THE NEED FOR FASTER TAX DEPRECIATION FOR ELECTRIC GENERATION ASSETS
Taxing Electric Generating Assets:  
The Need to Reduce the Depreciation Period  

The Alliance of Energy Suppliers is leading a significant tax initiative to enact federal tax legislation to lower the depreciable lives of electric power assets—saving the industry many millions of dollars. Today, the depreciation period for electric generating assets for tax purposes is far in excess of the recovery periods for other capital-intensive industries. Remedying this significant disparity would greatly benefit the growing number of power suppliers operating or purchasing these facilities. To accomplish this goal, the Alliance of Energy Suppliers has established the Coalition of Depreciation Equity (CODE) to lead the charge for an accelerated depreciation period. It’s time for change.

What’s at Stake

The deregulation of the electric utility industry has led to the unbundling of services and the sale of many generation assets. This transformation of electric generation to a competitive and unregulated industry has put energy suppliers at a competitive disadvantage compared to other capital-intensive industries that can depreciate assets at a much quicker rate.

The current tax law profoundly impacts a generator’s bottom line, making it difficult to compete. The current 15-year and 20-year cost recovery period for these assets also discourages the formation of much needed capital investment compared to other industries’ 6-year cost recovery period.

Reasons for Change

- Encouraging New Investment to Assure Reliability

Determining the reliability of the nation’s electric power system are the adequacy of generation supply and declining capacity margins. As deregulation is implemented and markets become competitive, the need for new investment to maintain the reliability has become critical. The price spikes and major power outages of 1999 brought this issue home to millions of people. In addition, the National Energy Reliability Council (“NERC”) has identified several NERC regions that will have dangerously narrow capacity margins within the next decade. These national interests must be met by new business incentives to improve and to construct new electric generation facilities.

- Other Capital Intensive Industries:
Shorther Depreciation Lives

In sharp contrast to the 15-20 year depreciation lives for electric generation assets, other capital-intensive manufacturing processes such as pulp and paper mills, steel mills, lumber mills, foundries, automobile plants and shipbuilding facilities are depreciable for Federal income tax purposes over seven years. Chemical plants,
for example, can depreciate their assets over five years. There is no justification for these distinctions. Generation assets must be treated as assets of other heavy industries.

- New Investments to Comply with Environmental Laws

New environmental requirements on electric generation can seriously impair the value and useful life of existing assets. Compliance requirements, such as those relating to the Clean Air Act amendments, new source performance reviews, state implementation plans, National Ambient Air Quality Standards, and the Environmental Protection Agency’s toxics release inventory are requiring significant new investment in mitigation technologies. In some cases, existing plants will have to be effectively abandoned and new generation plants constructed. This will require new capital investment, investment that the tax laws should encourage, not discourage as under current law.

- Technological Improvements

Deregulation of electric generation is already fostering innovation. Facilities constructed a generation ago were nuclear or coal-fired facilities. Today, many power plants are gas turbine facilities, often operated in combined-cycle or as co-generation facilities that produce steam for sale as well as electricity. These new combined-cycle generators operate at energy conversion efficiency levels of ~10% compared to ~40% - 50% a decade ago. However, tax laws discourage the construction of these more efficient units - while regular gas turbine facilities are depreciable over 15 years, combined-cycle units are depreciable over 20 years.

Rapid technological changes also threaten the longer-lived generation assets. Distributed generation could render these facilities functionally obsolete. The use of fuel cells, micro turbines, or other small scale generating equipment can eventually displace power generated by a central station generating unit. These rapid changes in the industry make it unlikely that electric generation facilities will have the same useful lives as they have had in the past.

- Uncertain Cost Recovery

Congress suggested in the legislative history to the Tax Reform Act of 1986 that one reason why electric assets are depreciated over longer periods is because of the certainty of utility cost recovery through rates. As the market for electric energy becomes competitive, this rationale is obsolete – there will be no more such certainty. Investors will demand a return of, and a return on, their investments over much shorter periods of time. This new reality is inconsistent with the current tax rules that allow cost recovery only over 15-20 years.

- The Need for Certainty in Tax Compliance

Just as the electric industry is rapidly changing, the IRS must recognize that electric generation cost recovery must also change. By changing these assets from a 15 or 20 year depreciable life to a ~7-year life, disputes with the IRS will be minimized. The question of whether certain costs should be expensed or capitalized (recovered over an extended number of years) can be resolved without the need for expensive litigation costs incurred by the taxpayer and the government.

- Join the Coalition of Depreciation Equity

A competitive electric industry must have the same ability as other industries to rapidly deprecate assets for Federal income tax purposes. The Alliance of Energy Suppliers and the industry coalition are strongly supporting changes in federal tax laws to allow electric generation facilities to be depreciated over 7 years – not 15 or 20 years!

