Bureau of Local Assessment
Informational Guideline Release (IGR) No. 98-403
September 1998

VALUATION AND TAXATION OF ELECTRIC GENERATING PROPERTY

Chapter 164 of the Acts of 1997
(Amending G.L. Ch. 59 §5(16)(3) and Adding G.L. Ch. 59 §38H)

This Informational Guideline Release (IGR) provides assessors and other local officials with information about the valuation and taxation of electric generating property as a result of the 1997 Electric Utility Restructuring Act.

Questions should be addressed to the Bureau of Local Assessment.

Topical Index Key :

Assessment Administration
Personal Property
Valuation

Distribution :

Assessors
Mayors / Selectmen
City / Town Councils

TABLE OF CONTENTS

Informational Guideline Release (IGR) No. 98-403
September 1998

VALUATION AND TAXATION OF ELECTRIC GENERATING PROPERTY

Chapter 164 of the Acts of 1997
(Amending G.L. Ch. 59 §5(16)(3) and Adding G.L. Ch. 59 §38H)

These guidelines address the valuation and taxation of electric industry property as a result of the 1997 Electric Utility Restructuring Act. Chapter 164 of the Acts of 1997. That act provides for the restructuring of the electric utility industry in Massachusetts by separating the generation of electricity from its transmission and distribution. Transmission and distribution of electricity will still be performed by regulated local electric utilities. However, electric generation will now be performed by independent, non-utility producers in a deregulated environment.

Of particular significance for local assessors and other municipal officials are provisions of the act that affect the taxation of electric generating facilities and give tax base protections to communities hosting them. These provisions:

- Make taxable certain electric generating plants of non-utility owners classified as manufacturing corporations.

- Allow host communities of electric generating plants that devalue after restructuring to continue to receive transition revenues attributable to those plants at levels equivalent to property tax revenues received in FY1997 before restructuring, but declining gradually to tax revenues based on actual full and fair cash value by FY2010.

- Allow host communities to enter into legally binding tax agreements with electric generation companies in order to provide revenue stability while restructuring occurs.

- Require transition or agreement payments to be treated as property tax revenues for Proposition 2½ and tax classification purposes.

The act also results in generating plants being subject to the same market forces as other non-regulated property bought and sold based on investor expectations. Beginning with assessments as of January 1, 1998 for fiscal year 1999, local assessors must consider how the removal of regulatory restrictions on potential buyers affects the valuation of plants in their community, whether or not the plants have been sold to a generation company.

BUREAU OF LOCAL ASSESSMENT MARILYN H. BROWNE, CHIEF

I. TAX AGREEMENTS

Municipalities hosting electric generating facilities have two avenues of taxing generating plants. The first is to value and assess property taxes on the facility in the same manner as other taxable property. Transition payments will supplement the assessed taxes during a transition period depending on whether the annual valuation of the plant is higher or lower than its FY1997 assessed valuation.

The second avenue is a voluntary tax agreement that is based on good faith negotiations and is the equivalent of assessing taxes on the full and fair cash valuation of the plant. This requires a negotiated agreement with a generation company.

This section explains the requirements for entering a tax agreement and outlines the roles of municipal officers in determining the avenue the municipality will pursue. The decision to enter into an agreement is made by the legislative body of the municipality. That decision will depend on a projection of the revenues that may be generated from taxing the plant at full and fair cash value and receiving transition payments, if any, and those received from a predictable, negotiated agreement.

A. Entering Tax Agreements

1. Agreements Executed Before Restructuring Act

"Binding" tax agreements made before the effective date of the Electric Restructuring Act (November 25, 1997) continue to govern until their expiration. Special legislation authorizing the agreement was or is required to make an agreement executed before restructuring binding.

2. Agreements Authorized by Restructuring Act

Host municipalities may enter into agreements with generation companies under the act. G.L. Ch. 59 §38H.

a. Authority to Negotiate Agreement

Authorization to negotiate on behalf of a municipality should be specifically granted to the chief executive board or officer (CEO) of the municipality (Board of Selectmen, Mayor or Manager), or some other municipal officer or officers, such as the Board of Assessors, by vote of the municipal legislative body (Town Meeting, City or Town Council). The authority may also be given some combination of officers, such as the CEO and assessors.

b. Approval of Agreement

After an agreement has been negotiated by the authorized officials, it must be approved or ratified by the legislative body to be binding.

