten percent of the potential risk and totally inappropriate and ineffective with respect to those five to ten percent of the sites that pose ninety to ninety-five to ninety percent of the potential risk. That alone should raise a question about a usefulness of the current proposal. The Advisory Committee on Nuclear Waste (ACNW) has questioned the 15 mrem/y limit (as did AMC, now NMA) in its comments. NMA recommends a change in the proposed criteria. A good starting place would be to allow for a 500 mrem/y intruder dose at "restricted use" sites rather than the currently proposed default value of 100 mrem/y or EPA's proposed 75 mrem/y. To the extent that the standard is to be based on apportioning the 100 mrem/y annual dose limit for members of the general public, it should consider a more reasonable division of that dose limit based on some affirmative evidence, or at a minimum reasonable assumptions, regarding the likely exposure of members of the public to multiple nuclear facilities. Perhaps, as the ACNW suggests, the limit ought to be on the order of one-quarter or one-third of the 100 mrem/y dose. This would be reasonably compatible with the current 10 C.F.R. Part 61 public exposure limit. NRC should consider and discuss with sister agencies the applicability of sections 151(b) and (c) of the NWPA to provide satisfactory institutional controls through federal government ownership of some of the complex existing sites.

With respect to whether or not uranium mill tailings facilities can be utilized to dispose of some similar types of radiological wastes, NMA has noted this issue is a placeholder that should be part of a strategic reassessment of uranium recovery issues. Criterion No. 2 of Appendix A to 10 C.F.R. Part 40 suggests that it is NRC's policy not to encourage multiple disposal sites, and given the difficulties associated with permitting new sites, it only makes sense to utilize existing facilities which are subject to a comprehensive regulatory program such as that applicable to

uranium recovery facilities. This program involves NRC regulation not only of the radiological components of such facilities but also the non-radiological and components as well.

e. DSI 12: Risk-Informed, Performance-Based Regulation

Question: What criteria should NRC use in expanding the scope in applying a risk-informed, performance-based approach to rulemaking, licensing, inspection, and enforcement?

The DSI paper proposes four options as follows:

Option 1: Continue the current process;

Option 2: More rigorously assess the relationship to public health and safety;

Option 3: Perform a comprehensive assessment of NRC regulatory approaches; and

Option 4: Consider risk-informed, performance-based approaches/primarily in response to stakeholder initiatives.

The Commission's preliminary views favor Option 1, to continue current efforts in cooperation with industry (including pilot programs) and particularly in the context of the Agency's Probabilistic Risk Assessment (PRA) Implementation Plan. With regard to enhancing the PRA Implementation Plan, the Commission would direct the staff to move towards implementing elements of Option 3. In particular, the staff should perform a thorough review of the basis for nuclear materials regulations and process, and should identify and prioritize those areas that are either now, or can be made, with minimal additional effort/resources, amenable to a risk-informed, performance-based approach.

NMA agrees with the proposed preliminary approach and, in keeping with Option 4, specifically requests that the Commission consider NMA's proposal set forth in its comments on

DSI 13 to perform a comprehensive reevaluation of a variety of NRC regulatory decisions related to uranium recovery licensees with risk-informed, performance-based regulation as a component thereof.

NMA notes that statutory and regulatory provisions applicable to uranium recovery licensees (e.g., decommissioning of uranium recovery facilities to provide assurance of compliance with regulatory limits for radon emissions and groundwater impacts for 200-1,000 years primarily through "passive" rather than "active/institutional" controls) necessarily implicate the use of PRA in conjunction with deterministic and performance-based approaches to provide the necessary, "reasonable assurance" of defense-in-depth protection of public health and safety that is required. Radiological and nonradiological (e.g., seismicity, PMP/PMF, actuarial risks of reclamation, potential nonradiological groundwater contamination) risk assessment are already necessary components of evaluating new license applications and final decommissioning plans for uranium recovery licenses. [See "Risk/Cost Analysis: A Case Scenario in the Decommissioning of a Radiological Site," Article by Anthony J. Thompson and Douglas B. Chambers, attached hereto as Attachment C, and See Also, "Earthquake Hazards in the Intermountain U.S.: Issues Relevant to Uranium Mill Tailings Disposal," Article by Ivan G. Wong, Susan S. Olig, Bruce W. Hassinger and Richard E. Blubaugh, attached hereto as Attachment D.] It is also true that risk assessment in some measure has and will continue to drive enforcement decisions.