*And your support is needed!*

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DOE003-0300

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Obtained and made public by the Natural Resources Defense Council, March/April 2002
H.R. 4959

To amend the Internal Revenue Code of 1986 to modify the depreciation of property used in the generation of electricity.

IN THE HOUSE OF REPRESENTATIVES

JULY 25, 2000

Mr. THOMAS (for himself, Mr. JEFFERSON, and Mr. ENGLISH) introduced the following bill; which was referred to the Committee on Ways and Means

A BILL

To amend the Internal Revenue Code of 1986 to modify the depreciation of property used in the generation of electricity.

Be it enacted by the Senate and House of Representa-
tives of the United States of America in Congress assembled,

SECTION 1. DEPRECIATION OF PROPERTY USED IN THE
GENERATION OF ELECTRICITY.

(a) DEPRECIATION OF PROPERTY USED IN THE
GENERATION OF ELECTRICITY.—

(1) IN GENERAL.—Subparagraph (C) of section
168(e)(3) of the Internal Revenue Code of 1986 (re-
lating to 7-year property) is amended by striking
"and" at the end of clause (i), by redesignating

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DOE003-0301

Obtained and made public by the Natural Resources Defense Council, March/April 2002
clause (ii) as clause (iii), and by inserting after clause (i) the following new clause:

"(ii) any property used in the generation of electricity, and”.

(2) 10-YEAR CLASS LIFE.—The table contained in section 168(g)(3)(B) of such Code is amended by inserting below the item relating to subparagraph (C)(i) the following new item:

"(C)(ii) ........................................... 10".

(b) DEFINITION OF PROPERTY USED IN THE GENERATION OF ELECTRICITY.—Subsection (i) of section 168 of such Code is amended by adding at the end the following new paragraph:

"(15) PROPERTY USED IN THE GENERATION OF ELECTRICITY.—The term ‘property used in the generation of electricity’ means property used in nuclear power production of electricity for sale, property used in hydraulic power production of electricity for sale, property used in steam power production of electricity for sale, and property used in combustion turbine production of electricity for sale.”

(c) EFFECTIVE DATE.—The amendments made by this section shall apply to property placed in service after the date of the enactment of this Act.
PROPOSAL TO MODIFY THE DEPRECIATION OF PROPERTY USED IN THE GENERATION OF ELECTRICITY

PRESENT LAW

A taxpayer generally recovers the cost of property used in a trade or business through depreciation or amortization deductions over time. Tangible personal property generally is depreciated under the Modified Accelerated Cost Recovery System ("MACRS") under section 168, which applies specific recovery periods and depreciation methods to the cost of various types of depreciable property.

The MACRS recovery periods for property used in the generation of electricity are outlined in Rev. Proc. 87-56, 1987-2 C.B. 674. Assets used in the nuclear power production of electricity for sale are provided a recovery period of 15 years. Assets used in hydraulic power production of electricity for sale are provided a recovery period of 20 years. Assets used in steam power production of electricity for sale are provided a recovery period of 20 years. Assets used in combustion turbine production of electricity for sale are provided a recovery period of 15 years.

In order for public utility property, including property used in the generation of electricity, to be eligible for depreciation under MACRS, the tax benefits of accelerated depreciation must be normalized in setting rates charged by utilities to customers and in reflecting operating results in regulated books of account.

REASONS FOR CHANGE

The electric industry has begun a transformation from a regional, vertically integrated, rate-regulated business to a national (or international) industry consisting of three components: generation, transmission, and distribution. As a result of this restructuring, most generation plant investments no longer will be regulated. Already, 24 States have passed restructuring legislation, and nearly all others are considering such legislation.

As an initial matter, the 15-year and 20-year recovery periods for electricity generation assets are much longer than the recovery periods provided with respect to other capital-intensive industries. For example, seven-year recovery periods are provided for pulp and paper mills, steel mills, lumber mills, foundries, automobile plants, and shipbuilding facilities.

The present-law recovery periods for electricity generation assets also are out of step with the innovation being forced by industry restructuring. New electricity generation technology is being developed and deployed at a rapid pace. For example, new "cogeneration" facilities being placed in service operate at energy conservation levels that are far higher than older plants. Other new developments—such as "distributed generation," where electricity is produced on a customer's site using fuel cells, micro turbines, or other small scale generating equipment that can displace power generated by a central station generating unit—could render longer-lived generation assets obsolete. In addition, clean-air regulations are requiring development of new environmental mitigation technologies. Present-law recovery periods for electricity generation property may act as a significant disincentive for taxpayers to invest in these new technologies.

Finally, the rationale for longer cost recovery in the electric industry is no longer applicable. In the legislative history underlying the 1986 Tax Reform Act, Congress suggested that one reason why electric industry assets are depreciated over longer periods is because of the certainty of cost recovery through rates. As electricity markets become deregulated, there will be no such certainty.

