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American Gas Association

FASB Interpretation No. 47

Accounting for Conditional Asset Retirement Obligations

An Industry White Paper



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<i>Introduction.....</i>	<i>2</i>
<i>Reasons for an Interpretation</i>	<i>3</i>
<i>Sufficient Information</i>	<i>3</i>
<i>Change in the Way Disposal is Viewed</i>	<i>5</i>
<i>Date of Obligating Event.....</i>	<i>6</i>
<i>Indefinite Life.....</i>	<i>7</i>
<i>Materiality</i>	<i>9</i>
<i>Decision Tree</i>	<i>9</i>
<i>Specific Property Considerations</i>	<i>13</i>
<i>Mass Assets, Electric and Gas</i>	<i>13</i>
<i>Minor Items.....</i>	<i>20</i>
<i>Asbestos, PCBs, and Other Contaminants</i>	<i>21</i>
<i>Rights-of-Way and Franchises</i>	<i>25</i>
<i>General Property.....</i>	<i>27</i>
<i>Hydro Generation.....</i>	<i>29</i>
<i>Overall Recommendation</i>	<i>30</i>
<i>Effective Date.....</i>	<i>31</i>

Introduction

“This Interpretation clarifies that the term *conditional asset retirement obligation* as used in FASB Statement No. 143, *Accounting for Asset Retirement Obligations*, refers to a legal obligation to perform the asset retirement activity in which the timing and (or) method of settlement are conditional on a future event that may or may not be within the control of the entity. The obligation to perform the asset retirement activity is unconditional even though uncertainty exists about the timing and (or) method of settlement. Thus, the timing and (or) method of settlement may be conditional on a future event.”

This white paper has been written with an eye toward the Electric and Gas utility business. It is intended to assist one in doing the investigation and review necessary to properly recognize and disclose any new asset retirement obligations resulting from the adoption of this Interpretation. Each company will need to work through their particular issues and review all assumptions with their legal staff to assure proper representation of this topic. At first glance, this Interpretation can appear overwhelming. But one needs to approach this in a thoughtful and reasonable manner that represents the intent and purpose of the Interpretation without getting so lost in the details that the accounting becomes impossible to maintain within a cost effective manner. Without careful thought to the intent and the process to achieve it, the accounting for this Interpretation may not be manageable as the issue moves throughout time.

FASB Statement No. 143, *Accounting for Asset Retirement Obligations* provides a complex process for determining recognition criteria, measurement procedures, and accounting and disclosure requirements for the financial implications of an obligation related to the future retirement of existing property. Because FIN 47 represents clarification of a limited, but important, concept within the broad scope of accounting for asset retirement obligations, this document is limited to discussing compliance within this new interpretation. It is beyond the scope of this document to attempt to provide a comprehensive discussion of all the provisions of FASB Statement No. 143.

Another white paper was prepared by EEI and AGA shortly after SFAS 143 was issued. This white paper is supplemental to that earlier one. The following terms and acronyms are used throughout this document.

Term or Acronym	Description
ARC	Asset Retirement Cost (Plant Asset)
ARO	Asset Retirement Obligations
FERC Order 631	Accounting, Financial Reporting, and Rate Filing Docket No. RM02-7-000, <i>Requirements for Asset Retirement Obligations</i>
FERC Order 552	Revision to Uniform Systems of Accounts to Account for Allowances under the Clean Air Act Amendments of 1990 and Regulatory-Created Assets and Liabilities and to Form Nos. 1, 1-F, 2 and 2-A
FIN 47 or Interpretation	FASB Interpretation No. 47, <i>Accounting for</i>

<u>Term or Acronym</u>	<u>Description</u>
	<i>Conditional Asset Retirement Obligations</i>
FSP	FASB Statement of Position
SAB 99	SEC Staff Accounting Bulletin No. 99, <i>Materiality</i>
SFAS 71	FASB Statement No. 71, <i>Accounting for the Effects of Certain Types of Regulation</i>
SFAS 143	FASB Statement No. 143, <i>Accounting for Asset Retirement Obligations</i>

Reasons for an Interpretation

Diverse accounting practices have been developed with respect to the timing of liability recognition for legal obligations associated with the retirement of a tangible long-lived asset when the timing and (or) method of settlement of the obligation are conditional on a future event. For example, some entities have recognized the fair value of the obligation prior to the retirement of the asset with the uncertainty about the timing and (or) method of settlement incorporated into the liability's fair value. Other entities, however, have recognized the fair value of the obligation only when it is probable the asset will be retired as of a specified date using a specified method or when the asset is actually retired.

The Interpretation clarifies that an entity is required to recognize a liability for the fair value of a conditional ARO when incurred if the liability's fair value can be reasonably estimated. The Interpretation clarifies when an entity would have sufficient information to reasonably estimate the fair value of the ARO. This clarification should improve the relevance, reliability, and comparability of the amounts recognized in the financial statements.

The FASB believes application of the Interpretation will result in a more consistent recognition of liabilities relating to AROs, in more information about expected future cash outflows associated with those obligations, and in more information about investments in long-lived assets because additional asset retirement costs will be recognized as part of the carrying amounts of the assets. At the January 26, 2005 meeting, the FASB addressed a request to reconsider the entire concept of recording AROs (see FASB Board minutes at www.fasb.org/board_meeting_minutes/board_meeting_minutes.shtml). This discussion provides significant insight to the FASB's expectations and considerable support for the role of management's judgment and reasonableness in the recognition of AROs. In summary, the FASB essentially establishes what disclosure is expected whenever there is an ARO while also narrowing the circumstances in which the measurement could be avoided.

Sufficient Information

In SFAS 143, the term *retirement* is defined as the other-than-temporary removal of a long-lived asset from service. The term *retirement* encompasses sale, abandonment, recycling, or disposal in some other manner. The term does not encompass the temporary idling of a long-lived asset.

- “If an entity has sufficient information to reasonably estimate the fair value of an asset retirement obligation, it must recognize a liability at the time the liability is incurred. An asset retirement obligation would be reasonably estimable if (a) it is evident that the fair value of the obligation is embodied in the acquisition price of the asset, (b) an active market exists for the transfer of the obligation, or (c) sufficient information exists to apply an expected present value technique.” This is from paragraph 4 of the Interpretation.
- The Interpretation states that when the method of settlement and settlement date have been specified by others such as in a law, regulation or contract, the entity has sufficient information to apply an expected present value technique. Therefore the ARO would be reasonably estimable and a liability must be recorded. The only uncertainty in these situations is whether performance will be required.

From paragraph 5a, “uncertainty about whether performance will be required does not defer the recognition of an asset retirement obligation because a legal obligation to stand ready to perform the retirement activities still exists”, and that uncertainty does not prevent the determination of a reasonable estimate of fair value. There are two possible outcomes in situations in which the only uncertainty is whether performance will be required—the entity will be required to perform or the entity will not be required to perform.

If there is no information about which outcome is more probable, paragraph A23 of SFAS 143 requires 50 percent likelihood for each outcome to be used until additional information is available. In certain cases, determining the settlement date for the obligation that has been specified by others is a matter of judgment that depends on the relevant facts and circumstances.

- In situations where the date and method of settlement are not specified by others, if information is available to reasonably estimate (1) the settlement date or the range of potential settlement dates, (2) the method of settlement or potential methods of settlement **and** (3) the probabilities associated with the potential settlement dates and potential methods of settlement, the FASB believes sufficient information is present to apply an expected present value technique. Therefore, the ARO would be reasonably estimable and a liability must be recorded.

Information that is derived from an entity’s past practice, industry practice, and management’s intent can provide a basis for estimating the potential methods of settlement. Entities must take into account only the methods of settling the obligation that are currently available to the entity.

The ability of an entity to indefinitely defer settlement of an ARO does not relieve the entity of the obligation. Implicit in this conclusion is the belief that no tangible asset will last forever (except land) and, accordingly, the asset retirement activities will eventually be performed. Furthermore, the ability of an entity to sell the asset prior to its disposal does not relieve the entity of its present duty or responsibility to settle the obligation. The sale would cause the buyer to assume the obligation, in turn affecting the sales price.

Change in the Way Disposal is Viewed

The FASB believes that if a current law, regulation, or contract requires an entity to perform an asset retirement activity; there is an unambiguous requirement to perform the retirement activity even if that activity can be indefinitely deferred. As noted above, no tangible asset will last forever (except land) and, accordingly, the asset retirement activities will eventually be performed. Therefore, the obligation to perform the asset retirement activity is unconditional even though uncertainty exists about the timing and (or) method of settlement.

- A law or entity's promise may create a duty or responsibility, but that law or promise in and of itself may not be the obligating event that results in an entity having little or no discretion to avoid a future transfer or use of assets.
- SFAS 143 states that the obligating event is the acquisition, construction, or development and (or) the normal operation of the long-lived asset when a law or promise exists that creates a duty or responsibility relating to the retirement of the asset. At this point, the obligation cannot be realistically avoided if the asset is operated for its intended use.

All companies are subject to federal and state solid waste disposal requirements for non-hazardous materials and refuse¹. These laws require such materials to be disposed in a licensed public landfill with other household garbage. Although there is no legal obligation to retire assets under these solid waste laws, these retired and dismantled assets must be transported to licensed public landfills. Companies regularly incur monthly expenses for use of these public landfills for disposal of non-hazardous materials and refuse (i.e. garbage) which in most cases would cover disposal of non-hazardous retired assets.