NRC has invested substantial resources since the mid-1970's in performance assessment methods for low-level and high-level waste disposal which are of necessity informed by PRA. 60 Fed. Reg. 42622, 42628 (August 16, 1995). Finally, if as ICRP has suggested, major

regulatory decisions such as those associated with final decommissioning of complex sites (particularly existing sites), "should do more good than harm" then risk-informed, performance-based decision making is an absolute necessity. (See, "1990 Recommendations of the International Commission on Radiological Protection, ICRP Publication 60 (1991), p. 28, 59; See Also Health Physics Society (HPS), "Scientific and Public Issues Committees Position Statement: Radiation Standards for Site Cleanup and Restoration (June, 1993) p. 7,9). In this regard, the NRC and EPA proposed decommissioning limit of 15 mrem/y is not a risk-informed regulatory limit. Neither is it performance-based in the sense that it may be difficult (and only at great expense), if not impossible, to determine compliance at complex sites involving significant soil or groundwater contamination with naturally-occurring radionuclides.

Thus, the suggestion on pages 21 and 23 that it is not apparent that nuclear materials licensees will benefit significantly from risk-informed, performance-based decisionmaking, at least with respect to NMA's uranium recovery facilities and materials licensees subject to the proposed decommissioning limit, simply is inaccurate. Although involving lower risk and less complexity than many reactor-related regulatory issues, materials licensees face many issues that allow for, and indeed often require, risk-informed, performance-based decisionmaking to provide the necessary flexibility to satisfy regulatory requirements.

A comprehensive initiative by NRC, as well as in response to stakeholder initiatives, to evaluate risk-informed, performance-based regulatory approaches will increase pressure on NRC to resolve dual regulation issues (e.g., risk harmonization, mixed waste, use of uranium mill tailings for non-11.e(2) byproduct material and diffuse NORM disposal), and to explain the

potential benefits and impacts through public communication efforts. NMA believes that NRC has both the responsibility and capability to do so. More efficient, cost-effective regulation that provides the necessary reasonable assurance of public health and safety will benefit all stakeholders.

f. DSI 13: The Role of Industry

Question: In performing its regulatory responsibilities, what consideration should NRC give to industry activities?

The DSI paper poses five options as follows:

Option 1: Continue the current program;

Option 2: Expand the role of industry;

Option 3: Increase accreditation and certification of licensee activities;

Option 4: Increase interaction with industry and professional groups, and

Options 5: Use a "designated industry representative."

The Commission's preliminary views favor Option 1, which is to continue to evaluate industry initiatives proposing further reliance on industry self regulatory activities as an alternative to NRC regulatory activities, on the basis of evaluation guidance to be developed by the staff describing process and decision criteria. Additionally, the NRC should increase interaction with industry groups, professional societies and technical institutes pursuant to Option 4. The Commission also thinks that Option 5 may have some potential where NRC oversight through inspection is infrequent.

On the one hand, the DSI paper suggests that NRC needs an overall policy "regarding the credit that should be given to industry activities that contribute to the achievement of necessary safety objectives." (DSI 13 at p.2) On the other hand, NRC notes that its recent enforcement policy expands credit to licenses that promptly identify and correct violations -- as it should! This raises the question of what is meant by the term "credit?" Credit in a specific enforcement context may be relatively easy to identify in both qualitative and quantitative terms. In addressing the broader question of how much reliance NRC can place on industry self-policing, the term credit may really mean "credibility." This will always be a difficult issue to address in light of the necessary tension between the prime objectives of the regulator as distinguished from those of the licensee. However, in the context of NRC's regulatory program, where the licensee has the primary responsibility to assure the protection of public health and safety and the NRC uses an "audit" approach to regulatory oversight, it should be more readily achievable than in some other regulatory contexts. Further, NMA believes it is a worthy goal that has led to and will in the future lead to more efficient and effective regulation. NMA believes that Option 1 with appropriate guidance, combined with Option 4, provide a platform for further progress.

