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To: Energy Facility Siting Council

From: Thomas Jackman, Rulemaking Coordinator

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Subject: Agenda Item D2 (Information Item): Retirement and Financial Assurance for the November 19-20, 2026 EFSC Meeting

Attachments: Attachment 1: RAC Feedback

STAFF RECOMMENDATION

Staff requests Council direction on how restoration costs should be calculated and how the required bond or other financial assurance should be provided, maintained, adjusted, and released. Council direction would guide a revised draft for further Rulemaking Advisory Committee review and later Council consideration. Staff is not requesting approval of draft rule language, authorization to file a Notice of Proposed Rulemaking, or rule adoption at this meeting.

Staff is also requesting direction on whether to adopt a standardized approach to the layout of Council rules for its standards, but this is discussed in the staff report on Organizational Expertise.

What The Retirement and Financial Assurance Standard Does

Retirement means carrying out required removal and restoring the site to a useful, non-hazardous condition after construction or operation ends permanently. Financial assurance is the bond or letter of credit available to the State if the certificate holder does not complete that work.

Under OAR 345-022-0050, the Council must find that restoration is feasible and that the applicant is reasonably likely to obtain acceptable assurance. Applicants provide a cost estimate in today's dollars and explain their methods and assumptions. Assurance must be in place before construction and remain effective through retirement. The Council may already set different amounts for construction and operation. The holder remains responsible for actual restoration costs, even if they exceed the approved estimate.

The estimate answers how much restoration would cost. The assurance policy answers how much backing must be available, in what form, and when. Full assurance describes the amount backed; it does not necessarily mean that amount is deposited in cash.

A Variety of Issues and Options
The 50-state review discussed with the Rulemaking Advisory Committee (RAC) illustrates a range of approaches. The choices below address how Oregon could implement its standard. The Council may select an approach for each issue, combine compatible choices, or request another approach. Staff's preferred approach is listed first, although the Council may prefer a combination of the presented options (e.g., all of option 1 and part of option 2).

The RAC met on December 15, 2025, March 4, 2026, and August 27, 2026, after Council authorization on July 18, 2025. The written comments are Attachment 1. RAC members were tasked with providing their own opinion on these same options and these are provided below where appropriate. The comments express individual positions, not committee approval of any one solution.

Calculating the cost of retirement

Issue 1 - What restoration work is required - The required restoration work determines the cost estimate. The Council must decide whether removal and restoration requirements should be established primarily for each site or begin with statewide minimums. Roads, foundations, buried equipment, and other improvements may have different removal needs.

> **Option 1: Establish requirements for each site.** Decide what must be removed and what may remain based on-site conditions, a lawful and feasible future use, and applicable requirements. Obtain the affected owner's agreement where retaining an improvement depends on that owner's intended use. This accommodates site differences but requires individual decisions.
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> **Option 2: Establish statewide minimums with justified exceptions.** Adopt minimum removal depths and restoration requirements, while allowing supported exceptions and preserving stricter applicable obligations. This provides a common starting point but requires technical support and may fit some sites poorly.
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> **Additional direction on owner preferences.** Under either option, the Council should indicate whether a documented owner request to retain improvements should be considered as one factor or generally favored when consistent with restoration and other public requirements. Retention would still need a lawful, feasible future use. Changes in ownership or intended use could require reconsideration.
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> Under either approach, applicant ownership of the land would not remove the restoration obligation. The estimate should distinguish project disturbance from preexisting conditions and address significant later changes.

Issue 2 - How the restoration work is priced - Once the required work is identified, the Council must decide how much the Department should standardize the estimating method and its technical assumptions. These include labor rates, equipment costs, removal methods, and the time needed to complete the work. Administration, contingency, and recoverable material credits are addressed separately in Issues 3 and 4.

Option 1: Applicant-developed approach. Require applicants to develop and justify their own estimating methods and cost assumptions, subject to existing information requirements. This largely reflects current practice. It minimizes Department work developing and maintaining an estimating framework but can make individual reviews more difficult because staff lacks a common basis for comparing estimates and evaluating their reasonableness.

Option 2: Common format and cost categories. Require a common format, specified cost categories, and disclosure of key assumptions, while applicants develop and justify project-specific costs. This makes estimates easier to compare without requiring every project to use the same rates or methods. Staff would still need to evaluate whether the assumptions are reasonable.