The scope of SFAS 143 and FIN 47 focuses on "special" requirements for disposal of retired assets that would add incremental costs to the retirement of those assets above what a company expenses monthly for non-hazardous material and refuse disposal. This is evidenced by the reference to "special" requirements in the examples to FIN 47 and the proposed FSP on SFAS 143 relating to the European Union (EU) Directive on Waste Electrical and Electronic Equipment that requires EU members to adopt legislation for environmentally sound disposal of electrical and electronic waste equipment.

This white paper assumes that even though some legal obligation may exist to dispose of non-hazardous materials and refuse resulting from retirements of fixed assets, the disposal costs for non-hazardous materials and refuse may be inconsequential for many assets and may not add significant incremental costs to the asset retirement activities. A company may decide that there is not a legal obligation for removal whereby an asset is disposed within the cost boundaries of the standard garbage fees and only incremental charges above this standard may constitute a removal obligation. Moreover, the incremental charge associated with additional service may be considered part of the standard costs. To illustrate this analysis with an example, consider the following removal activities typical for a treated and a non-treated pole:

¹ These rules federal and state regulations are governed under Subtitle D of the Resource Conservation and Recovery Act. Subtitle D regulates garbage, refuse, sludge from waste treatment plants, non-hazardous industrial waste and other discard materials including solid, semi-solid and liquid materials resulting from commercial and industrial activities (e.g. demolition debris, mining waste, oil & gas waste).

Pole Removal Example

	Non- treated	Treated
1. Labor to removal the pole and haul it to the yard	\$75	\$75
2. Grinding the pole into small pieces (not required by regular landfill)	0	10
3. Transporting the pole to the landfill	15	15
4. Landfill Fees	10	40

The costs to remove and transport the pole, for both types of pole, would not be considered an ARO in this example. The landfill fees for the treated pole would be considered an ARO, but one would need to determine if the incremental cost would be the ARO basis or would one use the total cost. If the landfill accepting the treated pole is different than the one accepting the non-treated pole, the total cost would be used and if the same facility then the incremental would be applicable. Lastly, the cost to grind the pole would be considered part of the ARO, as this cost is not incurred for non-treated poles.

As always, a full review of the company position on this issue is paramount to defining the magnitude of potential AROs. Each company needs to decide if these laws constitute a legal obligation in respect to the SFAS 143 and the Interpretation. In instances where the legal requirement relates only to the disposal of the asset subject to the ARO, the cost to remove the asset is not included in the ARO. However, if there were a legal requirement to remove the asset, the cost of removal would be included.

Date of Obligating Event

There has been some discussion around when the obligating event occurs. Quickly, most would point to the in-service date of the asset if a law, regulation, or contract creating the obligation was in place before the in-service date. Similarly, one would choose the date the law, regulation, or contract created the obligation if it came to be after the in-service date. However, SFAS 143 refers to obligations that “result from the acquisition, construction, or development and (or) the normal operation of the long-lived asset”. One could question if this infers the purchase of material during the construction process or to inventory. Whereby, the company may have incurred a legal obligation before the in-service date of the asset. Timing of the recognition of the ARO, as discussed in paragraphs 3-10 and B32-B41 of SFAS 143, is when all the following criteria are met:

- The obligation meets the definition of a liability in paragraph 35 of Concepts Statement 6.
- A future transfer of assets associated with the obligation is probable.
- The amount of the liability can be reasonably estimated.

During construction of long-lived assets, such as a steam generating plant, legal obligations to eventually retire the plant may be incurred and measurement of those obligations may be prudent during the

construction phase. It is important to remember that the obligating event has to have already happened to create a liability. In the case of a nuclear power facility, the obligation to remove the facility may not exist until the facility is operated and contamination occurs. Thus, the contamination constitutes the obligating event. Along with these two instances provided, work performed on leased property also may create a legal obligation during the construction phase. Furthermore, the amount of the liability may grow in subsequent periods as the construction of the asset continues. These changes, in the amount of the original estimate, may need to be recognized as an increase in the carrying amount of the liability.

Another example may be a treated pole purchased to inventory. One could argue that the obligating event has occurred at the purchase of the pole even though it is held for a time in the inventory account before moving through construction work in progress to plant in-service. The assumption presupposes that the manufacturer treated the pole before the company purchased it. The scenario would change if the company treats its poles itself. This component can add more complexity to an already multifarious process.

The definition for the obligating date needs to be fully thought out and clear as to the materiality of and the ability to recognize the obligation before the in-service date. One may likely conclude that the obligation will be flagged during construction or when in inventory only for those exceptionally large items. Otherwise, the in-service date will prevail. For any decision, either for this section or for others throughout this document, one needs to assure that it is legally reviewed and representative of management's judgment as to the correct application of the Interpretation and SFAS 143.

Indefinite Life

FIN 47 does not eliminate the recognition of an indefinite life, but rather distinguishes uncertainty from indefinite. The first sentence in paragraph B22 of the Interpretation provides specific guidance in three clauses where FASB considers an ARO is reasonably estimable, "if information is available":

1. "To estimate the settlement date or the range of potential settlement dates,"
2. "The method of settlement or potential methods of settlement," **and** (*emphasis added*).
3. "The probabilities associated with potential settlement dates and methods of settlement."

The third clause would seem to imply that the **probable** service lives and estimated net salvage developed from utility depreciation studies could lead to the conclusion that an ARO is reasonably estimable. Paragraph B19 through B27 also provided more specific language than originally addressed in SFAS 143, which substantially narrowed the circumstance that would lead to a conclusion that an ARO is not estimable.

The current utility industry position, prior to the release of this Interpretation, is that a company cannot calculate an ARO for the ultimate retirement of its distribution and transmission **systems** because each system has an indefinite life. A depreciation study develops probabilities of life and net salvage for a large group of similar assets, and that many cycles of replacements occur to the group or system. An example of the distinction between a "group of similar assets" versus a "system"; a power line or gas line between two points will probably have multiple retirements and replacement additions (items in a group), particularly if a portion of the line is moved for any reason, but the line itself generally continues long afterwards (as a

system). In addition, it is part of a larger group of assets when life analysis is done; all similar power lines or gas lines are considered together. In other words, the probable lives in a depreciation study are on the interim retirements and additions to the line, and not representative of the probable life of the line (or the system). Further, it has been suggested that retirement of the **system** would invoke other accounting pronouncement governing status as an ongoing entity, impairment of an asset, or accounting for discontinued operations.

Accordingly, sufficient information may not be available to reasonably estimate the ARO liability on the ultimate retirement of transmission or distribution property. The industry also does not believe that an ARO should be calculated for such interim retirements when there is not an obligation for that specific interim retirement or when a company cannot reasonable estimate when a specific interim retirement with an obligation would take place. The third characteristic of a liability is that the transaction or other event obligating the entity has already happened. One does not know what portion of a distribution or transmission system will be retired until an event such as a gas leak, storm damage, or a road widening requires work on the asset, making it difficult to estimate the costs and timing. This generally is corrected or recorded in the same accounting period so no liability would be accrued.

However, FIN 47 provides further interpretation of FAS 143 that may require a reassessment of the indefinite life concept. Example 1 specifically addresses this mass asset system versus individual asset contrast and clearly attempts to close the loophole that a system has an infinite life, therefore no ARO can be measured. FIN 47 requires that the fair value of an ARO be recognized when it can be reasonably estimated. It also clarifies when an entity would have sufficient information to reasonably estimate the fair value of an ARO. For some utilities, data derived from their most current depreciation study possibly could be a potential source to provide information to calculate an estimated ARO for distribution and transmission assets that constitute an entire system. This data is used to recover property costs (including removal cost) for regulatory purposes and also may serve as a platform for calculating the expected ARO liability. Depreciation study data is used in the Snapshot example within the Mass Assets, Electric and Gas section of this paper.

An argument also can be made that depreciation study data does not provide sufficient information to estimate a reasonable ARO liability. Depreciation data is utilized to provide for matching of existing property cost with the customer benefiting from that property cost. It is not designed, in concept, to provide an estimated liability for the permanent removal of the entire distribution and transmission system. The assumption is the entity will continue to be a going concern. As such, depreciation study data may need to be used cautiously as it may not be an appropriate mechanism to use when calculating all ARO liabilities. Discarding the depreciation study data, no data may be available to reasonably estimate the ARO liability.

Given this quandary, the indefinite life concept currently used by most utilities may continue in effect for the ultimate retirement of the system, but the individual assets comprising the system may not have indefinite life. Again, it was very clear that a “do nothing” scenario might not be a defensible position and that material obligations should be recognized or disclosed if a legal retirement obligation applies to the interim retirement of a system and the timing and method of settlement can be reasonably estimated. Any conclusion needs to be supported with full documentation and justification for the indefinite life choice and should be disclosed.

Materiality

FIN 47 clearly states, “The provisions of this Interpretation need not be applied to immaterial items.” However, many immaterial items may constitute, in aggregate, a material item. Determination of materiality is company specific and often an issue-specific routine. It should be defined and documented for each segment of the business. Along with the materiality threshold, a company should define the way in which assets will be summed to test materiality. It is assumed that the test will be for balance sheet materiality, as most utilities will offset any income statement effect with regulatory accounting. When the ARO does impact the income statement, an income statement materiality test may be used. For example, one must decide if distribution assets will be combined with nuclear assets in determining materiality. Perhaps a company will sum all asset obligations relative to a segment of the utility business keeping the nuclear AROs separate from the distribution calculation. Defining the materiality test to a lower level than function should be a decision based on propriety and not with the intent of avoiding this Interpretation. Additional guidance on materiality can be found in the Securities and Exchange Commission’s SAB No. 99.