DESCRIPTION OF PROPOSAL

Property used in the generation of electricity generally is provided a seven-year recovery period and a ten-year class life for MACRS purposes. Such property includes property used in nuclear power production of

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Obtained and made public by the Natural Resources Defense Council, March/April 2002
electricity for sale, property used in hydraulic power production of electricity for sale, property used in steam power production of electricity for sale, and property used in combustion turbine production of electricity for sale, as these terms are described in asset classes 49.11, 49.12, 49.13, and 49.15 in Rev. Proc. 87-56, 1987-2 C.B. 674.

EFFECTIVE DATE

The proposal is effective for property placed into service after the date of enactment.
NEW TREASURY REPORT FINDS THAT PRESENT DEPRECIATION LAW OF UTILITY ASSETS DOES NOT REFLECT THE IMPACT OF INDUSTRY Deregulation

TREASURY FINDS THAT UTILITY DEPRECIABLE LIVES FOR GENERATION MAY BE TOO LONG IN A COMPETITIVE ENVIRONMENT

The Department of the Treasury has issued a 132 page "Report to the Congress on Depreciation Recovery Periods and Methods," July 2000. The Report agrees with information provided to Treasury by the Alliance of Energy Suppliers, a division of the Edison Electric Institute, that the depreciable lives of public utility assets are decreasing as a result of deregulation and other new developments in the industry. In relevant part, the Report states:

"Electric, gas, water, and telephone utilities were all generally regulated at the time the current class lives were established. Under rate of return regulation, utilities were not theoretically concerned with depreciation and tax expense, because rate structures were based on cost-plus pricing. A utility's rate of return on equity was largely independent of its tax or depreciation expenses. Consequently, for public utilities, it is unclear that existing class lives truly represent the actual useful lives of the property involved.

Class lives may be expected to be different in the current more competitive environment. Producers must maintain state-of-the-art equipment, which might mean shorter lives and more rapid depreciation. For example, new generations of combined cycle gas turbine generators are more efficient today than previously, leading to a more rapid retirement of such equipment than would have occurred under regulation." [At page 97.]

The Alliance previously submitted information to Treasury, including a "Rationale for More Rapid Depreciation of Electric Generation Assets." The Rationale noted that while the preponderance of new generation facilities constructed a generation ago were nuclear or coal-fired facilities, many power plants built today are gas turbine facilities, often operated in combined-cycle or as co-generation facilities that produce steam for sale as well as electricity. These new combined cycle generators operate at energy conversion efficiency levels of 70% compared to 40%-50% a decade ago.

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Clearly, the Report was influenced by the Rationale in concluding that output facilities will be more rapidly retired in the future than would have occurred under regulation.

The Rationale also described how the end of rate regulation will shorten the time horizon over which utilities will seek the return of, and a return on, their investments. The first paragraph of language quoted above largely paraphrases from this section of the Rationale.

BACKGROUND

The Report was completed based on a directive to the Secretary of Treasury in the "Tax and Trade Relief Extension Act of 1998" to conduct a comprehensive study of the recovery periods and depreciation methods under section 168 of the Internal Revenue Code and to provide recommendations for determining those periods and methods in a more rational manner.

In the Report, the Treasury states that the current depreciation system is dated. It continues:

"The asset class lives that serve as the primary basis for assignment of recovery periods have remained largely unchanged since 1981, and most class lives date back at least to 1962. Entirely new industries have developed in the interim, and manufacturing processes in traditional industries have changed. These developments are not reflected in the current cost recovery system, which does not provide for updating depreciation rules to reflect new assets, new activities, and new production technologies. As a consequence, income may be mismeasured for these assets, relative to the measurement of the income generated by properly classified existing assets. . . .

The current depreciation system has been constructed using an ambiguous classification criterion. Most assets receive depreciation allowances that are determined by the length of their 'class lives.' However, current class lives have been assigned to property over a period of decades, under a number of different depreciation regimes serving dissimilar purposes, and with changed definitions of class lives. The ambiguous meaning of current class lives contributes to administrative problems and taxpayer controversies. It also makes difficult the rational inclusion of new assets and activities into the system, and inhibits rational changes in class lives for existing categories of investments." [At pages 2 and 3.]
Testimony of
Theodore Vogel, Vice President and Tax Counsel for
DTE Energy Company
on behalf of
Edison Electric Institute
regarding Federal Tax Laws and the New Economy
before the
Oversight Subcommittee
Committee on Ways and Means
United States House of Representatives
September 25, 2000
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Committee on Ways and Means
United States House of Representatives
September 26, 2000

My name is Ted Vogel and I am the Vice President and Tax Counsel for DTE Energy Company, the parent holding company of Detroit Edison Company. Detroit Edison is an integrated electric utility serving greater southeastern Michigan with non-regulated subsidiaries active throughout the United States. DTE has 2.1 million customers, generates and sells over 50 million MWH of electric energy per year, has approximately 9,000 employees and annual revenues in excess of $4.7 billion. I am responsible for tax planning and tax compliance for DTE Energy. I am testifying today on behalf of the Edison Electric Institute (EEI), specifically the energy supply division of EEI, the Alliance of Energy Suppliers. Ron Clements, Director of Governmental Relations at EEI, is accompanying me today.