Option 3: Department guidance and reference ranges. Add Department-developed technical guidance and comparison ranges to Option 2, potentially through an advisory manual rather than in rules. Applicants would explain significant differences from the ranges, but the reference values would remain advisory. This would help applicants prepare estimates and staff evaluate them, while requiring Department resources to develop and maintain the guidance.

Option 4: State cost model. Use a Department-developed model that prices individual components and work activities using standard costs and assumptions, with supported project-specific exceptions. This provides a common starting calculation and could reduce repeated estimating work. The Department previously used a model that was not kept current. Reintroducing this approach would require development funding, technical expertise, and an ongoing maintenance plan.

Option 5: Standard rates by technology or project size. Establish amounts per turbine, megawatt, acre, or other defined unit instead of separately pricing each work activity. Require adjustments for costs or site conditions the rates do not cover. This simplifies calculations and provides predictable starting amounts but could substantially overstate or understate costs for unusual projects. The Department would need to develop, support, and regularly update the rates.

RAC feedback. Oregon Solar + Storage Industry Association (OSSIA) favors standardized, site-specific estimates and a flexible technical manual. It cautions that State models or rates would require continuing Department resources. Renewable Northwest supports third-party estimates and disclosure of project assumptions. Both raised concerns about Department capacity to maintain changing cost assumptions. (Attachment 1, pp. 3 and 10.)

Issue 3 - How administration and uncertainty are accounted for - Administration covers arranging and overseeing retirement work. Contingency covers uncertainty in the estimate. These serve different purposes and should not duplicate each other, contractor overhead, known costs, or inflation. The Council may select a different approach for each allowance, regardless of the general estimating method selected in Issue 2.

Option 1: Project-specific amounts. Require a supported amount for the allowance based on the project's expected administrative work or identified uncertainties. This fits individual circumstances but requires staff judgment and may produce different results across projects.

Option 2: Fixed percentages. Apply an adopted percentage to a clearly defined cost base. This is predictable and straightforward to calculate but may overstate or understate the need.

Option 3: Default percentages with justified exceptions. Begin with adopted percentages and allow supported project-specific departures. This provides a common starting point while accommodating differences, but the Department would need to develop sound defaults and review exceptions.

RAC feedback. OSSIA favors project-specific administrative costs and objects to fixed percentages that do not account for technology differences. Its comment does not separately select a contingency method. (Attachment 1, p. 3.)

Issue 4 - Whether recoverable material value reduces the required assurance - Scrap value is the recoverable value of material such as metal. Equipment resale value depends on equipment remaining useful to another buyer. The Council must decide whether either value should reduce the required financial assurance.

For illustration, a $10 million restoration cost minus a $2 million allowed credit would leave $8 million to secure.

Option 1: Conservative scrap credit. Credit the supported value of recoverable metals using conservative prices and accounting for applicable sale costs and uncertainty with offsets for costs to recover the scarp value, e.g., the cost to ship the material to a recycling facility. This recognizes material value without assuming equipment can be reused. It still requires dependable access to the material or proceeds.

Option 2: No credit against assurance. This is current approach. Base assurance on the full approved restoration cost. Actual sale proceeds could still help pay for retirement. This avoids valuation and access risks when setting assurance but may secure more than the eventual net cost.

Additional direction if credits are allowed. The Council should choose whether assurance may fall to zero when reliable, timely recoverable value covers every retirement cost, or whether a separate readily available amount must remain for expenses incurred before materials can be sold. Any credit must address creditor claims, access to materials or proceeds, and the timing of those proceeds. Any minimum amount should be supported by actual needs.

RAC feedback. Tetra Tech requests at least a conservative, documented metals credit in both the estimate and the required bond amount. OSSIA and Renewable Northwest support

broader salvage credits, citing material value and project costs. (Attachment 1, pp. 3-4 and 10-12.)

Providing and maintaining financial assurance

Issue 5 - What must be shown before the Council approves a certificate - Today, the Council finds at approval that acceptable assurance is reasonably likely to be available. The actual bond or letter of credit is required before construction. This issue concerns what must be demonstrated at approval. Issue 6 separately addresses how much assurance must cover the work as the project proceeds.

Option 1: Keep the current sequence. Require credible evidence of availability with the application and actual assurance before construction. This supports the approval decision without requiring an instrument before the site is disturbed, but preliminary evidence can become outdated.

Option 2: Rely on the construction condition. Approve the restoration amount and prohibit construction until acceptable assurance is in place, without a separate application-stage likelihood finding. This reduces preliminary review but could result in approval of an applicant unable to obtain assurance. Removing the existing finding would require legal review.