For those companies that have more than one legal entity, the materiality should be done at the individual legal entity and not at the consolidated level. Now, one legal entity may have an ARO and another may not for the same class of assets because of the variety in the rules and regulation as well as the difference in size of the companies. This white paper does not advocate a consolidated materiality review of AROs where multiple legal entities exist within the corporation. The obligation is clearly the responsibility of the originating legal entity and it should be maintained at that level. However, the disclosures may be more detailed on the utility reports and summarized at the parent level.

Decision Tree

In general, a more substantive review of regulations, laws, and contract obligations will be required to assure that conditional AROs are properly recognized. Each company will need to assess its particular facts and circumstances as the same general situation may play out differently depending on the legal documents and company policies that surround it. To help facilitate this review, a decision tree for analyzing each situation is provided below.

Decision Tree Notes

1. Paragraph 3 of FIN 47 advises to include all legal obligations to perform an asset retirement activity, even those in which the timing and (or) method of settlement are conditional on a future event that may or may not be within the control of the entity. The obligation to perform the asset retirement activity is unconditional even though uncertainty exists about the timing and (or) method of settlement.

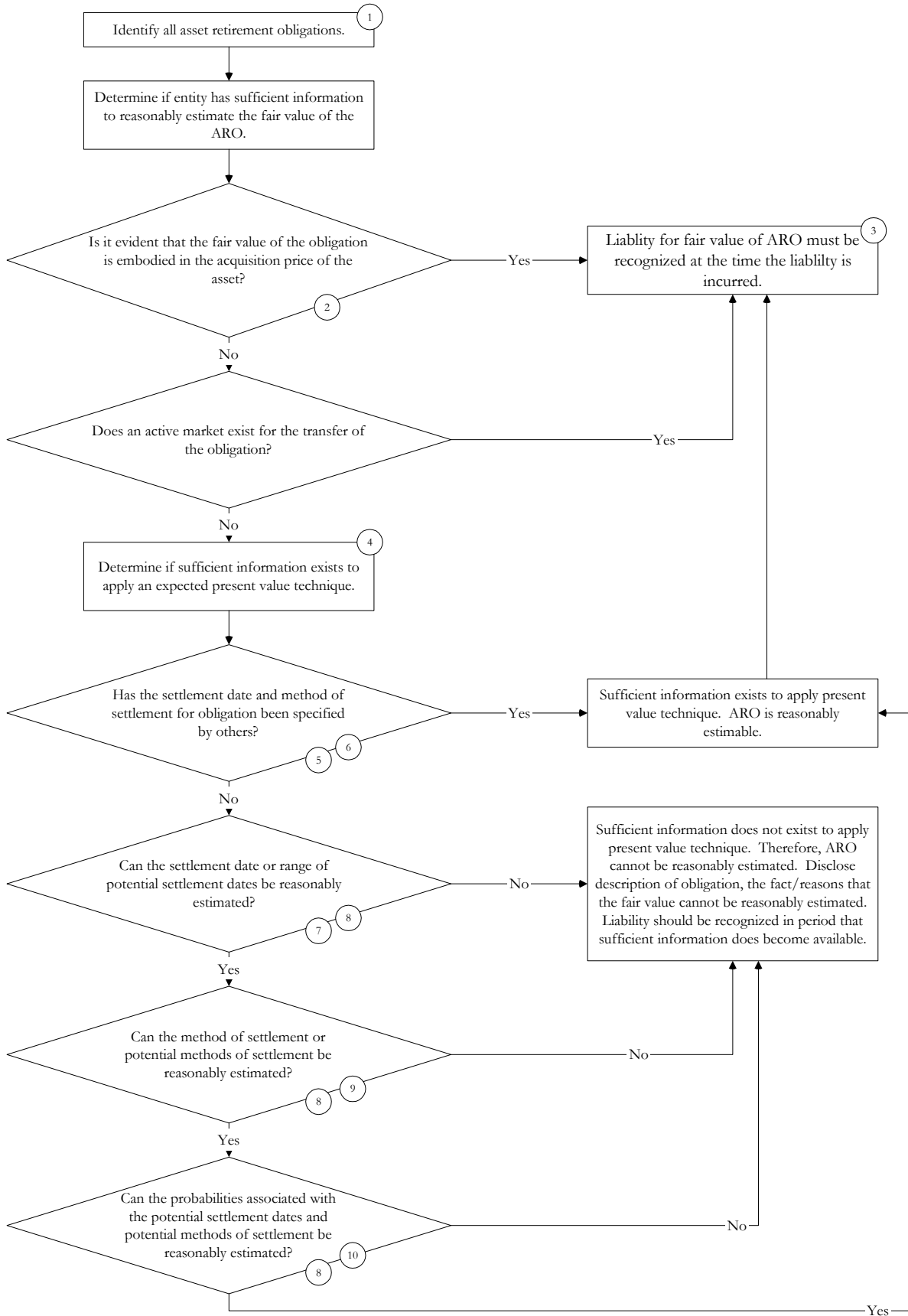
Paragraph B7 of the Interpretation states, “As used in Statement 143, a legal obligation is an obligation that a party is required to settle as a result of an existing or enacted law, statute, ordinance, or written or oral contract or by legal construction of a contract under the doctrine of promissory estoppel.”

2. Paragraph 4 of the Interpretation references paragraph 17 of FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, which states, “If a price for an asset or liability or an essentially similar asset or liability can be observed in the

marketplace, there is no need to use present value measurements. The marketplace assessment of present value is already embodied in such prices.”

3. Paragraph 3 of the Interpretation reiterates the SFAS 143 requirement that the fair value of an asset retirement obligation be recognized when the obligation is incurred—generally upon acquisition, construction, or development and (or) through the normal operation of the asset.
4. Present value techniques are discussed in paragraphs 39–54 and 75–88 of Concepts Statement 7. These techniques, which incorporate uncertainty about the timing and method of settlement into the fair value measurement, should be used when the fair value of the liability cannot be estimated based on the acquisition price or on an observable market price.
5. For example, specified in a law, regulation or contract (Paragraph 5a of the Interpretation).

Decision Tree



Decision Tree Notes Continued:

6. Paragraph 5a of the Interpretation states that uncertainty about whether performance will be required does **not** defer the recognition of an asset retirement obligation because a legal obligation to stand ready to perform the retirement activities still exists, and it does not prevent the determination of a reasonable estimate of fair value because the only uncertainty is whether performance will be required.

There are two possible outcomes in situations in which the only uncertainty is whether performance will be required—the entity will be required to perform or the entity will not be required to perform. If there is no information about which outcome is more probable, paragraph A23 of Statement 143 requires 50 percent likelihood for each outcome to be used until additional information is available.

In certain cases, determining the settlement date for the obligation that has been specified by others is a matter of judgment that depends on the relevant facts and circumstances. For example, a contract that provides the entity with an ability to extend its term through renewal should be evaluated to determine whether the settlement date should take into consideration renewal periods.

7. Paragraph 5b of the Interpretation states that the estimated economic life of the asset might indicate a potential settlement date for the asset retirement obligation. However, the original estimated economic life of the asset might not establish, in and of itself, that date because the entity may intend to make improvements to the asset that could extend the life of the asset or the entity could defer settlement of the obligation beyond the economic life of the asset. In those situations, the entity would look beyond the economic life of the asset in determining the settlement date or range of potential settlement dates to use when estimating the fair value of the asset retirement obligation.
8. Paragraph 5b gives examples of information that is expected to provide a basis for estimating the potential settlement dates, potential methods of settlement, and the associated probabilities. Examples include, but are not limited to, information that is derived from an entity's past practice, industry practice, management's intent, or the asset's estimated economic life.
9. Paragraph 5b of the Interpretation limits "potential methods of settlement" to those methods that are currently available to the entity. Therefore, uncertainty about future methods yet to be developed would not prevent the entity from estimating the fair value of the asset retirement obligation.
10. Paragraph 5b of the Interpretation states that the entity should have a reasonable basis for assigning probabilities to the potential settlement dates and potential methods of settlement to reasonably estimate the fair value of the asset retirement obligation. If the entity does not have a reasonable basis of assigning probabilities, it is expected that the entity would still be able to reasonably estimate fair value when the range of time over which the entity may settle the obligation is so narrow and (or) the cash flows associated with each potential method of settlement are so similar that assigning probabilities without having a reasonable basis for doing so would not have a material impact on the fair value of the asset retirement obligation.

Specific Property Considerations

Four examples were included in FIN 47. This white paper discusses those examples in the context of the Electric and Gas utility business. The examples are as follows:

1. Telecommunication poles
2. Bricks in a kiln
3. Factory with asbestos and regulations go into effect after purchase
4. Factory with asbestos and regulations are in place at acquisition

Basically, the premise put forward by the FASB in this Interpretation was that no tangible asset, except land, would last forever and accordingly, asset retirement activities will eventually be performed. In completing the retirement work, if a company is required to dispose of the asset in a specific manner or could be required to perform any one of a number of different methods of settlement, to be chosen at some later date, the company will need to evaluate the asset's retirement obligations. The four examples provided were meant to cover various situations a company may face. To bring the examples into the context of the energy industry, the list has been tailored to the potential issues for the Electric and Gas business. The following are the asset issues discussed in the remaining document:

1. Mass assets, electric and gas (***Telecommunication poles***)
2. Minor Items (***Bricks in a kiln***)
3. Asbestos, PCBs, and other contaminants (***Factory with asbestos and regulations go into effect after purchase or in place at acquisition***)
4. Rights-of-Way and franchises
5. General equipment
6. Hydro generation

Mass Assets, Electric and Gas

Example 1 of Appendix A, Illustrative Examples, provides specific discussion on wood pole treated with certain chemicals. However, the circumstances may be comparable to other utility property generally described as mass asset property. The following summarizes Example 1, followed by a discussion of comparability and applicability to other mass assets, and finally a discussion of various issues for utilities to consider in their implementation of FIN 47.