NMA, however, heartily disagrees with the DSI paper's rather negative assessment of materials licensee industry groups' involvement (See DSI 13 at pp. 6,12,14; App. A, pp. 23-37) -- particularly, with respect to uranium recovery licensees. NMA has participated actively on behalf of its uranium recovery licensees in legislative, judicial and regulatory proceedings relating to its members for several decades. In that time, NMA and its licensee members have developed technical and regulatory expertise on relevant issues second to none, including that of NRC staff.

In keeping with its comments on DSI 14 (Public Communication Initiatives), NMA believes that the best way to establish credibility (on both sides of the regulatory equation) is to seek early and ongoing involvement on regulatory issues of generic importance with relevant industry groups like NMA. An ongoing dialogue that preserves the necessary dichotomy between the regulator and the licensee can contribute substantially to a mutual understanding of the critical issues and, thus, inevitably to more efficient and effective regulation in the public interest.

It is worth, noting in this regard, a number of success stories that are not reflected in the DSI paper. First, after NRC, over NMA's strenuous objections, closed the Uranium Recovery Field Office (URFO) in Denver, a collaborative effort developed between NMA on behalf of its members, some individual licensees, and NRC's Waste Management Division staff to minimize the inevitable delays and confusion caused by the loss of institutional memory at NRC as a result of URFO's closure and the obvious cost increases associated with dealing directly with NRC headquarters in the Washington, D.C. area. NRC formed a transition oversight team (TOT) that joined with NMA and others to attempt to make the new system work. As part of this effort, NMA suggested and ultimately co-sponsored with NRC a conference in Denver, Colorado in March, 1994 to introduce NRC's new uranium recovery staff to licensee and Agreement State personnel and issues, and vice-versa. This joint conference has been held each year since that initial effort and has attracted over 100 participants annually from the licensee community, NRC, Agreement States, DOE and EPA. There have been additional ongoing formal and informal meetings between NRC staff and NMA representatives which continue to address preexisting and "cutting edge" issues of regulatory concern. This process has stimulated creative efforts on the part of all involved that have resulted in, or will result in, reduced regulatory oversight where

appropriate. For example, the concept of performance based license conditions (PBLC's) was addressed and a policy to encourage them ultimately developed for uranium recovery licensees.

In another context, the Fuel Cycle Facilities Forum (FCFF), a materials licensee group, co-sponsored a "tabletop" exercise to assess the feasibility of compliance with NRC's proposed 15 mrem/y residual radioactivity standard for decommissioned sites. This excellent exercise demonstrated to NRC staff that, at complex sites with naturally occurring radionuclide contamination, compliance with the proposed limit may be essentially impossible and certainly extremely difficult without largely unwarranted costs for the benefit to be derived.

Thus, NMA, on behalf of its uranium recovery licensees, and other groups such as FCFF believe that they have participated effectively and aggressively with NRC to address cost-effective regulatory oversight. In that regard, NMA notes that a variety of NRC decisions regarding regulatory issues affecting uranium recovery operations under the AEA, as amended by UMTRCA, are leading to a series of complex and puzzling problems for uranium recovery licensees. These NRC decisions (e.g., NRC's assertion of jurisdiction over ISL wellfields, NRC's decision to afford non-Agreement States jurisdiction over the nonradiological component of 11e.(2) byproduct material, NRC's staff guidance on effluent disposal, NRC's policy guidance on placing non 11.e(2) byproduct material in uranium mill tailings pile, etc.) were made a differing times and for differing reasons without the benefit of a strategic overview. The result is that uranium recovery licensees are facing a bewildering, crazy-quilt of regulatory contradictions and inconsistencies in the uranium recovery program. NMA has proposed to NRC staff that NMA present a White Paper or petition to the Commission outlining these issues and their related problems with

a proposal that the Commission reevaluate its positions as part of a "strategic" reassessment of uranium recovery regulatory issues. NMA believes that it is entirely appropriate to note this proposal as a "placeholder" in its comments on NRC's overall strategic reassessment.