EEI, through its Alliance of Energy Suppliers, serves the needs and advances the commercial interests of power producers and power marketers throughout the United States by advancing public policy positions that enhance the competitiveness and effectiveness of the regulated and unregulated producers, distributors and sellers of electric energy.

THE CRISIS IN ENERGY SUPPLY
The recent headlines that describe the energy supply crisis in the San Diego region of southern California are a vivid example of the need to construct additional generation and transmission capacity in many areas of the United States. Responding to market demand, almost 52,000 megawatts of merchant generation — that is, unregulated generating plants selling energy for resale, not to end-use customers — are scheduled to come on-line by the end of 2001. This increase in generating capacity comes far too late, however, to provide relief from the situation caused by current shortfalls in generating and transmission capacity.

The San Francisco Bay area also experienced several blackouts this summer as a result of insufficient generating capacity in, or availability for import into, the state of California. Not only was in-state generation in too short of supply, but, even worse, the California Independent System Operator, the quasi-public operator of the transmission grid in California, could not import enough power from neighboring states to fuel California’s high demand for electricity. Rolling blackouts were instituted in the San Francisco Bay area on June 14 this summer. Many employees at Silicon Valley technology companies like Hewlett Packard worked in near darkness with limited air conditioning. Hewlett Packard’s energy manager told Dow Jones News Service that a blackout in Silicon Valley would cost companies there as much as $75 million dollars a day in lost revenues.1

The investment firm, J.P. Morgan, reported earlier this month that U.S. demand for electricity is likely to grow at more than 5% a year, driven largely by the spread of information technology

1 Dow Jones News Wire, September 20, 2000

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Obtained and made public by the Natural Resources Defense Council, March/April 2002
and telecommunications infrastructure. Information technology and telecommunications presently account for 16% of U.S. energy consumption, according to the report.

CONGRESSIONAL ACTION IS NEEDED NOW
Energy shortages have been severe across California, as the state’s expanding economy has out-stripped the construction of new power plants. To quote President Clinton’s, “The wholesale price of electricity has risen sharply in California this summer as a result of tight supplies and growing demand. This is having a particularly heavy impact where the price hikes are being passed on to consumers, as they are in the San Diego region.” The President released $2.8 million in emergency funds for low-income families to cope with higher energy costs. He also directed the Small Business Administration to set up a program for small businesses to apply for loans to pay their electricity bills. Acknowledging California’s “power-crunch,” he renewed his calls to Congress to take up his Energy Budget initiatives and tax incentives.

The explosive growth in electronic equipment, computers, telecommunications, and bandwidth content has produced a dramatic increase in the demand for electricity. All elements of this new energy intensive information-based economy have two things in common. All the equipment and content utilized in this trend incorporate silicon-based microprocessors and electricity. Everything is plugged in to an electrical outlet. Personal computers and servers are nothing more than electron conversion devices that accept kilowatts though a power source and convert, create, store, and transmit those kilowatts into digital bits of information. This new information economy is powered exclusively by electricity. The Internet is becoming more electricity intensive. Wireless Internet and telecommunications applications are growing at an even faster rate than basic Internet growth.

Congress must act now. The most efficient manner for Congress to act is to legislate incentives to encourage the construction of new or more efficient electric generation facilities. The demand for power in this country is staggering and, with 16% of all electric energy being used to support e-commerce and computers generally, annual growth is outstripping new capacity by an alarming rate. The inability to provide sufficient generating capacity will have dire impacts for virtually all sectors of the country’s economy.

IMPACT OF ELECTRICITY INDUSTRY Restructuring
Until the mid-1990’s, the investor-owned electric industry was composed entirely of single state or regional companies that were closely regulated by the various state public utility commissions. Companies were vertically integrated: they generated power, transmitted the power across their regions and then distributed the power to each customer. The companies operated as highly regulated monopolies and had an obligation to serve all customers.

In this regulated market, utilities were given an opportunity by regulators to recover their investment much differently than companies that operate in a more competitive marketplace. A regulated company had little incentive to retire its assets before the end of their useful life in order to deploy new technology. To have done so may have resulted in increased costs to customers that would have been unpalatable to state commissions and, therefore, not recoverable in rates paid for regulated services. This regulated status explains, in part, why electric assets have historically had such long recovery periods. This no longer is the state of the industry today.