B. Estimating Property Tax Revenues

In order to determine whether a tax agreement is in the municipality's interest, the plant's current full and fair cash value should be determined and a revenue projection made.

1. Role of the Board of Assessors

The board of assessors is responsible for establishing full and fair cash values of property for local tax assessment purposes. Assessors must determine what a willing buyer under no compulsion to buy would pay for the property of a willing seller with no compulsion to sell. Ordinarily this determination is made on an annual basis, using information gathered over the year. This would be the method the assessors would continue to use in the valuation of electric generating plants if a tax agreement has not been negotiated or is not in effect.

If a multi-year tax agreement is being considered instead, the assessors should make projections of full and fair cash value for each year of the agreement, taking into account plant additions and retirements. These projections will necessarily be speculative, given the uncertainty involved with restructuring a complex industry.

2. Role of Town Meeting, City or Town Council

The legislative body has the power to authorize negotiations and to approve agreements with power producers and therefore, should have information as to the potential value of the property. It may rely on information provided by the assessors or seek an independent analysis of projected values for the purpose of determining whether an agreement is in the municipality's interest.

3. Role of the Board of Selectmen, Mayor or Manager

The CEO may be authorized to negotiate and execute a tax agreement on behalf of the municipality. The CEO may also rely on information provided by the assessors or seek an independent analysis of projected values.

C. Agreement Requirements

The primary purpose of tax agreements is to provide revenue stability for host municipalities over a transition period. However, agreements between host municipalities and generation companies must be the result of good faith negotiations and any payments the equivalent of property taxes assessed on a full and fair cash valuation basis. G.L. Ch. 59 §38H.

- Agreements should be for a reasonable term. As a general rule, a term within the 12 year transition period provided by the act would be a reasonable one.

- Agreements should fix values or formulas for determining values (rather than fixing tax payments). These values should be representative of the future full and fair cash values of the plant for the term of the agreement and payments resulting from them will be treated as property taxes for Proposition 2½ and tax classification purposes. The payments are subject to the municipality's levy limit, and the values will be used to calculate its levy ceiling and minimum residential factor.

- Agreements may include negotiated transition values to offset potential revenue losses due to the devaluation of existing electric generating property as a result of restructuring. These values will also be used in levy limit and minimum residential factor calculations and resulting payments considered part of the tax levy.

- Agreements may establish billing procedures and payment schedules for negotiated amounts that are the same as or different from the ones used for annual property taxes.

A copy of any executed and approved tax agreement, and any later amendments to the agreement, must be sent to the Bureau of Local Assessment immediately upon execution and approval. See Section III below.

D. Assessing Taxes and Transition Payments

Assessors should assess the amounts based on the representative full and fair cash and transition values negotiated under the agreement to the generation company and commit them to the tax collector at the same time and in the same manner as annual property taxes for the fiscal year, unless otherwise provided in the agreement.

II. ASSESSING PROPERTY TAXES

Host municipalities without tax agreements will value and assess electric generating plants in the same manner as with any other taxable property. Assessments will be made to the owner of the plant as of the January 1 assessment date.

A. Electric Generating Property

1. Exempt Property

Electric generating facility real and personal property exempt from taxation includes:

- Buildings, structures and personal property of resource recovery facilities (the land remains taxable and a per ton tax on solid waste processed is substituted). G.L. Ch. 16 §24A.

- Buildings, structures, devices, appliances, machinery, equipment or other real or personal property constructed, installed or placed in operation as an air or water pollution control device certified as effective by the appropriate state pollution control agency. G.L. Ch. 59 §5(44).

- Real and personal property of any hydropower facility constructed after January 1, 1979, except transmission lines from the facility, for a period of up to 20 years (the owner must first enter into an agreement to make an annual payment in lieu of taxes of at least five percent of its gross income in the preceding calendar year). G.L. Ch. 59 §5(45A).

2. Taxable Real Property

All land, buildings, structures and other improvements to real estate of an electric generating plant other than described above in Section II-A-1 are taxable.