NMA will continue its dialogue with NRC and develop a timeframe for presenting such a proposal to the Commission. NMA, therefore, specifically requests that the Commission take note of this comment and provide an opportunity as a part of, or as an adjunct to, this proceeding to reconsider these critical issues for uranium recovery licensees.

g. DSI 14: Public Communications Initiatives

Question: What approach should NRC take to optimize its communication with the public?

The DSI paper poses three options as follows:

Option 1: Continue the existing approach;

Option 1(a): Focus on maximizing effectiveness and economy;

Option 2: Place a priority on early identification of public concerns and methods for public interaction; and

Option 3: Place a priority on expanding general public outreach.

The Commission's preliminary views favor Option 2 and Option 1(a).

NMA is of the view that all of the options are essentially subsumed in Option 1 which reflects a "maximum" dissemination of agency documentation to the public, timely and professional response to inquiries, and structuring of NRC activities to facilitate public participation. NMA believes that public participation cannot be facilitated effectively without "early

identification" of public concerns and methods for public interaction -- this is true for the "licensee" public and the general public as well.

The failure to develop public input at the earliest stages not only leads to less useful input, but also to less efficient use of resources and often public resentment. For example, NMA has continually expressed its desire to be included in "scoping" discussions on proposed regulatory guidance (e.g., effluent disposal guidelines) and other relevant NRC efforts (e.g., the Lawrence Livermore study regarding seismicity concerns at uranium mill tailings facilities). The failure to involve the "licensee" public at early stages of both of the cited documents has led to less competent documents and, by definition, wasted resources.

NMA also believes that it is important for NRC to expand its general public outreach per Option 3. Those who deal regularly with NRC understand its statutory authority and resulting regulatory posture. Most members of the media and general public (which apparently often includes sister federal and state agencies) do not! The DSI paper acknowledges this in the discussion on public confidence in paragraph 4 on page 7. For example, the general public is not aware that "the Commission's role in protecting the radiological health and safety of the public is a limited one, confined primarily to granting applications with or without conditions or denying applications and does not include authority to undertake developmental programs." (49 Fed. Reg. 9352, 9356, March 12, 1984; See also DSI 13 at pp. 2-3.)

NMA also agrees that as NRC develops risk-informed, performance based regulatory approaches, the need for effective communication will be increased substantially. For example, the public needs to understand the difference in regulatory approaches taken by NRC and EPA. The

public will not understand that although NRC's regulations may appear less restrictive then EPA's regulations, the final result is much the same when NRC guidance documents and the ALARA principle are factored into the equation. [Thompson/Goo, Attachment A, p. 10715-16; See also; "Status of Risk Harmonization with the EPA under the 1992 MOU," SECY-93-134, p.7-8].

While NMA encourages general public involvement at an early stage, in certain circumstances such involvement can be premature and destructive of an effective dialogue between the regulator and the licensee. NRC's public meeting policy goal is designed to provide meaningful opportunities for the public to be informed but without unduly affecting open and candid discussions between licensees and NRC staff. As NMA has stated in the past, if the public becomes involved at the stage when "preliminary" ideas, proposals and data are the focus of the dialogue, it could have a "chilling" effect on the willingness of licensees to work with NRC staff to solve regulatory problems. Additionally, since NRC does not regard inspections as public meetings, NMA unequivocally objects to public participation in enforcement conferences resulting from such inspections.

With respect to NRC's proposed standards for site decommissioning, NMA again states its opposition to any requirement that formalizes the mode of public involvement such as by requiring Site Specific Advisory Board (SSAB). NRC should follow its basic approach to performance based regulatory requirements and allow licensees the flexibility to develop the most appropriate site specific mode for public involvement.

h. DSI 21: Fees

Question 1: In making decisions about what activities the NRC should perform in support of its mission, to what extent should fees be considered?

The DSI paper poses four options as follows:

Option 1: Continue existing approach;

Option 2: No consideration of fees for mandated activities;

Option 3: No consideration of fees; and

Option 4: Fees for service.

The Commission's preliminary views favor option 2.