Summary of Example 1 of Appendix A

Example 1 discusses a situation in which a utility is using treated wood poles and where there is existing legislation that requires special disposal procedures in the state in which the utility operates. The example recognizes that the poles may be removed from the ground for a variety of operational reasons other than disposal, and further recognizes that the disposal obligation is not triggered by removal of the pole. Once a pole is removed from the ground, it may be disposed of, sold, or reused as part of other activities. In

this example, the disposal obligation is not triggered by removal of the pole. Based on that premise, Example 1 includes specific guidance that requires an assessment of AROs related to treated wood poles. That guidance suggests assessing the ARO and related accounting based on the following:

1. The **recognition point begins with the purchase** of the pole, rather than when the pole was placed into service (in-service date is when the pole first became a long-lived fixed asset). See obligating event and materiality above.
2. That **reuse does not change the obligation**, only defers it (common industry practice is to retire the pole at time of removal, not track it while in inventory, and considered a new addition when reused and placed in the ground again).
3. The **utility already has the information necessary to estimate** a range of settlement dates, methods of settlement, and the related probabilities **based on entity-specific practices, industry practices, management's intent, or the asset's estimated economic life**. (It is important to note that only in the example did the entity have sufficient information to estimate the fair value of the liability for the ARO. Each entity will have to make their own determination as to whether they have sufficient information.)
4. The utility is **not relieved of the obligation by selling** the pole to another party through the assertion that the exchange price reflects the estimated fair value of the obligation.

Impact On Asset Retirement Obligations Accounting

Example 1 of FIN 47 represents a utility that has a legal requirement to follow special procedures for disposal of treated wood poles. In this example, the utility is presumed to have all the information necessary to calculate an asset retirement obligation and is expected to make appropriate disclosure. Therefore, the asset retirement obligation should be recognized when the entity purchases the pole. This may result in a significant change from the requirements under FAS 143, where previous estimates and disclosures were not made because: 1) most disposal activities were performed by third parties so there were no future direct costs to be expended by the utility, 2) it was not reasonable to track the obligation (and settlement) due to reuse and different options for disposal, or 3) that the obligation was conditional due to circumstances known only at the time of removing the pole from the ground. There were no future costs because most utilities could give the poles away to third parties at no cost to the utility, but under FIN 47 even the ultimate disposal cost to a third party is to be considered (that net zero would be bifurcated into the avoided future disposal removal cost and the salvage – remember salvage is not recognizable for ARO purposes.)

Example 1 could apply to other mass asset property where a portion of the asset may be subject to special disposal procedures. Some examples might be property containing PCBs, mercury, lead, or any chemical considered hazardous. In the case of natural gas pipelines, specific activities are legally mandated for abandonment or removal and disposal. The ARO may include the cost of testing, removal, disposal or decontamination of pipeline segments and liquids. In other words, FIN 47 requires that if a utility has a special procedure requirement at ultimate disposal, then the utility either would have a measurable ARO with all the related accounting requirements, which should be recognized if the entity has sufficient information to estimate the fair value of the obligation. If the entity does not have sufficient information to reasonably estimate the obligation, the entity only has a disclosure requirement until sufficient information becomes available.

Concerns and Issues

This raises several concerns and issues for both the individual utility and for the industry:

1. Initial determination of legal obligation – The language seems to indicate that if there is a special disposal procedure, that there will be a cost of performing that disposal activity and therefore, an asset retirement obligation. The legal obligation review may need to be expanded to other assets containing materials, which are considered hazardous with special disposal procedures required by some legal mandate.
2. Record keeping and reporting changes – Many if not most utilities track poles as assets from the date put in the ground until the next time it is removed rather than from purchase to disposal. Time in inventory (initially and upon salvage for reuse) is often not tracked – much less details on how many were treated and what happened to the treated portion at disposal. An individual utility may have to develop such tracking details.
3. Third party disposal – Example 1 states that the “ability to sell the poles prior to disposal does not relieve the entity of its ...obligation”, and states that “the assumption of the obligation affects the exchange price”. This could be a significant issue in compliance for some utilities. It implies that the utility is not relieved of the obligation; and, therefore, should attempt to measure the ARO.

The use of the pole would affect disposal requirements, as Example 1 clearly requires a company to identify future disposal costs. Therefore, unless there is a market price available, the company would need to apply present value techniques, estimating the life of the pole before disposal. Such information about that future transaction may be particularly hard to estimate when the utility purchases the pole and needs to record the obligation.

4. SEC transfer of other provisions for accrued cost of removal – Any change because of reassessing the ARO for treated wood poles also would affect any recognition of the SEC interpretation on depreciation accruals for future removal costs.

Background: SFAS 143 does not allow a provision for future removal costs to be included in depreciation reserves. FERC Order 631 provides that utilities that qualify to apply SFAS 71 and if the requirements for Order 552 are met, any provisions for future removal cost would be transferred to a regulatory liability. However, FERC Order 631 continues to allow provision for future removal costs for assets that do not have an existing legal retirement obligation. A conflict may exist because many utilities also have adopted the unofficial SEC interpretation that SFAS 143 does not allow for any accrual of future removal costs, and all provisions for future removal costs should be excluded from accumulated reserves (or transferred to a regulatory liability if eligible for SFAS 71). There is inherent contradiction for many utility assets whereby it needs to be recognized in two different ways for reporting the same activity to the two different entities.

FERC Order 631 requires that only for accounts where an ARO is recognized, then previous provisions for future removal costs should be transferred from the accumulated reserve (and carried as a regulatory obligation under SFAS 71, if the requirements for Order 552 are met). Many utilities have also adopted the unofficial SEC interpretation that SFAS 143 does not allow for any accrual of future removal costs, and all provisions for future removal costs should be excluded from accumulated reserves (or transferred to a regulatory liability if eligible for SFAS 71).

The cumulative effect adjustment for SEC reporting will be the difference between the amount previously recognized prior to FIN 47 and the amount recognized following the advice in FIN 47 (as mentioned under Transition Accounting below). FERC reporting will be governed by any new advice that FERC may issue prior to adoption of FIN 47.

Recommendation

Since ARO compliance for this category of plant type, mass assets, may be quite onerous, a recommendation is offered for consideration to achieve the intent of the Interpretation without excess burden to the company and the accounting personnel. Each company will need to decide if the recommendation is feasible for their books and records. SFAS 143 (paragraph A22) permits the use of estimates and computational shortcuts that are consistent with the fair value measurement objective when computing an aggregate asset retirement obligation for assets that are components of a larger group of assets. This is appropriate for large transmission and distribution utilities that use group accounting. Therefore, the recommendation is to approximate the literal compliance with FIN 47 with an approximation that uses a statistical based method in order to achieve the **intent** of the statements without incurring undue burden on the accounting personnel.

1. Statistical Method – There are varying levels of information available to the individual utility from their depreciation studies from Simulated Plant Record to Equal Life Group study methods applied property data from individual accounts/sub accounts to functional categories like distribution plant. Even availability of details (such as separating net salvage into removal cost or into removal cost just for treated poles) will vary for different utilities. The following are general descriptions of possible approximation procedures that might be used:
 - a. Modified group property/modified depreciation study. Using the latest available depreciation study, the utility could develop the percentage adjustments to indicated life and negative salvage estimates to approximate the timing and the amount of the future removal cash flow. Many utilities have property records that provide the age of existing property and combined with average age, a future cash flow estimate could be prepared for each vintage of property (average age less current age result in the time to expected removal). There may be a standard length of time between removal from service until actual disposal and that could be added to remaining life.

It may be necessary to analyze the property in the pole account as not all the units may be part of the retirement obligation and to identify a percentage adjustment to approximate the proportion of obligating poles that are treated to all others and adjust the future cash flows to represent only the legally required disposal.

If dispersion curves were used in the study, the related retirement curves also could be used to approximate the period of disposal. When time estimates and future cash flows are estimated, then one can compute the various ARO elements (ARC, depreciation and accretion tables, and associated regulatory assets). For the first year, monthly entries are made based on that estimate only. In subsequent years and if vintaged retirements are available, it would be possible to go through the individual settlement calculations for each ARO vintage group plus recognize any layers if disposal cost estimates change or a new study is performed. If vintage retirement data is not available, do exactly the same calculation, but true up the components (which would eliminate all the subsequent measurements and layering).

- b. Fin 47 requires the use of current assumptions. It may be necessary to perform a new depreciation study to obtain current information on expected lives and removal costs for existing property. Negative salvage estimates that have been taken from depreciation studies reflect previous assumptions. In other words, the study reflects removal costs that have already happened and may not even reflect costs or methods of disposal under a new or recent legal requirement (or only partially reflect it). To the extent that previous assumptions are the same as current assumptions, the depreciation study may be used.

The gross removal portion of the negative net salvage amount also may contain a removal component that may or may not be part of the retirement obligation. Use of the approved rate to determine the obligation under this Interpretation could result in an inflated obligation. In either case, it should be updated to reflect current assumptions, based on management's intent, the asset's estimated economic life as well as entity and industry practices. Be sure to exclude gross salvage value from estimated removal costs and to split the removal costs into its components in order to identify only those pieces that represent the retirement obligation.