3. Taxable Personal Property

The tax status of electric generating facility personal property other than described above in Section II-A-1 depends on the form of ownership on January 1. Each of the following owners are taxable for poles, underground conduits, wires and pipes as well as the personalty described below.

a. Utility Corporation

Taxable personal property of an electric generating plant owned by a utility corporation includes all machinery used in the manufacture or production of electricity (or the supply or distribution of water). Other personal property is exempt. G.L. Ch. 59 §5(16)(1).

b. Business Corporation or "Corporate" Limited Liability Company

Taxable personal property of an electric generating plant owned by a business corporation, or a limited liability company (LLC) filing as a corporation for federal tax purposes, includes all machinery used in the conduct of business, including the manufacture or production of electricity, except machinery which is:

- stock in trade
- directly used in laundering, dry-cleaning, refrigeration of goods, air-conditioning of premises, or
- directly used in a selling, purchasing, accounting or administrative function.

Other personal property owned by the corporation or LLC is not taxable. G.L. Ch. 59 §5(16)(2).

c. Manufacturing Corporation or "Corporate" Manufacturing Limited Liability Company

If the owner is a manufacturing corporation, or a LLC filing as a corporation for federal tax purposes and classified by the Commissioner of Revenue as manufacturing as of January 1, all personal property used in electric production is taxable unless it:

- is a cogeneration facility of 30 megawatts or less capacity, or
- was previously exempt because of a manufacturing classification effective on or before January 1, 1996. [1]

G.L. Ch. 59 §5(16)(3).

d. Other Entities

Personal property of any electric generating plant, including a cogeneration facility, that is owned by any other entity, such as an individual, association, trust, partnership, limited partnership, LLC treated as a partnership for federal tax purposes or limited liability partnership, is taxable.

[1] Except the facility owned by the Holyoke Water Power Company.

B. Transition Payments

Host municipalities assessing property taxes will have revenue and tax base protection in any year during a 12 year transition period when the assessed value of a generating plant falls below its FY1997 value. In that year, in addition to the property taxes assessed on the full and fair cash value of the plant, the board of assessors will assess a transition payment to offset any lost property tax revenue from the generating plant. Plant value for this purpose includes both real and personal property. If the plant value increases over FY1997 values for a transition year, the transition payment provision does not apply for that year, and the plant will only be assessed and taxed at its full and fair cash value. G.L. Ch. 59 §38H.

Transition payments will be assessed as follows:

- For FY1998, FY1999 and FY2000, the transition payment will be the difference between the FY1997 assessed taxes on the plant and the current year's taxes.

- From FY2001 through FY2009, the transition payment will be based on the difference between the FY1997 value of the plant and its annual full and fair cash value, multiplied by that year's commercial tax rate. This amount decreases 10% a year from 90% in FY2001 to 10% in FY2009.

Transition payments will be treated as property taxes for Proposition 2½ and tax classification purposes. The payments are subject to the municipality's levy limit, and the values on which the payments are based will be used to calculate its levy ceiling and minimum residential factor.

1. Determining if Transition Payment Due

In order to determine if transition payments are due in any year over the transition period, the assessors must:

a. Determine the total value of real and personal generating plant property for the current fiscal year.

(1) The plant should be valued based on the property at each generating facility site as it exists on the particular January 1 assessment date, including additions and retirements that have occurred over the past year. Real property improvements should be determined as of June 30 if the municipality has adopted Ch. 653 §40 of the Acts of 1989, which permits the accelerated assessment of new construction built between January 1 and June 30.

(2) The generating plant consists of the real and personal property located at the particular parcel or parcels used to determine the generating facility site in FY1997, plus any contiguous or ancillary property added, less any property removed, which is associated with that site.

b. Determine that portion of the FY1997 assessed valuation of electric utility property that is associated with the generating plant, and not transmission or distribution facilities.

2. Calculating Transition Payment

a. Payments in FY1998 - 2000

If the current year's assessed taxes on the plant are less than the FY1997 assessed taxes, a transition payment will be assessed equal to the difference in taxes.

b. Payments in FY2001 - 2009

If the current year's value is less than the FY1997 value, a transition payment will be assessed based on the "transition value," which is the difference between the FY1997 and current year value. The transition value is multiplied by the current year's commercial tax rate and the applicable year's percentage is then applied to the resulting amount to determine the transition payment due for the year:

- 90% in FY2001
- 80% in FY2002
- 70% in FY2003
- 60% in FY2004
- 50% in FY2005
- 40% in FY2006
- 30% in FY2007
- 20% in FY2008
- 10% in FY2009.