NMA also supports Option 2. Under this option, NRC would 1) not consider fees when making programmatic decisions in response to NRC mandates; 2) require those requesting NRC to perform non-mandated activities to reimburse NRC for the cost of performing such activities; and 3) seek to have Congress explicitly address the payment of fees when adding new statutory responsibilities to NRC. NMA believes that where NRC has a statutory mandate to conduct certain activities, NRC must perform such activities, regardless of fees. NMA also supports reimbursement from parties requesting non-mandated activities; reimbursement would insert appropriate fairness into the fee process by ensuring that the party who benefits from the NRC action also pays for the cost of pursuing the action. NRC, under this option, also addresses some of the inequities of the fee system by attempting to deal with Congress regarding new statutory mandates. In this way it is possible that Congress may either exclude these costs from the fee base or grant NRC the authority to assess charges for new activities from any party benefiting from the activity.

While NMA believes that pursuing Option 2 could permit NRC to address some of the inequities inherent in the fee system, NMA still has some serious concerns about the underpinnings of the fee structure. In particular, the inequities caused by the OBRA-1990 mandate that NRC recover approximately 100 percent of its budget each year. Without legislative changes to OBRA, there is no way to alleviate completely NMA licensees' major concerns about the fairness and equity of the NRC fee schedule.

In the second major issue raised in the DSI on fees, NRC discusses legislative changes to OBRA as a possible solution to the inequities in the fee system. The Commission does not support the approach and would instead continue current policies.

Question 2: What funding mechanism should the NRC pursue, in addition to annual appropriations with fee recovery, to fund activities that are not required to be funded through appropriations, for example, certain international activities?

The DSI paper poses four funding mechanisms as follows:

Funding Mechanism 1: Recover the cost of providing requested services from the requestor, using fees and reimbursable agreements. The cost of activities that serve the interest of the general public would be recovered from general revenues raised from taxes;

Funding Mechanism 2: (Current Approach) NRC applicants and licensees would continue to pay for approximately 100 percent of the appropriated budget authority. Reimbursable agreements would be used to fund all non-mandated activities;

Funding Mechanism 3: Amend OBRA-1990 and AEA of 1954 to give the NRC maximum flexibility to assess fees;

Funding Mechanism 4: Rescind the Independent Offices Appropriation Act of 1952 (IOAA) and OBRA-90 so that the NRC would be fully funded through taxes, as was the case until 1968.

The Commission's preliminary view is to support Funding Mechanism 2.

NMA supports a mix of funding mechanisms 1 and 3. By pursuing these options, NRC would put into effect the recommendation made by the Commission in its Report to Congress that OBRA be modified to relax the 100 percent budget recovery requirement and remove certain costs from NRC's fee base, thereby eliminating many of the inequitable burdens imposed on NRC licensees. (NRC, "Report to Congress on the U.S. Nuclear Regulatory Commission's Licensee Fee Policy Review Required by the Energy Policy Act of 1992," February 1994 (NRC Report.) In its report to Congress, NRC acknowledges the problems, both real and perceived, with its present fee structure but claims that it is not authorized to undertake the changes noted in its report to Congress without express modification to OBRA or the AEA. NMA believes it is time therefore, for NRC to actively pursue a legislative agenda with Congress by drafting specific language to modify OBRA or the AEA. NMA is committed to assisting NRC in this endeavor. NMA acknowledges that the pressure on the Federal Government to achieve a balanced budget may make this legislative solution difficult to achieve but believes that fairness issues and the impact of the current system on competitiveness require that the attempt be made.

Too heavy a burden is falling on uranium recovery facilities, particularly those sites on standby or awaiting approval of reclamation plans or approval to resume operations, without a comparable benefit. The realities of the uranium market have forced many cease operations to

either go on standby or to begin the decommissioning process. Sites that are awaiting NRC approval of reclamation plans or are on standby require considerably less active NRC supervision, yet they must continue to pay an annual fee that is not commensurate with the benefit of holding a license. In fact, uranium recovery licensees even have to seek extensions of standby status in light of the timeliness in decommissioning rules apparently to some extent as a result of decreased NRC oversight.

This problem of the lack of a reasonable relationship between annual fees and services rendered by NRC, moreover, will be exacerbated in future years as more states become Agreement States, leaving fewer NRC licensees to bear an even greater share of the burden. The state of the domestic and international uranium markets, however, cannot support the imposition of even heavier financial burdens on NRC licensees. The number of operating sites can be expected to decline if NRC does not find a more equitable means of assessing annual fees on its licensees. The current system also, in effect, gives preferential treatment and therefore, a competitive edge, to licensees in Agreement States.