- c. Snapshot. If immaterial or one is unable to modify or perform annual studies, work with what is available at the end of each year. Then compute the ARO by taking a snapshot each year and true up for differences.
2. Detail Method – If detailed records exist or it is feasible to create detailed records and reporting just for treated wood poles (or like mass assets), and then it would be possible to fully comply with SFAS 143 and FIN 47.
 3. For either method, one may want to:
 - a. Re-examine the legal obligation to determine if there is a specific obligation due to the type of treatment on the poles along with other mass assets **and** that complying will result in a cost. For some locations, there are no “special” disposal tracking or fees. Examine the disposal fee for poles to determine if it is related to special facilities or just additional cost for garbage service. No cost means no accruals need to be booked.
 - b. Determine if the future fee could qualify as immaterial. For example, a \$5 fee or a 50-cent information sheet to buyers could be immaterial on the surface. However, balance sheet materiality would apply and it is the fair value of the ARO items as grouped that may determine materiality.
 - c. Review the additional reporting and record keeping requirements of the full application to determine if the cost of keeping records is unreasonable for the effort and that an alternative method may yield a reasonable estimate. For example, if one can match disposal to vintaged purchases, then one should be able to comply using the Detailed Method instead of developing a statistical approximation.
 - d. Similar to above, review whether the depreciation studies are reasonably compatible. Remember FIN 47 “example 1” is concerned with “purchase to disposal” total life versus studies based upon “site life” and in-service time (does not recognize reuse.) Similarly, then, approximation methods might be reasonable. Paragraph 2 of SFAS 143 states that this “applies to legal obligations associated with the *retirement*² of a tangible long-lived asset that results from **the acquisition, construction or development...**” This sentence has two interpretations - the first half indicates it only applies to plant in-service, while the second half adds the purchase or construction to the point of application. This review

may want to include making a determination on the reasonableness and materiality of the difference between in-service date versus the date of construction or purchase.

- e. Alternative approaches also may be justified if one qualifies as a regulated utility. As a regulated utility, the entire ARO compliance effort may result only in balance sheet adjustments with no earning impacts. The most reasonable application of managerial judgment might involve only a high-level, rough estimate of the current obligation without all the various kinds of offsetting regulatory assets and regulatory liabilities. It may be that all those offsetting line items and calculations provides only confusion and a good description of the circumstances is the most appropriate disclosure, especially if preliminary efforts indicate that full compliance results in an immaterial impact.

An example of a possible “snapshot” follows. Utilities with recent, extensive, and detailed studies may have such particulars and resources to develop a very close approximation of full ARO accounting. Many utilities will have very limited information available from latest depreciation studies and property records. This example is intended to show how to approximate an ARO calculation with the bare minimum of information.

Assuming that the utility depreciation study only provides an average service life and net salvage (no basis for a split for removal costs), has a count or estimate of treated poles in service, and vintage or estimate of age of those poles:

For Year 1 (2005) the following applies:

- Surviving plant is equal to 100,000 poles,
- Average service life is estimated to be 50 years,
- Average age of existing poles is 30 years (assume the average remaining life is 20 years even though it most likely would be closer to 25 years using Iowa Curves)
- Disposal cost is \$15 per pole fee set by law in 2000 at a local waste management facility.
- Future removal cost in 20 years would be \$1.5 million (\$15 times 100,000). Note, apply an inflation factor as well if disposal fee can increase due to inflation,
- Apply a current discount rate (credit adjusted risk free rate) back to the year that the obligation began (in this example it is the year 2000) to determine ARC,
- Set up schedules to determine ARC depreciation, accumulated reserve, accretion table, and current value of ARO in year 2005 (also determine regulatory accounting to offset any expenses or income if eligible for SFAS 71 treatment – FERC Accounts 182.3 and 407.4 for regulatory assets, FERC Accounts 254 and 407.3 for regulatory liabilities).

For Year 2 (it is now 2006) the following occurs:

- Surviving plant has been reduced to 95,000 poles (additions and retirement led to a net reduction,
- Average service life is still estimated to be 50 years,

- Average age of existing poles has changed due to the additions and retirements – and is now 29.5 years (average remaining life is now 21.5 years)
- Disposal cost is still \$15 per pole fee set by law at a local waste management facility back in year 2000 (watch for whether this should be inflated),
- Future removal cost in 21.5 years would be \$1.425 million (15 times 95,000),
- Apply a current discount rate (credit adjusted risk-free rate) back to year 2000 to determine ARC (FERC account 359.1 or 374),
- Set up schedules to determine ARC depreciation, accumulated reserve, accretion table, and current value of ARO now in year **2006** (also determine regulatory accounting to offset any expenses or income if eligible for SFAS 71 treatment – FERC Accounts 182.3 and 407.4 for regulatory assets, FERC Accounts 254 and 407.3 for regulatory liabilities).
- Compare the Year 2 (2006) results to Year 1 (2005) results:
 1. Adjust both the ARC asset, ARC accumulated reserve, and the ARO liability to the new numbers.
 2. The remaining differences (accretion, depreciation, and affect of the change upon the current) will be recognized as a gain or loss or deferred under regulatory accounting (adjust previously recorded amount – difference may change the amount from an asset to a liability which should be a reversal of the prior year entry and a new entry in order to keep the connection between 407.3 and 254 or 407.4 and 182.3 as appropriate).
 3. Layering is being ignored for both because this is only an approximation and this does recognize that the forecast future date of cash flows has changed for all assets and in the long run will achieve a more appropriate obligation at the time of disposal.

In the situation where more information is available (such as vintage data), and the effort reasonable, then the above “snapshot” approach could be applied to each vintage. If service life is estimated using dispersion curves such as Iowa Curves, another enhancement would be to use the “retirement rate” percentages from those curves to develop the estimated time for future retirements. Such an enhancement may be unreasonable (especially if being computed manually) because it would be many times more complicated with the number of vintages involved and it may result in an immaterial difference to the results. These are issues subject to that managerial judgment discussed at the beginning of this document.

Questions for Review: Mass Assets, Electric and Gas

1. Which mass assets are subject to this section?
2. What actuarial assumptions has the company been using with those assets identified as falling within FIN 47?
3. Are the state laws or federal ones defining the disposal restrictions related to any of these minor items?
4. Can one determine a reasonable estimate the current disposal costs and does that apply to all or most in the mass asset group?
5. Can one estimate the retirement possibilities such that the choices would meet current audit and accounting standards for supporting evidence?

6. Is the ARO associated with this mass assets material enough to spur recognition in the books and records or should its presence just be disclosed?

Minor Items

SFAS 143 applies to legal obligations associated with the retirement of a tangible long-lived asset that result from the acquisition, construction, development, or normal operations of the asset itself. In the utility business, property accountants break the huge investment in fixed assets into retirement units, whereby anything less than a retirement unit is not significant enough to be a unit of property. These items that are less than a retirement unit are often called minor items. When construction ensues to install one or more retirement units, minor items directly associated with the retirement units are often part of the construction cost. However, a minor item is not replaced with future construction dollars just because its original cost was part of fixed assets. These items are replaced using maintenance dollars or the replacement is expensed at that time. Minor items to the utility business are basically our “bricks in a kiln”.

So it can easily be seen that these minor items can be a quandary when determining a conditional ARO. In some respects, these minor items can consist of the contaminants discussed below. Replacing these in the course of normal operations may be construed as impossible to determine as not enough facts are available to measure the conditional ARO. One would need to know when in the course of operations these minor items will be replaced. However, a more routine maintenance replacement may not be as difficult to predict than an item that perchance could fail. For example, if oil is replaced after every certain number of hours of operation, then one may be able to estimate the disposal obligation. The bricks example infers that the disposal of these bricks, because it is known and routine, may constitute an ARO. A company needs to decide if any of the minor items, those that are part of the asset on installation, but are replaced on maintenance throughout the life of the asset, qualify for conditional ARO treatment. Minimally, the proper removal of oil may be a legal obligation upon retirement of the asset.

However, one keeps coming back to the idea that these items are not fixed assets in exclusion of the retirement unit. Oil sitting on the shelf (i.e. inventory not specifically a property unit) does not fall within the scope of SFAS 143. If the installation of the oil is expensed at the time it is added to the fixed asset, one could conclude that it is not part of the fixed asset cost and perhaps the only retirement obligation is the one associated with the retirement of the asset either interim or final. Assuming this conclusion, the replacement of a minor item during operation in exclusion of the retirement unit would be considered normal maintenance and not subject to ARO accounting. Whereas, the retirement of the asset including the minor item could constitute an ARO, conditional or otherwise, if the minor item causes the asset retirement to meet the rules of SFAS 143 or FIN 47.

Recommendation

Before minor items are recognized as an ARO, make sure that the component is not part of an ARO established for the asset to which the minor item relates. For example, the bricks in the kiln were replaced many times over the life of the kiln’s useful life. If an ARO exists for the final disposal of the kiln in its entirety, one would not want to set up an ARO for the disposal of the final set of bricks. Clearly define the minor items that should be included and test early on in this process for materiality. One may have bricks, but the bricks represent such a small component of one’s balance sheet and income statement that

the inclusion of such in the ARO process may be immaterial at all times, especially if the asset (the kiln) has no ARO. Keep track of the asset to which these minor items relate in order to determine if a future ARO will be warranted by association. Lastly, document the minor items with possible AROs that are routinely replaced versus those where replacement cannot be predicted.