3. Assessing Transition Payment

Transition payments are to be assessed to the owner of the plant as of the January 1 assessment date except where an electric company had sold the plant. In that case, the transition assessment is to be made to the electric company or the resulting distribution company that is allowed to recover transition costs from ratepayers.

III. DOCUMENTATION

The Commissioner of Revenue is required to approve a municipality's tax rate annually and review its assessments every three years in order to certify compliance with the legal standard of full and fair cash value assessments. In addition, under the Electric Utility Restructuring Act, the Commissioner is required to investigate and study the effectiveness of the local tax provisions and make recommendations for legislative changes, if necessary.

In order to fulfill these requirements, the Bureau of Local Assessment must receive certain information and documentation about the taxation of electric generating plants. The following forms and information will be required before tax rates may be approved and certification may be granted.

A. All Communities

Every host community with an electric generation plant must submit an Electric Generating Plant Assessment Information Form to the Bureau. This form provides information on each generation, transmission and distribution facility in a community hosting a generating plant. It identifies each generating plant by name, owner, type of facility and fuel type, rated capacity and parcel identification. It also requires a breakdown of the plant into real estate and personal property, as well as generation, transmission and distribution functions, and provides net book and actual assessed values.

- For FY1999, every community hosting a plant must submit the form no later than the time it submits the Forms LA-4 "Assessment/Classification Report" and LA-4W "Assessment/Classification Worksheet" for tax rate setting purposes.

- Annually beginning in FY2000, every community hosting a plant will be required to report the assessment and any plant construction, reopenings, retirements or other changes by submitting an updated form no later than the time it submits the Forms LA-4 and LA-4W.

B. Communities Assessing Property Taxes

1. Triennial Certification

In any certification year, assessors in a host community must submit to the Bureau an appraisal report or documentation that supports the proposed full and fair cash value of each generating plant. All three approaches to value are to be considered in arriving at a final value. See Section V below.

2. Interim Year Valuation

Assessors adjusting the valuation of generating plants in non-certification years must use appropriate appraisal methods and adjust valuations in other property classes to ensure equitable and consistent assessments within and between all property classes, as evidenced by conformity with accepted mass appraisal measures of assessment level and uniformity. See Bureau of Local Assessment Informational Guideline Release, *Guidelines for Annual Assessment and Allocation of Tax Levy* , Section 1-B.

C. Communities with Tax Agreements

A host community entering into a tax agreement under G.L. Ch. 59 §38H, or a special act, must submit the following to the Bureau:

1. A copy of the executed tax agreement along with a certified copy of the vote by the legislative body approving it.

   If an agreement effective for FY1999 has not been approved by the time the host community submits its tax rate, the community may set its rate if it agrees to seek approval before the FY2000 tax rate is submitted and provides assurances the FY1999 overlay is sufficient in the event the agreement is not approved and the plant owner seeks an abatement of the assessment made.

2. Appraisal documentation used to support the estimates of full and fair cash value included in any tax agreement. This documentation must only be submitted once unless the agreement is amended as to the valuations to be used.

3. A copy of any executed amendment to the agreement.

IV. TAX BASE GROWTH

Municipalities hosting electric generating plants may use certain increases in the assessed or negotiated valuation of the plant as allowable value for the purpose of computing the annual tax base growth adjustment in its Proposition 2½ levy limit. See Bureau of Local Assessment Informational Guideline Release, *Determining Annual Levy Limit Increase for Tax Base Growth.*

A. Communities Assessing Property Taxes

If a community is assessing annual property taxes based on the full and fair cash valuation of a particular generating plant, the following assessed valuation increases are allowable:

- The value of any new plant installed (real or personal)
- The value of any additions to plant installed (real or personal)
- The additional market value attributable to the removal of regulatory restrictions. This is a one-time increase.

Future market value increases documented during triennial revaluations or interim valuation adjustment programs will not qualify as allowable value for growth purposes. Nor will any increase in value attributable to transition payments made as a result of plant devaluation qualify.