Issue 6 - How much restoration cost must be covered at each stage - The current rule allows different construction and operating amounts. A smaller amount can fully cover a smaller construction stage. That differs from providing assurance for only part of the restoration cost that the work could create. The latter leaves some costs uncovered if work stops early.

Option 1: Full coverage for each authorized stage. Before allowing a stage to proceed, require assurance for the maximum restoration cost that its work could create, including temporary disturbance and unrestored earlier work, after any allowed credits. Future stages not yet allowed to proceed would not be included. This protects against early closure but uses more credit capacity.

Option 2: A common schedule for increasing coverage. Require stated percentages at common milestones, reaching full coverage by a set date. This offers predictable financing relief and a consistent schedule but leaves some known restoration costs uncovered before full coverage is reached. Several states operate with some form of this milestone coverage (e.g., 25% at five years, 50% at 10 years).

Option 3: Schedules based on project and technology. Approve schedules based on documented risks, with a full-coverage date and events that require earlier increases. This may fit different technologies better but requires more review and monitoring. Additional assurance may also be hardest to obtain when the holder's finances are worsening.

RAC feedback. OSSIA and Renewable Northwest favor risk-based stages tailored to technology. OSSIA points to long equipment warranties; Renewable Northwest points to

lower risk after a power purchase agreement. The Council would need to decide whether those factors justify reduced early coverage. (Attachment 1, pp. 3-4 and 11.)

For either phased approach, staff would identify the largest uncovered amount at each stage and the consequences of early closure. An equipment warranty or a schedule for updating an estimate does not itself provide funds for restoration.

Issue 7 - Whether a utility may use another financial arrangement - Bonds and letters of credit are the current general requirements. NW Natural asks to allow recovery through an administrative-agency order instead. The Council must decide whether an alternative must provide equivalent protection or whether authorization to recover costs later is sufficient.

Option 1: Retain the same requirement for utilities and other holders. Continue requiring bonds or letters of credit. This uses familiar protection but may duplicate some utility arrangements and their costs.

Option 2: Allow an equivalent utility arrangement. Allow an alternative that provides enforceable, timely access to the amount otherwise required under the Council's selected coverage policy, including after closure, insolvency, or transfer. Require separate assurance for any gap. This could remove duplication while preserving the selected protection, but would require careful legal and financial review.

Option 3: Accept a qualifying recovery order. Allow a final agency order authorizing cost recovery to replace separate assurance for covered costs, even without equivalent immediately available funding. This more directly provides NW Natural's requested relief but accepts collection and timing risks.

RAC feedback. NW Natural proposes the recovery-order alternative. Staff would evaluate the legal authority and practical protection before returning with language. (Attachment 1, p. 5.)

Issue 8 - When the restoration estimate must be reviewed or recalculated - Inflation adjustments do not capture every change in equipment, disposal needs, contamination, or recoverable value. Confirming that a bond remains effective also does not establish that its amount remains adequate.

All options below would include inflation adjustments, review after significant changes, and checks of final design and what was actually built. The choice is what additional scheduled reviews to require and whether those reviews must produce a complete new estimate.

Option 1: An adequacy review at least every five years. Require a review of whether the estimate remains sufficient. Accept a supported explanation when the estimate remains sound and require recalculation where needed. This periodically checks assumptions without automatically requiring a complete new estimate.

Option 2: Required project or technology milestones. Require review or recalculation at defined milestones, such as major equipment replacement, repowering, or approaching

planned closure, with a latest review date. This ties the work to relevant project stages but creates more individual schedules and may leave longer intervals between reviews.

Option 3: No additional scheduled review. Rely on inflation adjustments and review when significant changes or an identified adequacy concern warrant it. This minimizes routine recalculation but depends on problems being recognized before a shortfall develops.

RAC feedback. OSSIA and Renewable Northwest favor recalculation linked to project milestones. OSSIA favors technology-specific milestones linked to equipment warranties. (Attachment 1, pp. 3 and 11.)

Five years is a proposed interval, not a current uniform rule or an agreed RAC position. Updated estimates would be used to adjust assurance under the credit and coverage policies selected by the Council.

REQUESTED DIRECTION AND NEXT STEPS

Staff requests direction on issues discussed above, including any alternatives the Council wishes to retain for further comparison. Direction to develop an option would not approve its legal sufficiency or commit the Council to adoption. Staff would prepare a coordinated draft, identify requirements retained, moved, changed, or removed, and return it to the RAC before seeking later Council action on a Notice of Proposed Rulemaking.