Some Questions for Review: Minor Items

1. Can the minor items be identified that could cause an ARO situation to occur when it is removed with the asset retirement?
2. Does the company have a definitive list of minor units of property?
3. Are the state laws or federal ones defining the disposal restrictions related to any of these minor items?
4. Can a one make a reasonable estimate of when the asset will be retired and whether the minor item will exist as part of the asset at that retirement date?
5. Does any of the guidance from AICPA Statement of Position (SOP) 96-1, "Environmental Remediation Liabilities" supersede the application of SFAS 143 or FIN 47?
6. Can one estimate the retirement possibilities such that the choices would meet current audit and accounting standards for supporting evidence?
7. Is the ARO associated with this minor item material enough to spur recognition in the books and records?

Asbestos, PCBs, and Other Contaminants**Asbestos**

Assets constructed before 1980 may have used asbestos as insulation or fire retardant. Typical removal of this substance involves extensive effort to protect workers and the environment from harm along with very specific disposal rules. For that matter, any asset with asbestos may have an ARO associated with it. The determination of whether the removal is performed as a part of normal ongoing maintenance during the life of the asset or is present at the time of retirement may need to be factored into the fair value analysis.

For non-real property, the ability to determine the amount of contamination may be an issue and a costly one at that. The engineering staff generally can determine if the asset being worked on contains asbestos, but determining the amount of contamination may not be feasible. This may make the process more difficult in applying FIN 47, but it may not preclude recognition in the financial statements. At the minimum, disclosure may be necessary for specific assets that are contaminated. For instance, the amount of existing asbestos in a generating facility may not be known and the timing of the removal of it during normal maintenance may be difficult to forecast. The obligation, in this circumstance may be measurable only after the work has been defined. If the ARO is known, measurable, and satisfied all during the same accounting period, then perhaps only a disclosure is necessary for these instances.

Real estate may be easier to estimate if one knows the extent of the contamination. It may be that when the building was first constructed asbestos was throughout every floor. Many years later, some of the

asbestos may have been removed in past maintenance on various sections of the building. The engineers familiar with the building should know the relative extent of the contamination. If the building has been through a recent assessment, it may be possible to estimate the loss in market value of the building because of the asbestos. However, asbestos abatement may not be comparable to the loss in market value, and this loss should be weighed with the potential for undertaking the removal oneself.

Estimation of retirement, as with all assets falling within the scope of this Interpretation, can be quite difficult as some of the assets contaminated also are the longest living assets. Even with the loss in value due to selling the building with the contamination, one still may have a difficult time determining retirement parameters. Non-real property may be easier to estimate, as there often exists a manufacturing life on most retirement units.

Polychlorinated Biphenyls (PCBs)

PCBs are man-made chemical compounds previously used in the manufacture of products to make them flexible and heat resistant. Because of these fire retardant qualities, manufacturers sometimes used it in the insulating oil of capacitors, transformers and other electrical equipment. PCBs also can be found in hydraulic fluids, lubricants, paints, sealants, carbonless paper, ink, caulking compounds, and plastics.

PCBs are very stable and do not readily break down in the environment and therefore require special care during handling and disposal. The use of PCBs is regulated under the Federal Toxic Substances Control Act (TSCA). The Environmental Protection Agency (EPA) has set strict regulations regarding the manufacture, use, storage, transportation and disposal of specific levels of PCBs. PCB concentrations below specified levels are not regulated under TSCA.

The existence of regulations related to disposal of PCBs creates a duty to dispose of PCBs in a prescribed manner. The obligation to perform this asset retirement activity is unconditional even though uncertainty may exist about the timing and (or) method of settlement.

The Interpretation states an entity shall recognize a liability for the fair value of the conditional Asset Retirement Obligation (ARO) if the fair value of the liability can be reasonably estimated. If one has assets that contain PCBs and one has sufficient information to reasonably estimate the fair value of the ARO, then the PCB ARO must be recorded. Sufficient information needed to reasonably estimate the fair value includes:

- Settlement date, or information to estimate a range of potential settlement dates
- Method of settlement or potential method of settlement, and
- The probability associated with the potential settlement dates and method of settlement.

The ability to defer settlement, such as storing PCB containing equipment, does not relieve the entity of the obligation. The PCB will eventually need to be disposed of following EPA prescribed procedures. The obligation to perform the asset retirement activity is unconditional even though uncertainty may exist about the timing or method of settlement. The PCB ARO is the cost to dispose of the PCBs as required by the EPA.

Example 1 included in Appendix A of the Interpretation indicates that the ability to sell the PCB containing equipment or facility prior to disposal does not relieve the entity of its present duty to settle the

obligation. The sale of the equipment or facility transfers the obligation to another entity. The assumption of the obligation by the buyer affects the sale price. Therefore, an ARO should be recorded once known; when the asset is sold, the ARO liability is debited and the sale price is adjusted to reflect the transfer of the ARO obligation. It is assumed that the utility has factored into the calculation of the ARO, the probability that not all of the assets may be contaminated upon sale.

An entity does not have sufficient information to estimate the fair value of the ARO if:

- The settlement date is indeterminate (the range of time over which the entity may settle the obligation is unknown or cannot be estimated),
- Method of settlement is unknown, and
- Sufficient information is not available to apply an expected present value technique

In this case, an entity will record an ARO when sufficient information exists. It currently qualifies as an ARO, albeit not measurable, and it would be subject to certain accounting and disclosure requirements related to reserves and provisions for cost of future removal. Example 3 included in Appendix A of the Interpretation illustrates this point. However, paragraph 22 of Statement 143 requires that if the liability's fair value cannot be reasonably estimated, that fact and the reasons shall be disclosed.

Electrical equipment damaged by a car, lightning or other incident, which result in a spill of insulating oil containing PCBs will be out-of-scope of this Interpretation since the spill is not considered normal operations. Paragraph 2 of the Interpretations states that "Statement 143 applies to legal obligations associated with the retirement of tangible long-lived assets that result from the acquisition, construction, or development and (or) the normal operation of a long-lived asset, except as explained in paragraph 17 of that Statement for certain obligations of lessees."

Other Contaminants

As part of the normal operations for a utility, other contaminants may exist in fixed assets that would require "special" disposal procedures under federal and state regulations. Below are examples of these assets that may contain other contaminants:

Generation

- Groundwater contamination in ***ash ponds*** from metals such as nickel, chromium and arsenic
- Groundwater and soil contamination from unlined ***chemical cleaning basins*** (i.e. boiler cleaning waste basins)
- Soil and ground water contamination associated with ***above and below ground storage tanks*** (i.e. petroleum or other contamination)
- ***Solid waste landfills*** that require installation of a final cover system, grading the final cover, and establish vegetation on the final cover
- ***Septic tanks*** that must be drained and filled with sand prior to closure
- ***Wastewater and sewage treatment facilities*** that may contain hazardous wastewater treatment sludge or sewage

Transmission & distribution

- Soil contamination from arsenic at ***substations***
- Soil contamination from mineral oil at ***substations*** from ***non-PCB transformers***

Other

- ***Equipment*** containing sulfur hexafluoride (SF₆) gas

This is not an exhaustive list of potential contaminants resulting from normal operations of utilities. Each company should consult with environmental experts and legal counsel to properly assess these and other contaminants for potential AROs. Care should be given to ensure that contaminants at these facilities do not fall under the scope of SOP 96-1, *Environmental Remediation Liabilities*, and that these contaminants resulted from normal operations.

Recommendation

EEI and AGA issued a White Paper entitled *Asset Retirement Obligation Implementation White Paper* late 2002, which recommended a team approach to identifying and estimating AROs. That approach can be used for the implementation of FIN 47. Listed below are some of the main points included in the White Paper:

- Use a team approach, ARO team members should include representatives from various company operating departments,
- Develop an inventory of potential AROs,
- Accounting and Legal departments must review and discuss these potential AROs to determine if a legal obligation exists,
- Once it is determined that the obligation falls within the scope of SFAS 143 and FIN 47, the next step is measurement of the ARO liability. The amount of the ARO liability is to be measured at fair value.

Refer to the 2002 EEI and AGA White paper section entitled “Calculation Process Overview” for suggested ARO calculation guidelines and examples. The White Paper also includes journal entry examples and record keeping suggestions.

Questions for Review: Asbestos, PCBs, and Other Contaminants

1. Can all the assets be identified that contain asbestos, PCBs, or other contaminants and can the amount of asbestos that is contained in the asset be determined?
2. Does the company treat these contaminants as a major or minor unit of property?
3. Are the state laws more onerous than the federal ones?
4. Can a market value of the asset be determined with and without the contaminant?
5. Does any of the guidance from AICPA Statement of Position (SOP) 96-1, “Environmental Remediation Liabilities” supersede the application of SFAS 143, Accounting for Retirement Obligations or FIN 47?
6. Can one estimate the retirement possibilities such that the choices would meet current audit and accounting standards for supporting evidence?

Rights-of-Way and Franchises

Land, although not specifically excluded from scope of SFAS 143 and FIN 47, is perhaps the one asset that can live forever. Rights of way and easements are land related intangible assets that also are excluded from the scope of SFAS 143 and FIN 47. However, consideration should be given to whether there is a conditional obligation that can be associated to specific, existing, long-lived assets within rights-of-way and franchise areas. It should be noted that there is no asset retirement obligation associated with the franchise (or right-of-way) itself. If it is determined that there is an ARO, it only will be with the assets located within that franchise (or right-of-way). Similar situations may exist with leased land or leasehold improvements, however this section is dealing with the intangible asset created by the right-of-way or franchise agreement. An ARO associated with a lease may be more determinable due to the language of the legal agreement.

