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U.S. NUCLEAR REGULATORY COMMISSION

To Whom It May Concern:

The Illinois Department of Nuclear Safety has reviewed the NRC Draft Regulatory Guide DG-1085 "Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors" and would like to offer some general comments on the guide.

The NRC has adopted a rather narrow definition of decommissioning. In 10 CFR 50.2, the NRC has established the following definition:

Decommission means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits –

- (1) Release of the property for unrestricted use and termination of the license; or
- (2) Release of the property under restricted conditions and termination of the license.

On page 5 of the guide the NRC provides the following guidance which further narrows the scope of decommissioning:

"The licensee is reminded that decommissioning is defined in 10 CFR 50.2 as the safe removal of a facility or site from service and the reduction of residual radioactivity to levels that permit release of the site and termination of the license. For example, removing uncontaminated material, such as soil or a wall, to gain access to contamination to be removed would be a legitimate decommissioning cost. However, the costs of demolition of decontaminated structures, site



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restoration activities, or other activities not involved with removing the facility from service or reducing residual radioactivity are not considered decommissioning costs by the NRC. Rather, they are considered operating expenses not required by the NRC and are not included in the amount of money required by 10 CFR 50.75 to be placed in the plant's decommissioning fund."

In establishing the decommissioning funding requirements for a nuclear power reactor operator, the NRC has narrowed its focus to solely those costs associated with removing the necessary radioactive contamination from the structures and systems to allow for license termination. This narrow focus is in stark contrast to the general public's conception of decommissioning which is to dismantle and remove all the systems and structures associated with the nuclear power station. Commonwealth Edison Company (now Exelon) acknowledged the same in their decommissioning filing with the Illinois Commerce Commission. For purposes of establishing suitable decommissioning funding requirements, the Commerce Commission adopted the same narrow definition as the NRC.

The purpose of the regulatory guide is to provide the reactor operator with guidance on preparing:

- Preliminary decommissioning cost estimate (about 5 years prior to shutdown)
- Expanded cost estimate contained in the Post-Shutdown Decommissioning Activities Report (PSDAR),
- Site-specific decommissioning cost estimates submitted within two years following permanent cessation of operations, and
- An updated decommissioning cost estimate as part of the License Termination Plan submitted at least two years prior to termination of the license.

The level of effort and detail increases as the reactor operator progresses from the preliminary to the site-specific.

The guidance provided by the NRC for preparing the preliminary decommissioning cost estimate requires the reactor operator to:

- identify the decommissioning method to be used,
- discuss the potential or known contamination at the site,
- provide a preliminary schedule and cost for decommissioning,
- present a comparison of the cost with the minimum decommissioning funding requirement, and,
- discuss the plan for compensating for insufficient funding (if applicable).

The guide provides a table that the operator can use to provide the cost and schedule information. Based on the requirement description contained in the guide, the level of detail required appears to be quite shallow. One would hope that the NRC would require a greater level of detail for a submittal that is due no later than 5 years prior to the projected end of operations. The filing that the nuclear power owners are required to file for rate-making purposes with the Illinois Commerce Commission appear to contain a significantly greater level of detail. The NRC has not stated whether these documents would suffice for purposes of the preliminary decommissioning cost estimate.

Prior to or within two years following the permanent termination of operations the licensee is required to submit a Post Shutdown Decommissioning Activities Report (PSDAR) to the NRC. An expanded cost estimate is to be included with the PSDAR. The guide identifies four different forms this expanded cost estimate can take. They are:

1. The amount of decommissioning funds estimated to be required by 10 CFR 50.75(b) and (c),
2. A site-specific cost estimate,
3. An estimate based on actual costs at similar facilities that have undergone similar decommissioning activities, or
4. A generic cost estimate.

When the reactor operator begins to focus attention on the post-shutdown activities, the operator should have an accurate understanding of what the actual site-specific decommissioning costs should be. Allowing the operator to provide a generic calculation or reference to some other facility's cost seem to be a misuse of the operator's resources when they will have to create a site-specific estimate within two years of termination of operations. The NRC should require the site-specific cost estimate to accompany the PSDAR.

Within two years of terminating operations the operator is required to provide a site-specific decommissioning cost estimate if they did not provide it along with the PSDAR. As mentioned previously, the NRC should require the site-specific cost estimate at the time of the PSDAR submittal.

The final cost estimate required by the guide is an updated estimate submitted as part of the License Termination Plan. This plan must be submitted at least two years prior to termination of the license. By this time, the operator should be almost completed with the decommissioning activities and should have an accurate estimate of the funds necessary to complete the decommissioning process. The guide did not provide any guidance related to estimating the costs for long-term site control should the site be released with restrictions. Given the current effort to expand the possibility for entombment to occur some additional guidance for long-term funding requirements should be provided.

With respect to the decommissioning cost estimate guidance, the NRC references NUREG-1307 "Report on Waste Disposal Charges: Changes in Decommissioning Waste Disposal Costs at Low-Level Waste Burial Facilities" as a source for estimating low-level radioactive waste disposal costs. This document may not be the best source of information for reactor operators to use. Basing cost projections on the existing disposal facilities could lead to a drastic underestimation of costs at a new compact developed disposal facility.

South Carolina has taken drastically different stances on hosting a national disposal facility over the last two decades. The Barnwell disposal facility is currently scheduled to close to non-Atlantic Compact generators by fiscal year 2008. The Richland Washington site is only available to generators located in the Northwest and Rocky Mountain Compacts. The Envirocare of Utah facility is available to all generators except those located in the Northwest Compact. In addition, regional compacts can limit the accessibility of out of region disposal facilities.

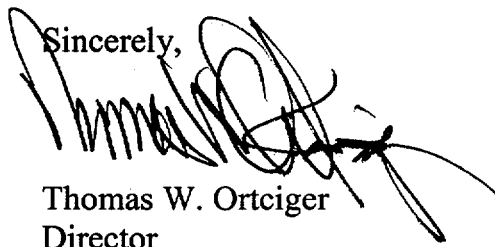
The NRC should have suggested that the reactor operator work closely with their respective host state and compact commission to determine what disposal facilities may be available to them at the time of decommissioning and what the projected costs would

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be for disposal at a regional disposal facility. This would likely yield a more accurate estimate of the low-level radioactive waste disposal cost component.

Any questions you may have regarding these comments may be directed to me at (217) 785-9868.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas W. Ortziger', with a large, stylized flourish extending from the end of the signature.

Thomas W. Ortziger
Director

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