Nationwide, the structure of the electric industry is rapidly changing from vertically-integrated, regulated monopolies to unbundled and fully competitive generation services. Currently, 24 states and the District of Columbia, encompassing some 70% of the Nation's population, have either passed electric industry restructuring legislation or enacted regulatory orders to implement unbundling and competitive customer choice. In these states, this choice in electric generating service supplier is either currently available, awaiting a phase-in implementation or part of a "big-bang" implementation in which all customers have the choice of electric energy supplier all at once. Because of the introduction of competition, previously applicable rules regarding the cost recovery of capital simply do not apply any longer.

There also is no regulatory certainty in a deregulated electricity market. This is one of the clear contributing factors at play in the San Diego situation described above. Uncertainty has stifled the interest of competitive generators to build new plants. In a regulated environment, predictable dividend payments to utility investors permitted them the opportunity to earn a return commensurate with the return they would earn in industries with similar risk profiles. In a newly competitive electricity environment, however, investors will demand a return of, and a higher return on, their investments over a much shorter period of time to reflect the vastly increased risks of an unregulated environment. Shorter capital recovery periods are a key element in attracting these investors.

The electric industry is one of the most capital-intensive industries in this country, requiring nearly four dollars in investment for each dollar of annual revenue. Cost recovery, including the federal income tax rules providing for depreciation and amortization of assets, is of vital importance. The present 15-20 year depreciation requirement for generating assets discourages badly needed investment in the construction of new electric generation facilities and in the repowering of currently mothballed facilities.

**NEW TECHNOLOGY REQUIRES IMPROVED AND ADDITIONAL CAPITAL INVESTMENT**

Energy producers must build and maintain state-of-the-art equipment to accommodate our nation's new technology. Competitive pressures that arise through the unbundling of retail electric service requires that all competitors be as efficient as possible. Because the competitiveness of wholesale markets is now an established feature of the industry's business landscape, sales for resale must also be generated as cost-effectively as possible. The advances in technology require that all new construction be more efficient in terms of the engineering measurements than equipment manufactured just a few years ago. These measurements include capacity factor, heat rate and availability factor. New combined cycle gas turbine generators are much more efficient today, resulting in more rapid obsolescence of older less efficient generating equipment.

Many of the power plants constructed a generation ago were coal-fired or nuclear. Power plants being built today are much more likely to be gas turbine facilities, often operated in a combined-cycle or as cogeneration facilities that produce steam for industrial process use as well as electricity. Gas-fired turbine technology has made stunning advances over the last decade. These new combined-cycle generators operate at energy conversion efficiency levels of 70% compared to 40-50% only a decade ago. Energy conversion efficiency measures the efficiency with which one type of fuel is converted to electric energy, which, in turn, is capable of providing the light, heat or work that consumers expect. As these advances continue, electric generation equipment suffers much quicker economic obsolescence than in prior decades when the current depreciation rates were set.
In addition to new generation facilities, existing electric generation facilities require massive amounts of investment in order to retrofit these facilities and bring them into compliance with environmental regulations. The Clean Air Act Amendments, new source review, the National Ambient Air Quality Standards, and the related state implementation plans all require significant new capital investment in environmental mitigation technologies in order to improve air quality and maintain compliance with federal and state directives. Again, this advanced technology supports the need for shorter capital recovery periods.

**THE INEQUITIES OF CURRENT DEPRECIATION RULES**

The recovery periods permitted under section 168 of the Internal Revenue Code for assets used to produce and distribute electricity are much longer than the recovery periods allowed to other capital intensive industries. As in every other instance of a heavily regulated industry undergoing deregulation, new technology is being developed and deployed at a much more rapid pace and makes obsolete many prior investments in property, plant and equipment. With most of our industry's assets placed in the 15-year and 20-year recovery period, the present cost recovery system unjustly penalizes investors in electric generation and makes raising necessary capital much more difficult.

The disparity between electric industry recovery periods and the recovery periods of other industries is highlighted upon review of asset class 00.4, Industrial Steam and Electric Generation and/or Distribution Systems. This asset class includes equipment identical to that used by the electric industry except that the energy generated is used in industrial manufacturing processes instead of being sold to others. This asset class is given a 15-year life. The same asset in the hands of an electric company has a 20-year life. No rationale reasonably supports this distinction.

By contrast to the 15-20 year depreciation lives for electric generation assets, depreciation lives for other capital intensive manufacturing processes—such as pulp and paper mills, steel mills, lumber mills, foundries, automobile plants and shipbuilding facilities—are depreciable for Federal income tax purposes over just 7 years. Chemical plants and facilities for the manufacture of electronic components and semiconductors can be depreciated over only 5 years. The power plants that generate electricity have useful lives that are similar to this production equipment that have recovery periods in the 7-year range.