Typically, utilities are granted franchises by each local jurisdiction in which they have distribution and transmission assets. Typically, the local jurisdiction retains the right to require the removal of the utility's assets, at the discretion of the local jurisdiction. Consequently, the wording in the franchise imposes certain requirements due to revocation of ordinances and road relocations. Just as typically, however, the intent of the utility and the local jurisdiction is for the utility to continue to provide service on a permanent basis in the service area, and the utility is required to remove its assets only when necessary to allow the local jurisdiction to perform some public work.

Generally, the wording in such franchises indicates that there is a possibility that any individual asset could be required to be moved at any time, but the wording neither identifies specific assets to be removed nor sets a specific time that the removal is required. Furthermore, the franchise wording typically indicates that the franchise is either perpetual or renewable.

Paragraph 3 of FASB Interpretation No. 47 states:

“The term *conditional asset retirement obligation* as used in paragraph A23 of Statement 143 refers to a legal obligation to perform an asset retirement activity in which the timing and (or) method of settlement are conditional on a future event that may or may not be within the control of the entity. The obligation to perform the asset retirement activity is unconditional even though uncertainty exist about the timing and (or) method of settlement.”

This definition identifies three variables: “If”, “When” and “How/How Much”.

- The “If” is satisfied if it has been determined that an asset will have to be retired at some future date, i.e. the obligating event has occurred.
- The “When” is the date or range of dates when the retirement will/must occur.
- The “How” is the method (and by extension, the cost) associated with the retirement.

In the case of franchises, the obligating event would be the determination by the local jurisdiction that an asset or group of assets must be removed. In granting a franchise, however, the presumption by both the utility and the local jurisdiction is that this event will never occur. The fact that this event does occur on occasion (road widening, for example) is not sufficient to negate this presumption.

In a franchise situation, a conditional ARO does not exist, because the obligating event has not yet occurred. The possibility exists that the obligating event will occur, but the possibility alone is not itself an obligating event. The questions of “when” and “how/how much” do not even come into play, because it has not been established that any asset or group of assets will have to be removed. It is impossible to calculate an asset retirement amount, so journal entries are not required. Furthermore, the possibility that an ARO could come into existence need not be disclosed in a footnote.

It should be noted that franchise language typically requires a utility to remove its assets from a given location, not retire those assets. Theoretically, the utility could satisfy the requirements of the franchise by simply moving those assets. In the case of a road widening, for example, the utility could just pick up all of its poles and wires and move them. In reality, new poles and wire are installed and the old poles and wire are removed. But, the decision to install the new and then remove the old is a management decision, to allow for continuous service while the assets are being “relocated”. And in some cases, those assets being removed could be re-used elsewhere (poles, for example). There is no asset retirement obligation, because there is no obligation to retire assets.

This situation can change for major projects, however. If a jurisdiction notifies a utility that it must remove specific assets, for any reason, and assuming the utility will retire those assets, the obligating event for those specific assets will have occurred, and an ARO would exist at that point. If the timing and method of removal can be reasonably estimated (and it probably could be), then the utility would be required to calculate and record an ARO. For example, if the utility is notified that a given section of a subway system is to be extended in five years, and that the utility will have to relocate its poles, wires, buried cable or gas mains along the route of the subway extension, all of the requirements of an ARO will have been met. At this point the utility would be required to record an asset retirement obligation for these assets.

It is not uncommon for local jurisdictions to reimburse the utility some or all of the cost of removal when that local jurisdiction requires that assets be relocated. Such reimbursements are not salvage; they are, in fact, a reduction of the cost of removal. Since the cost of removal is the basis for calculating the amount of the asset retirement obligation, any such reimbursement must be reflected (as a reduction) in the ARO calculation. This could substantially reduce the amount of the ARO (or in the case of a 100% reimbursement, totally eliminate it).

Rights-of-Way are similar to franchises, but on a smaller scale. Rights-of-Way typically are granted by individual citizens or companies, cover smaller areas of land, and may be for shorter periods than franchises. The logic in applying the criteria for establishing an ARO is the same, however. If and when an obligating event occurs, an ARO would have to be recognized if sufficient information exists to estimate the fair value of the obligation or disclosed (if sufficient information does not exist). The determination that a Right-of-Way will not be renewed would be an obligating event. Until that time, no calculations or disclosure by the utility would be required.

If it is determined that an asset retirement obligation does exist, it is important that companies do not double-count or double-record the ARO amount. For example, companies may have a program to identify and track asset retirement obligations for the disposal of treated poles. If a treated pole is in a franchise area or right-of-way and must be removed, and it is deemed that an ARO does exist, the cost of disposing of the treated pole should not be counted twice – once under the program to identify costs of disposing of treated poles, and then again as part of the cost of removing an asset from a franchise area or right-of-way. Property accounting personnel should take care to coordinate the ARO identification and

measurement efforts to ensure that all ARO costs are recorded, but that those costs are recorded only once.

Recommendation

The costs of franchises and rights-of-way do not themselves incur an asset retirement obligation. Generally, the assets within the franchise area or right-of-way do not incur an asset liability solely because those assets are subject to the franchise or right-of-way. Under certain circumstances, however, those assets could incur an asset retirement obligation. If it is deemed that an asset retirement obligation does exist for certain assets in a franchise area or right-of-way, care should be taken not to include costs that have been included under another ARO identification program within the company.

Questions for Review: Rights-of-Way and Franchises

1. Who maintains the file of all franchises and rights-of-way agreements?
2. What is the exact wording in the franchises and rights-of-way agreements? (Specifically, what do it require the company to do?)
3. Can one identify all of the assets in the franchise and rights-of-way areas?
4. Are the assets in the franchise and rights-of-way areas covered under some other ARO identification program within the company?
5. Do the company have procedures in place to make sure that one is not double-counting the ARO?
6. Can one reasonably estimate the amount of reimbursements the company will receive for any required cost of removal?

General Property

The possible changes in ARO accounting as indicated in the guidance and examples provided in FIN 47 also may apply to utility property classified under the General Plant function. Recently, the lead and mercury content in personal computers have been drawing attention of lawmakers, environmental agencies, and disposal sites. There are other potential issues like the mercury in fluorescent light bulbs and chemicals in common batteries. Individual utilities may want to assess ARO requirements as modified by FIN 47.

It may be possible that each of the four examples could apply depending upon the circumstances of the legal obligation and property accounting issues such as whether the obligation relates to a retirement unit, a minor item, or a smaller portion of an asset. For example the coatings or trace elements in a personal computer might be comparable to the chemicals in the treated wood poles in Example 1 in Appendix A of FIN 47. If the obligation relates to specific components of the computer, Examples 3 and 4 may be more applicable.

There may be an additional complication in applying FIN 47 to General Plant property. Many utilities have adopted amortization accounting (such as allowed under Federal Energy Regulatory Commission Accounting Release No. 15, "Vintage Year Accounting For General Plant Accounts"). A main objective of adopting amortization accounting was often to eliminate the relatively unreasonable cost of tracking the

status of large volumes of low cost property. Under amortization accounting, the cost of the long-lived asset is given an assumed life and reporting of movement or disposition of the property ceases.

While there may be insufficient information in the property records, there may be alternative sources of information. In the personal computer circumstance, a utility may already have a policy of storing the PC prior to disposal – possibly to be in compliance or anticipation of compliance with disposal obligation. The assessment of application of FIN 47 might include evaluation of the existing availability of such alternative information or of possibly creating such information to facilitate compliance with both the legal obligation and the accounting requirements.

Recommendation

1. Review the circumstances for each account – identify the legal obligation, availability of the information to determine the estimated future removal cost, and the property accounting method (item property, group property, or amortization accounting).
2. Amortization accounting would represent a unique situation, because it was probably adopted because of a determination that it was unreasonable to maintain detailed record keeping under group or item property. There may still be a basis for recording an ARO, if alternative information is available and the effort reasonable or not considered immaterial.
 - a. For example, company using amortization accounting with a policy that requires that unused PCs be returned to a central location for disposal with a known disposal cost. If quantities are kept with the unamortized period, then it is possible to estimate a total liability (quantity unamortized plus quantity waiting for disposal multiplied by the disposal fee). All that is necessary is to estimate the timing of the disposals.
 - b. Some utilities may keep other records on such items outside of the accounting, which may provide sufficient information to calculate the exposure quantity and approximate timing of disposal.
 - c. This accounting method is designed to alleviate the record keeping burden on small value, high volume assets and one should attempt to maintain this simplicity in the ARO analysis and calculation.
3. The possible situations are numerous, but if information is available and cost is large enough, then one of the methods described above (such as used for mass assets) may be applicable for making the calculation.

Questions for Review: General Property

1. Can one define the legal requirements for removal for the general assets?
2. Does the company use AR-15, amortization of general property?
3. Can one estimate potential future retirements?
4. Are the obligations for this category material?
5. If immaterial, is it appropriate to group these AROs with others to determine materiality?
6. Can you estimate the retirement possibilities such that the choices would meet current audit and accounting standards for supporting evidence?

Hydro Generation

Hydro dams and facilities fall into conditional obligations primarily due to three factors:

1. An exceptionally long life of the total facility,
2. The large magnitude of costs and complications associated with removal, and
3. The uneven probabilities involved.

In some circumstances, however, the obligation may already provide the information to support recording an estimate. In other circumstances, there may be legitimacy in asserting that too much uncertainty exists to make a reasonable estimate.