B. Communities with Tax Agreements

If a community is receiving payments under a tax agreement, the following negotiated full and fair cash valuation increases are allowable:

- The value of any new plant installed (real or personal)
- The value of any additions to plant installed (real or personal)
- The additional value attributable to the removal of regulatory restrictions. This is a one-time increase.

Increases in the negotiated full and fair cash valuation that are intended to reflect future increase in the market value of the plant will not qualify as allowable value for growth purposes. Nor will any increase attributable to negotiated transition payments made as a result of plant devaluation qualify.

V. VALUATION

A. Data Collection

As of the assessment date, the assessors should collect the following data and information for each generating plant.

1. Physical Plant

Information about the physical plant may be obtained from the Form of List submitted by the owner. The list should include all property including property donated or given to the owner (Contribution in Aid of Construction), Construction Work in Progress (CWIP) and other unallocated plant. Descriptions and plans should be requested and obtained if the information on the list is insufficient to develop a detailed physical inventory of major plant components.

2. Plant Investment

Information about the dollars invested in the physical plant may be obtained by requesting the original and net book costs of the plant by year invested. This should include all direct and indirect costs associated with the plant. For plants existing before restructuring, the historical original cost, accumulated depreciation and net book cost will be found in the utility company FERC and DTE records. The new book cost of existing plants acquired in a deregulated market, as well as the original cost of new plants, may be obtained by requesting a return under G.L. Ch. 59 §§38D and 38F.

3. Plant Income and Expenses

Information about historic, current and future projected plant income and expenses should also be obtained by requesting a return under G.L. Ch. 59 §§38D and 38F. This information includes, but is not limited to:

- Annual net generation exclusive of plant use
- Annual availability including planned and unplanned outages (separately stated)
- Annual fuel, operating and maintenance costs
- Annual administrative and general costs
- Annual taxes
- Annual net additions to plant in service
- Annual working capital reserves
- Dedicated transmission expenses associated with the plant
- Avoided cost rates
- Fuel purchase and handling contracts
- Contracts or solicitations for purchase of capacity from plant.

In addition, information should be requested about the existence of any factors that will impair the operation or cost competitiveness of the plant and any planned capital improvements.

B. Valuation Approaches

Generating plants must now be valued using the same accepted appraisal methods: cost, market and income, that are used for other commercial and industrial properties subject to market forces.

Land at generating plant sites should be treated as industrial land and valued in the same manner as other such land.

1. Cost Approach

a. New Book Cost

For existing plants acquired by a generation company, the new book cost allocated by the company to the sale and acquisition may be an indicator of value and present cost to acquire the plant in a deregulated environment.

b. Original Cost

The original cost of the plant may be used where the plant is relatively new and any depreciation has not exceeded the appreciation of costs in the geographical area.

c. Reproduction Cost New Less Depreciation

The cost to reproduce the plant may be determined from various engineering cost estimating disciplines based on plans and specifications obtained from the facilities. Alternatively, the original costs of the plant may be trended to the present with generally accepted manuals or indexes such as the Handy-Whitman Index of Public Utility Construction Costs.

All forms of depreciation must be considered and allowances made not only for physical depreciation, but also technological and market changes that affect existing plants.

d. Replacement Cost New Less Depreciation

Replacement costs developed for an existing facility should consider the plant's intended use of duty cycle, fuel availability, transmission capacity and environmental limitations. The cost analysis will also require the engineering judgment of how new technology affects the existing property. The analysis should recognize that new technology or construction techniques may be more or less expensive than the existing facilities due to the impact of various factors.

All forms of depreciation must be considered and appropriate allowances made for physical depreciation and technological and market changes.

2. Market Approach

A comparable sales approach may used. Generating plant sales should be analyzed on a price per unit of capacity or generation basis. Historical, annual plant generation and capacity factors are indicators of the plant's cost competitiveness and should be analyzed to determine the plant's ranking within the marketplace. When comparing sales to the subject plant, any non-cash considerations that impact value should be identified and appropriate adjustments made. Additional adjustments may be required to take into consideration the variability of generating sources and fuel types.

3. Income Approach

Indicators of value may be developed either by direct capitalization (*i.e.*, using a single year's income) or yield capitalization (*i.e.*, using income over a period of time including reversion proceeds).