Another area of concern are the restrictions contained in the description of class life 00.12, Information Systems, that further compounds the disadvantage suffered by investors in electricity generation, transmission and distribution facilities. The description excludes computers that are an integral part of other capital equipment, thus, giving computers used in a power plant control room a 15 or 20-year life and a 150% declining balance method. A computer used to run a highly sophisticated nuclear power plant cannot be expected to be less susceptible to obsolescence than one used in a cigarette factory, for example, which currently is recovered within 7 years. The economic life of a process control computer is not closely related to economic life of the manufacturing equipment it operates. It belies common sense to treat a process control computer any differently than a computer used to administer normal business transactions, yet these computers perform much more sophisticated "high technology" processes than normal business computer applications.

Mr. Chairman, to more fully explain the inequities inherent in current depreciation rates and methods, we have attached a copy of a letter we submitted to Treasury last November that we hope can be incorporated into this Subcommittee's formal record.
CONCLUSIONS AND RECOMMENDATIONS
We applaud this Subcommittee’s efforts to take a long overdue look at the current federal income taxation system with respect to capital recovery periods. We agree with the conclusions of a recent Treasury report and urge you to act on its findings. The Treasury Report (Report to the Congress on Depreciation Recovery Periods and Methods) states:

“Electric, gas, water, and telephone utilities were all generally regulated at the time the current class lives were established. Under rate of return regulation, utilities were not theoretically concerned with depreciation and tax expense, because rate structures were based on cost-plus pricing. A utility’s rate of return on equity was largely independent of its tax or depreciation expenses. Consequently, for public utilities, it is unclear that existing class lives truly represent the actual useful lives of the property involved.

Class lives may be expected to be different in the current more competitive environment. Producers must maintain state-of-the-art equipment, which might mean shorter lives and more rapid depreciation. For example, new generations of combined cycle gas turbine generators are more efficient today than previously, leading to a more rapid retirement of such equipment than would have occurred under regulation.” [At page 97].

Congressional action is needed to cure the power supply emergency facing our country. We encourage you to modernize the tax treatment of new electric generating capacity to reflect the technical, environmental and economic realities of the current structure of the electric industry. Doing so would greatly advance the public interest by insuring against the dire economic consequences that necessarily accompany electricity shortfalls. Failing to do so would benefit no one.

In recognition of the need to modernize the capital cost recovery system for electric generation assets, we wish to commend Ways and Means Committee members Thomas, Jefferson and English for their leadership in introducing H.R. 4959 to modify the depreciation of property used in the generation of electricity. We believe this is a significant first step in helping our nation avoid an electric supply crisis which would harm all segments of our economy.

We would be pleased to provide this Committee with more information about our industry’s views on depreciation rates and methods for facilities used in the generation, transmission and distribution of electricity, and how the current system discourages investment in badly needed new generation capacity that is necessary to fuel economic growth in this country. We thank you for the opportunity to participate in this process.
November 1, 1999

Department of the Treasury
Office of Tax Analysis
Room 4217, Main Treasury Building
1500 Pennsylvania Avenue, NW
Washington, DC 20220

Re: Notice 99-34; 1999-35 IRB 1; Depreciation Study

Dear Sir or Madam:

The Edison Electric Institute ("EEI") is pleased to offer the following comments in response to Notice 99-34; 1999-35 IRB 1 which requested public comment and recommendations for possible improvements to the current depreciation system under section 168.

EEI is the association of U.S. investor-owned electric utilities, their affiliates and associated members worldwide. EEI is serving approximately 75 percent of the nation's electric customers and generate approximately three-quarters of all the electricity generated by all electric utilities in the country.

EEI is concerned that the recovery periods permitted under section 168 for assets used to produce and distribute electricity are much longer than the recovery periods allowed to other capital intensive industries. Indeed, this disparity has been present in nearly every depreciation or cost recovery regime since the 1970's. While there may have been a justification for this difference a number of years ago, today we believe that the industry has much more in common with other capital intensive industries. In the last five years, the electric industry has begun a transformation from a regional, vertically integrated, rate regulated business to a national (or international), industry consisting of three components: generation, transmission and distribution. Most generation plant investments will be non-regulated. As in every other instance of a heavily regulated industry undergoing deregulation, new technology is being developed and deployed at a much more rapid pace that competes with and makes obsolete many prior investments in property, plant and equipment. With most of our industry's assets placed in the 15-year and 20-year recovery period, the present cost recovery system unjustly penalizes our investors and makes capital formation much more difficult.

MACRS Cost Recovery Periods

Under section 168, the cost recovery period of assets is generally determined by reference to the midpoint class life for the asset guideline class in which such property is classified under Rev. Proc. 83-35, 1983-1 C.B. 745. Section 168 (e)(1) specifies (in relevant part) that property shall be treated as

- 10-year property if such property has a class life of 16 through 19 years,
- 15-year property if such property has a class life of 20 through 24 years, and
- 20-year property if such property has a class life of 25 or more years.