Hydro facilities (generation equipment, dam, reservoir, and other plant) typically have an extremely long life. That life may also involve multiple steps, in that the dam may continue to provide service long after generation ceases, and may be rebuilt or repaired multiple times in order to maintain the reservoir for conservation or flood control purposes. That combined total facility life may be so long that “there are no boundaries of time or an extremely lengthy period of time, that bears on a person’s ability to make a reasonable estimate of the timing and the amount of the cash flows”¹ (Minutes of January 26, 2005 Board Meeting, wwwfasb.org). Estimating life may be further complicated by whether the obligation is identified (individually or overlapping) by multiple jurisdictions (a FERC license, a Corp of Engineers building permit, an act of Congress, state law, or even promissory estoppel).

The exceptionally long life expectancy will typically represent the greatest obstacle to developing a reasonable estimate of ARO. Many reservoirs can be traced to the early history of the United States, so it is reasonable for a total life of a hydro facility to be measured in hundreds of years. Another complication may be multiple legal jurisdictions involved in the obligation over different phases of that total life. Further, economics may support a truly indefinite life since the magnitude of a repair/rebuild may be the clear option of choice compared to the magnitude of the cost of removal of the facility - at any point in time when a removal consideration is being faced.

The long-life combined with the economics favoring indefinite repair over removal creates a time frame in which acts of gods (unprecedented floods, earthquake, etc.) would have to be included in setting probabilities of life. Statistical models may not be applicable when a long life would also involve such random factors – not only for the life, but also the wide range of possible methods of removal complicated by varying relationships to the cause of removal.

Recommendation

Understanding the nature and timing of the current legal obligation is a critical first step, but one that may be particularly difficult to determine. With Hydro licenses, the requirement to remove the dam and flowage structure, albeit purportedly required by the FERC, may not occur if the environment has adapted and become accustomed to the dam. One may have to rely more on local data that is in relation to a legal obligation to define the possible course of action.

A conditional ARO is a judgment-based process and if it results in no ARO recognition, then documentation of such conclusion must be done. If a life or range of lives can be identified, the next step is to review the extent of possible methods for meeting the obligation. If life and method of settlement

can be identified, the next step would be to identify the availability of other critical elements in estimating an ARO.

Questions for Review: Hydro Generation

1. What is the nature of the legal obligation(s) involved – does it apply to only a portion of the hydro or to the full facility?
2. Can a life or a range of lives be reasonably identified with any degree of statistical validity?
3. Can the methods of settlement be identified with reasonable estimates of probability?
4. Can a market value of the asset be determined with and without asbestos?
5. If all of the above exists, can costs and cash flows be reasonably estimable with any degree of statistical validity?
6. And, can inflation be reliably predicted from present to the time of removal?
7. Does a risk-free interest rate exist for such a period and will credit adjustments be applicable to determine the rate necessary to convert the ARO into the capitalized asset retirement cost and accretion models necessary under SFAS 143?
8. Can one estimate the retirement possibilities such that the choices would meet current audit and accounting standards for supporting evidence?

Overall Recommendation

There will be no single way to estimate the conditional ARO on the property that was excluded in the earlier review. Several recommendations have been provided within this white paper, but as always, each company will need to decide the appropriate conditional ARO. This review includes the determination of the potential liability, the costing and probability of occurrence, the method for calculating the liability and asset, the materiality of the ARO, forward processing, and the appropriate disclosure. The basic concept throughout was to define the property and to encourage one to find a way to provide for the intent of the accounting without creating unbearable duress in doing the calculation. Also, the calculation for the first recognition at the end of this year should be one consideration, but the process used should define the ongoing revision of the conditional liability and the eventual settlement.

The whole process used should be defined and documented to support audit review and to satisfy any Sarbanes/Oxley provisions within the company. Even if one chooses to disclose and not to account, the documentation for the first and subsequent measurements must be such that it will completely support that decision. Overall, proper management and design of the process keeping a keen site on the form and intent should enable one to fully represent the conditional ARO without creating a nightmare of a process.

Effective Date

Effective Date

Paragraph 8 of the Interpretation specifies the effective date and states:

The Interpretation shall be effective no later than the end of fiscal years ending after December 15, 2005 (December 31, 2005, for calendar-year enterprises). Retrospective application of interim financial information is permitted but is not required. Early adoption of the Interpretation is encouraged.

Transition Accounting:

Paragraphs 9 and 10 of the Interpretation provide requirements for transitional accounting and state:

“For amounts recognized upon the initial application of the Interpretation, an entity shall recognize the following items in its statement of financial position: (a) a liability for any existing AROs adjusted for cumulative accretion to the date of adoption of the Interpretation, (b) an asset retirement cost capitalized as an increase to the carrying amount of the associated long-lived asset(s), and (c) accumulated depreciation on that capitalized cost.”

“Amounts resulting from initial application of the Interpretation shall be measured using current (that is, as of the date of adoption of the Interpretation) information, current assumptions, and current interest rates. The amount recognized as an asset retirement cost shall be measured as of the date the asset retirement obligation was incurred. Cumulative accretion and accumulated depreciation shall be recorded for the time period from the date the liability would have been recognized had the provisions of the Interpretation been in effect when the liability was incurred to the date of adoption of the Interpretation.”

“An entity shall recognize the cumulative effect of initially applying the Interpretation as a change in accounting principle. The amount to be reported as a cumulative-effect adjustment in the statement of operations is the difference between the amounts, if any, recognized in the statement of financial position prior to the application of the Interpretation and the net amount that is recognized in the statement of financial position pursuant to paragraph 9 of the Interpretation.”

Thus, the recognition of new AROs due to adopting this Interpretation is similar to the first recognition done for SFAS 143. Once the full accounting is established for an ARO, the change in estimate routine from SFAS 143 is used for all subsequent layers. For mass assets and other AROs recognized in aggregate, the change in the obligation acknowledged in the second and successive years may be defined as a new layer. This would have to be discussed and agreed upon by management and your auditors as an appropriate treatment.

Subsequent Accounting for Indeterminate AROs:

As has occurred throughout this issue, a quandary seems to exist relating to subsequent recognition if a previously indeterminate ARO becomes measurable and material such that one must invoke the full accounting treatment, not just the disclosure part. The question that has been difficult to get a consensus on is as follows:

Should transition accounting be used in future years to record the initial measurement of an ARO, which was previously treated as indeterminate or would the measurement of this ARO constitute a change in estimate and thus the accounting for a subsequent layer be applicable?

There does not seem to be agreement on this point and it may be a common occurrence. A survey of 18 EEI companies (by Constellation) showed responses that were split down the middle as to whether transition accounting would apply when asset retirement costs were first being measured (previously immeasurable) in years after adoption of FIN 47.

It would seem that transition accounting would not be used in years following adoption of FIN 47. Both FAS 143's paragraph 25 and FIN 47's paragraph 9 on transitional accounting specifically refer to measuring an asset retirement cost (as of the date the obligation was incurred) and provide for accumulated depreciation "to the date of adoption of this Statement" or "Interpretation". Neither FAS 143's paragraph B19 nor Fin 47's paragraph B27 specifically provide a method for asset retirement costs when it states that obligations should be measured at the point where information becomes available.

FIN 47 paragraph 9 ends by stating: "Cumulative accretion and accumulated depreciation shall be recorded for the time period from the date the liability would have been recognized had the provisions of this Interpretation been in effect when the liability was incurred to the date of adoption of this Interpretation." (Emphasis added.) Since the date of subsequent measurement of a specific ARO is not the date of adoption of the pronouncement, it would seem that transition accounting would not be applicable. To rely on this premise, it is assumed that the following is true:

1. An asset was defined as either having an ARO or not based on the legal review at time of adoption
2. Of those assets with an ARO, the ones that were measurable and material were accounted for and disclosed in the financial statements
3. The remaining assets with an ARO were immeasurable, immaterial, or indeterminate in nature, such that only a disclosure was presented in the financial statements
4. A new legal obligation created in the current period for an asset would start the ARO accounting in the current period and no transitional or layer would apply
5. An asset with an ARO would use the cumulative-effect accounting upon adoption of FIN 47 or did use this accounting upon adoption of SFAS 143
6. Any change in estimate, a new layer is created. With an asset where only a disclosure existed, the new layer is done based on a zero layer from adoption.

FIN 47 seems to constitute new rules regarding the determination of when an ARO exists, and how (or what information can be used) to measure that ARO. When booking entries, which adopt these new rules, it explicitly directs one to discount the asset retirement cost back to the origination of the obligation. However, neither SFAS 143 nor FIN 47 requires this when new facts result in a change in the measurement of an existing ARO. In future years, if an immeasurable ARO becomes measurable, this is due to a change in facts rather than a change in the rules. Therefore, it seems more closely aligned with the prospective treatment given to a new layer. It seems likely that if the FASB wanted transition accounting for this situation, it would have explicitly required it in SFAS 143 paragraph B19 and FIN 47

paragraphs B19 and 27. This elucidation has not been tested through any audit and each company will need to decide if this accounting is appropriate for their financial statements.

Transition Disclosures:

Paragraph 11 of the Interpretation provides requirements for transitional disclosures and states:

In addition to disclosures required by paragraphs 19(c), 19(d), and 21 of APB Opinion No. 20, *Accounting Changes*, an entity shall compute on a pro forma basis and disclose in the footnotes to the financial statements for the beginning of the earliest year presented and at the end of all years presented the amount of the liability for AROs as if the Interpretation had been applied during all periods affected. The pro forma amounts of that liability shall be measured using the information, assumptions, and interest rates used to measure the obligation recognized upon adoption of the Interpretation.

Until the Interpretation is implemented, there is a disclosure requirement for adoption of new accounting pronouncements (SAB 74). Basically, an entity is to provide qualitative or quantitative information, when available, about the expected impact of implementation, updated quarterly.



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