The gross income developed for the facility from the current wholesale market should consider the price of capacity, installed capacity, operable capability, 10 minute spinning reserve, 10-minute non-spinning reserve, 30-minute reserve and automatic generation control. Prices for each may vary, depending on the type of generating unit and time of day and year. When analyzing expenses, consideration should be given to the historic cost of operating the facility and future fuel prices.

Business income should be isolated from the gross income to determine the income attributable to the property. Property related expenses to be considered include, but are not limited to, site staff operations, site management, current and future fuel type, routine annual maintenance, operational costs such as chemicals, insurance, various regulatory and license fees, allowance for property taxes (as an expense or in the capitalization rate) and capital reserves and replacements for adequate project life.

GLOSSARY

Automatic Generation Control, equipment that automatically adjusts a control area's generation to maintain its interchange schedule plus its share of frequency regulation.

Availability, a measure of time a generating unit, transmission line or other facility is capable of providing service, whether or not it actually is in service. Typically, this measure is expressed as a percent available for the period under consideration.

Avoided cost, the cost the utility would incur but for the existence of an independent generator or other energy service option. Avoided cost rates have been used as the power purchase price utilities offer independent suppliers.

Cogeneration facility, any electrical generating unit having a power production capacity that, together with any other facilities located at the same site, is not greater than 30 megawatts and produces electric energy and steam or other form of useful energy used for industrial, commercial, heating or cooling purposes.

Distribution, the delivery of electricity over lines that operate at a voltage level typically equal to or greater than 110 volts and less than 69,000 volts to an end-use customer.

Distribution company, a company engaging in the distribution of electricity or owning, operating, or controlling distribution facilities.

Distribution facility, plant or equipment used for the distribution of electricity that is not a transmission facility, cogeneration facility, or small power production facility.

DTE, the Department of Telecommunications & Energy, formerly the Department of Public Utilities (DPU), the state agency that regulates utilities and is primarily responsible for implementing the Electric Restructuring Act.

Electric company, a corporation organized for the purpose of making and selling, or distributing and selling, or only distributing, electricity.

Electric service, the provision of generation, transmission, distribution or ancillary services.

FERC, the Federal Energy Regulatory Commission.

Generation, the act or process of transforming other forms of energy into electric energy, or the amount of electric energy so produced.

Generation company, a company engaged in the business of producing, manufacturing, or generating electricity for retail sale to the public.

Generation facility, plant or equipment used to produce, manufacture, or otherwise generate electricity that is not a transmission facility.

Independent Power Producer (IPP), any entity that owns or operates an electric generating facility that is not included in an electric utility's rate base.

Investor Owned Utility (IOU), a company that provides utility services and is owned by stockholders or investors.

Net Book Value (Net Book), a method of property valuation based on the rates of return on investment regulated by a governmental agency and the original cost of the property when put into service less depreciation.

Non-spinning reserve, the operating reserve not connected to the system, but capable of serving demand within a specific time, or interruptible demand that can be removed from the system in a specified time. Interruptible demand may be included in non-spinning reserve if it can be removed from service within 10 minutes.

Non-Utility Generator (NUG), an electric generation facility owned and operated by an entity not defined as a utility.

Rate Base, the value of property upon which a utility is permitted to earn a specified rate of return as determined by a regulatory agency.

Restructuring, the reconfiguration of the electric industry from wholly owned electric generation, transmission and distribution systems to a system where electric generating facilities are independently owned. (Restructuring includes re-regulation and is not to be confused with deregulation, which implies the elimination of regulation.)

Spinning reserve, unloaded generation, which is synchronized and ready to serve additional demand.

Transmission, the delivery of power over lines that operate at a voltage level typically equal to or greater than 69,000 volts from generating facilities across interconnected high voltage lines to where it enters a distribution system.

Transmission company, a company engaging in the transmission of electricity or owning, operating, or controlling transmission facilities.

Transmission facility, plant or equipment used for the transmission of electricity, as determined by FERC pursuant to federal law and regulation.

Transmission service, the delivery of electricity to a retail customer, supplier, distribution company, or wholesale customer by a transmission company.

Utility, a regulated entity providing essential services usually associated with a natural monopoly, the power of eminent domain, the obligation to serve and significant government regulation, including a distribution company, transmission company and electric company, but not a generation company.