Section 168 (b)(1) sets the applicable depreciation method as the 200 percent declining balance method except that section 168 (b)(2) allows only the 150 percent declining balance method for any 15-year or
20-year property. The application of these rules results in the following depreciable lives for assets used in the electric industry as published in Rev. Proc. 87-56:

Hydraulic Production Plants, Steam Production Plants, and Transmission and Distribution Plant (asset classes 49.11, 49.13, and 49.14 respectively) have 20-year lives,
Nuclear Production Plants and Combustion Turbine Production Plants (asset classes 49.12 and 49.15) have 15-year lives,
Nuclear Fuel Assemblies (asset class 49.121) have 5-year lives.
Thus, the lion's share of the investment in the electric industry must be depreciated over 20 years using the 150 percent declining balance method.

One can scan Rev. Proc. 87-56 and note that very few asset classes have a 20 year life; aside from electric industry assets there are only twelve. Indeed, out of 133 asset classes identified in the Revenue Procedure only fifteen have even a 15-year life. The only manufacturing assets included among the fifteen are assets used to manufacture cement. As a matter of fact, most manufacturing assets have a 7-year depreciable life and are permitted use of the 200 percent declining balance method. For example, the following manufacturing categories have assigned lives that are less than half as long as most electric industry assets:

7-year cost recovery
Pulp and paper mills, Steel mills, Manufacture of locomotives and railcars, Lumber mills
Foundries, Auto plants, Ship building

5-year cost recovery
Chemical plants, Manufacture of electronic components and semiconductors

The disparity between electric industry recovery periods and the recovery periods of other industries is highlighted upon review of asset class 00.4 Industrial Steam and Electric Generation and/or Distribution Systems. This asset class includes equipment identical to that used by the electric industry except that the energy generated is used in an industrial manufacturing process instead of being sold to others. This asset class is given a 15-year life. The same assets in the hands of an electric company would have a 20-year life.

Another area of concern for our industry are the restrictions contained in the description of class life 00.12 Information Systems that further compounds the disadvantage suffered by our investors. The description excludes computers that are an integral part of other capital equipment, thus, giving computers used in a power plant control room a 15 or 20-year life and a 150% declining balance method. A computer used to operate a highly sophisticated nuclear plant cannot be expected to be less susceptible to obsolescence than one used in a cigarette factory or a textile mill which currently is recovered within 7 years. The economic life of a process control computer is not closely related to economic life of the manufacturing equipment it operates. It belies common sense to treat a process control computer any differently than a computer.

They are:
class 01.3 Farm Buildings,
class 40.2 Railroad Structures classified as Public Improvements Construction,
classes 40.51, 40.53, and 40.54 Railroad Electric Generation Equipment,
class 48.11 Telephone Central Office Buildings,
class 48.33 TOCSC-Cable and Long-line Systems,
classes 49.21 and 49.221 Gas Utility Distribution and Manufactured Gas Production Facilities,
class 49.3 Water Utilities,
class 49.4 Central Steam Utility Production and Distribution, and
class 51 Municipal Sewers.
used to administer normal business transactions, yet these computers perform much more sophisticated “high technology” processes than normal business computer applications.

The power plants that manufacture electricity have lives that are similar to the production equipment listed above that have recovery periods in the 7 year range. The advantageous recovery periods allowed by Congress were given to encourage modernization of the nation’s industrial base and to improve productivity. As discussed below, the electric industry is entering a period of great change. It is now appropriate to reexamine the traditional electric utility recovery periods and bring them in line with other industries.

The Present and Future State of the Electric Industry
Until the 1990’s the investor-owned electric industry was composed entirely of single state or regional companies that were closely regulated by the various state public utility commissions. Companies were vertically integrated in that they generated power, transmitted the power across their region and then distributed the power to each customer. The companies operated as monopolies and had an obligation to serve all customers.

In this sort of market utilities may have had a greater expectation of recovery of their investment than in a more competitive marketplace. Furthermore, a regulated company had little incentive to retire its assets before the end of their technological life in order to deploy new technology. To have done so might have resulted in increased costs to customers that would have been unacceptable to state commissions. This monopoly status may explain why electric assets have historically had such long recovery periods. Such is not the state of the industry today.

One by one states are unbundling the electric industry and introducing competition. Generally, three distinct businesses are formed: generation, transmission, and distribution. In order to keep incumbent utilities from enjoying an early market advantage, states are often structuring market rules such that the incumbent utilities sell off large numbers of their generation plants. For example, California utilities sold off half of their fossil fuel plants as part of that state’s restructuring plan. With the proceeds of these sales, many utilities (or former utilities) are investing in non-regulated generation plants in other regions of the country. This newly competitive marketplace is encouraging the introduction of newer technology.

Cleaner burning natural gas plants are being built to compete with coal fired plants. As many nuclear plants are shut down, replacement energy is being generated by new, non-regulated plants. In this marketplace, investors in electric generation have no guarantee of recovery. As in any other business they will have no control over other, cheaper sources of supply that will attract away their customers.

