



# TRANSACTIONAL MANAGEMENT

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## Unregulated Generating Company Accounting Practices

The following provides a summary of a Transactive Management survey of unregulated generating company accounting practices. The survey was part of an 18-month study of plant useful life and value conducted for the PG&E National Energy Group (NEG). This study revisited and updated a series of prior studies completed between 1997 and 2000 that the NEG has used to depreciate its fossil-fired plants and hydroelectric generating systems. For additional information on the study see the July 10, 2003 press release, which can be found at the web site provided at the end of this summary.

### Survey Areas and Information Sources

The purpose of the survey was to learn about the methods used by unregulated generating companies to depreciate power plants. Questions addressed the following areas:

1. The period of time over which merchant plants and plants under a power sales agreement are depreciated.
2. The approach used to determine depreciation.
3. Consideration or use of a unit of production method for such depreciation.
4. Actions taken to implement the component-level accounting standards proposed by an Accounting Standards Executive Committee (AcSEC) Statement of Position entitled "Accounting for Certain Costs and Activities Related to Property, Plant, and Equipment" dated June 29, 2001.

Information was obtained from respondents that are directly responsible for or otherwise familiar with company depreciation practices. Target contacts included respondents to a similar survey conducted by Transactive Management in 1997. Other individuals active in the accounting community were identified through Internet searches and other sources.

The following provides a summary of findings by area of inquiry. Company names are not included in keeping with our assurance that individual companies would not be identified by response. In each of these areas, a summary of study conclusions is also presented.

### Depreciable Life Periods

Several companies reported that they use depreciable life periods of 40 years or more. Specific responses included:

- Baseload coal-fired and gas-fired steam plants depreciated over 40-to-50 years; combined-cycle merchant plants depreciated over 35-years.
- Plants in development or coming on-line depreciated over 45 years.
- Coal-fired plants depreciated over a period of up to 40 years; a lesser number of years used to depreciate gas-fired plants.
- Plants acquired from utilities depreciated over 30-to-50 years.
- Other companies stated that plants are being depreciated over a period of time that exceeds the power sales agreements, but did not provide information on the length of this period.

A number of other companies stated they have not extended depreciation beyond what they have used for plants under power sales agreements. Reasons given included the current industry downturn and concern over violating asset impairment criteria. Information on practices obtained from sources other than the survey found that some companies have actually reduced the depreciable life of plants because of the perceived decline in plant value as a result of market overbuilding.

Study conclusions in this area included the following:

- In general, fossil-fired plants should be depreciated over a 45-to-55 year period depending on the

type of generating technology. Hydroelectric generating systems have a service life of 100 years or more.

- These recommendations should be applied on a plant-specific basis, which considers individual plant construction cost, maintenance and accounting practices, age and material condition, and mode of operation (baseload versus cycling).

#### Approaches to Determining Depreciation

There are a number of different approaches being used to determine the depreciable life plants in a deregulated market:

- Continued use of depreciable life periods of the utility from which plants were acquired or transferred, in some cases without conducting depreciable life studies.
- Basing new plant depreciable life on financial pro forma projections developed to secure project financing.
- Engaging equipment suppliers or engineering companies to project technical life and developing in-house financial pro forma projections to determine plant economic life.

Study conclusions in this area included the following:

- Study conclusions for each type of generating technology assessed can be used as the basis for updating the depreciable life of each plant and system, as applicable, using a composite method.
- Future updates should be made on a plant specific-basis that addresses: (1) individual plant component-level service life and cost; (2) the established maintenance standard of care; (3) accounting practices regarding capitalizing or expensing maintenance costs; (4) economic viability over the plant's estimated service life consistent asset impairment account standards (FAS No. 144).
- Plants that are cycled to the point of exceeding plant design specifications should also apply the recommended unit of production method in conjunction with the composite method (see the discussion below).
- Projecting the value of power plants in a deregulated market should emphasize long-term social, political, and economic trends more than shorter-term business cycles and capacity boom-and-bust cycles. The review of industry practices over the past seven years found that the 1996-to-2000 capacity expansion phase was unduly influenced by, what in retrospect was, overly optimistic expectations of the public benefits of deregulation and potential for future earnings in this market. Since 2000, the collapse of Enron, subsequent discovery of accounting and trading improprieties, and the resulting liquidity crunch, brought about the current contraction phase—which is characterized by the prevailing pessimistic outlook. The mistake in both phases is to let relatively short market and capital expansion and retraction cycles drive 40-to-50 year investment and depreciation strategies.
- With regard to the two tests of economic value provided in FAS No. 144, the asset impairment test is based on income and cash flow projections over the full life of plants and is therefore suited to consider all of the long-term business climate factors that determine plant economic value. The fair market value test is based on “like or similar” transactions, which may not necessarily reflect these same considerations—i.e., can be influenced by relatively recent events.
- With regard to the Sarbanes-Oxley Act and implementing regulations, over compensating for the present downturn by understating plant depreciable life could actually increase rather than decrease the risk of violations. Failure to fully recognize the economic life and value of plants could be construed as a violation if such actions understate asset value and book income to the point of negatively influencing the valuation and transaction price of publicly traded stock.
- To ensure compliance with accounting standards and the Sarbanes-Oxley Act, the company should

monitor plant, company, industry, and broader business climate changes that effect study conclusions regarding service life and economic viability.

- The company should approve policies and procedures to ensure that ongoing monitoring and updates of plant depreciable life meet the governance and internal audit provisions of the Sarbanes-Oxley Act and implementing regulations.

#### Unit of Production Method

Several companies said that they had considered applying a unit of production approach and some of these had actually developed such an approach. However, none had actually implemented this method. Responses were as follows:

- A Unit of Production method was developed but not applied. This approach was based on beginning with a straight-line method and then adjusting the annual rate according to actual production patterns.
- The method was considered but not applied for acquired plants operated under “run/must-run” contracts. The approach considered was based on actual production hours and the number of starts on an equivalent operating hours basis.
- This method is an implicit part of power sales agreement in that it provides for a price based on the number of starts. It is also implicit in long-term service agreements under which service costs are based on production-related factors.

Study-related findings in this area included the following:

- Plants that are regularly cycled or experience long periods of disuse should use a unit of production approach at the end of each year to adjust the annual rate of depreciation based on study depreciable life recommendations.
- A unit of production adjustment factor should be based on hours and starts based operating measures that identify the impact of cycling on individual plant components on an equivalent operating hours basis.
- Annual adjustments should be limited to components affected by cycling and the percent of original plant construction cost represented by such components.

#### Component Level Accounting

Most companies were aware of the proposed component-level accounting standards but had not yet developed an implementation approach.

Study conclusions in this area included the following:

- The method used in prior studies to estimate plant useful life of plants meets or exceeds component-level accounting and reporting requirements as proposed by the AcSEC.
- Discussions with FASB confirmed that: (1) adopting component-level accounting, as part of GAAP standards, remains an active project; (2) there is nothing in existing GAAP standards that is inconsistent requirements proposed by the AcSEC.

#### The Transactive Management Plant Life Update and Methods Study and Related Services

Additional information on the NEG study can be found at Electric Energy Online.com or by “clicking” on the link below.

[http://www.electricenergyonline.com/detail\\_industry\\_news.asp?ID=8650](http://www.electricenergyonline.com/detail_industry_news.asp?ID=8650)

If you are unable to connect to this site, other sites that carried the press release include CBS MarketWatch, Yahoo, PR Newswire, Lycos, NBC6, and the DallasNews.

The Transactive Management Independent Competitive Evaluation (ICE) of company, which is discussed in the press release, applies the NEG study analytical model and methods to assess depreciation practices and make recommendations. I have established a fixed cost of \$5,000 plus expenses to conduct each study, which includes 4-to-5 days of on-site interviews, a review of key documents, and a presentation of results and recommendations.

If you have any questions, feedback, or would like additional information on Transactive Management services, please contact me at 858.259.5501 or by replying the email that forwarded this summary. I can also provide a ICE proposal if you want additional details on what this service includes.

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