If the attempt to achieve a legislative solution fails, NMA recommends that NRC pursue its current approach to recovery of fees. NMA agrees with NRC that within the current system some improvements can be made administratively. NMA has supported several NRC proposed administrative changes that help make the fee system more equitable including: 1) changes to the method for allocating budgeted costs by treating some of NRC costs that do not directly benefit NRC licensees as if they were "overhead;" 2) changes to the methodology for calculating

annual fees; 3) pursuit of reimbursable agreements with agreement states, DOE and DOD; and 4) attempts to stabilize fees by establishing a base fee.

Question 3: In performing reimbursable work, how should the NRC address the full-time equivalent (FTE) constraints that limit the number of NRC staff?

No specific options for dealing with the FTE question are posed but the Commission's preliminary view is to support the NRC's identification of FTEs associated with reimbursable activities as "business-like" activities, thus removing FTEs used for such activities from the NRC ceiling.

NMA agrees with the Commission that it is inappropriate for the Federal Workforce Restructuring Act of 1994 (FWRA) to limit the number of NRC FTEs available to do reimbursable work. Since the reimbursement arrangement will provide NRC with the funds to do the work requested, no ceiling should be placed on the FTE levels for accomplishing such work and thus, may fit under FWRA's "business-like" organization exception. NMA adds however, that the same reasoning applies to most of the work done by NRC, not just the work that is reimbursable. Since NRC is required by OBRA to recover nearly 100 percent of its budget from its licensees, NRC will be reimbursed by its licensees for the actions it takes in any given year. Therefore, NMA believes all work done by NRC that is recovered through licensee fees may also be considered "business-like" activities and not affected by the FWRA ceiling on FTEs.

Other fee issues that merit attention during the Strategic Assessment Process

Lack of Oversight

Problem: Lack of oversight is a problem that might exist even without OBRA, but the existence of OBRA exacerbates the problem. A system that allows an agency to recover 100 percent of its costs, in essence, is an invitation to regulatory abuse. There is little oversight or quality control. These are serious flaws that can lead to gross inequities in the system. For example, uranium recovery facilities are charged an hourly rate for inspections, but there are no limits for how often a facility can be inspected leaving open the possibility for excessive inspections and, accordingly, excessive fees.

The regulations have no provisions to allow licensees to object to unreasonable costs. Without such a mechanism, the licensees are at the mercy of the regulators and must pay for services rendered, regardless of the necessity, efficiency, advisability or value of such "service". There is no assurance that any given regulatory function performed by NRC will be completed expeditiously, efficiently or within a reasonable range of costs.

Proposed Solution: The fees charged by NRC are intended to recover operating costs. The licensees, accordingly, should be given the ability to oversee and have input into the NRC budget. If licensees are to be charged for the costs incurred by the regulatory agency for their own regulation, the licensees should be able to have some control over the costs incurred by that agency through, for example, a licensee review board established to review NRC fees annually and to make recommendations to the Commission.

Hourly Rates

Problem: The professional hourly rates established annually are arbitrary and do not reflect the costs of providing regulatory services to licensees. NMA believes the hourly rate is too high for NRC staff and cannot be justified. The current $116 hourly rate equals or exceeds the hourly charges of senior consultants, principals or project managers at major consulting firms and exceeds the generally accepted rate for similar work in the private industry.

Proposed Solution: As NMA has advocated in previous comments, NRC should, at a minimum, set certain standards for the "services" provided by the Commission. These standards would help insert more fairness in the fee system and can be implemented without any modifications to OBRA. For example, standards regarding consistency in charges, deadlines for completion, and itemization of bills should be adopted.

IV. CONCLUSION

NMA is pleased to have the opportunity to participate on behalf of its uranium recovery licensee members in NRC's SARI process. NMA hopes that its comments will be considered as intended -- that is, as constructive input into NRC's Agency-wide process. NMA also again requests that the Commission recognize the "placeholder" request for a strategic reassessment of uranium recovery regulatory issues which NMA believes is both appropriate and necessary in light of the SARI process.