An example of the effect of technological innovation is the rapidly increasing deployment of combined cycle gas turbine generators. Combined cycle generators increase efficiency by producing electricity from otherwise lost waste heat. Today’s state-of-the-art combined cycle generators operate at energy conversion efficiency levels of 70% compared to 40% to 50% a decade ago. Competitive pressure is forcing owners of units less than a decade old to make costly improvements to increase operating efficiency.

In addition to the competitive threats facing the generation segment of the electric industry, transmission and distribution are facing competitive threats from gas pipelines and the location of generation along gas pipelines. Not only is gas a competitive energy source, but gas pipelines with capacity to serve generating plants can substitute for portions of transmission lines. Locating new generation along gas pipelines is, in effect, a mechanism for transporting electrons by moving gas. Longer term, numerous threats are emerging to place transmission owner revenues at risk. These include the location of generation nearer to loads, changes in electricity consumption patterns, and new technology.
In fact, one rapidly emerging new technology is Distributed Generation. Distributed Generation refers to electric power produced using fuel cell technology or on-site small scale generating equipment that can displace power generated by a central station generating unit. Because they can be sited on a customer’s premise, their widespread use would effect the economic life of transmission and distribution assets as well as generating plants.

In EEl’s view, the fundamental changes taking place in the electric industry must be acknowledged and taken into account in the current cost recovery system. We note that recently many industry groups have publicly expressed a need for shorter recovery periods. In every case, these industries already have recovery periods of 5-years, 7-years or 10-years. Although we don’t seek to diminish the arguments put forward by other industries, we do believe that our industry is bearing the biggest penalty under the present system. The disparity is so great that we believe that shortening electric industry lives must be acted upon before adjusting any other industry’s lives. We believe the current system provides incentives that direct capital formation away from our industry. As a matter of fundamental fairness, the cost recovery system must take into account marketplace changes that radically effect the economic useful lives of assets.

We would be pleased to provide you with any other information that you might find helpful. Please feel free to contact Mr. Cary Flynn of Duke Energy at 704/382-5918. We would also welcome the opportunity to meet with you personally to further discuss our views.

Sincerely,

David K. Owens  
Executive Vice President  
Business Operations Group
Consultants see electric supply tsunami

Power plant overbuilding will occur in several regional markets, while shortages could crop up in other markets, a noted research group forecasts.

Volatility is the rule rather than the exception in restructured North American power markets, and the bumpy transition to electric competition will be "prolonged and maddening" according to a recently released report by Cambridge Energy Research Associates (CERA) consultant Arthur Andersen.

Intended to be a mid-course examination of the impacts of restructuring since California opened its markets two years ago, Electric Power Trends 2001, provides a compilation of industry data and an analysis of challenges facing the industry and policy makers.

The report also notes that previously abnormal prices and volatility are becoming the norm. Further, rather than running up stranded costs, coal and nuclear plants are found to have value.

In prepared remarks, John Wierda, a partner with Arthur Andersen, said the "electric supply tsunami" will drive up supply in certain markets where there is little demand, causing a downward pressure on power prices. The consultants acknowledge that at least some

Financial analysts: most projects not viable

While 250,000 MW of new power plant development has been proposed, prominent equities research analysts say most development projects aren't viable and plant developers are likely to add plants at the planned rate.

"Most development projects are not viable, in our view," said Salomon Smith Barney.

"They are constrained by difficulties in siting, financing, and securing natural gas supplies. The availability of gas supplies will be a critically limiting factor, according to the financial analysts' report."

"We believe natural gas supplies will be able to fuel at most about 25,000 MW of new development over the next six or seven years."

Even at this rate, gas production would have to grow at an aggressive 5% annual rate.

Taking a jab at consultants who predict too many plants will get built, Salomon Smith Barney called that hyperbole instead of reality.

"Numerous industry consultants and analysts are suggesting a 'tsunami' of new electric generation capacity," the financial analysts say. "Many of these studies conclude that the United States faces excess generating capacity over the next few years. We disagree...

"Many of these observers are assuming that nearly all of the development projects pencil.

PJM plans competitive spinning reserves market

PJM is developing business rules to establish a competitive market in spinning reserves about 15 months with the aims of providing incentives to relieve a shortfall in capacity that service.

"The Operations Reserve Working Group has developed a strawman proposal which the Energy Markets Committee approved... and now they'll start moving forward to explore the proposal and look at creation of that market," PJM spokesperson Melissa Singleton Josef said.

"Now a new Spinning Reserve Working Group has been formed out of that process. I expected that the spinning reserve market would open sometime around the beginning of 2002. PJM has determined that in order for a competitive market in spinning reserves to be viable the market needs to be broadened.

In addition to promoting more competition, PJM organizers say that the interconnection objectives for the market would include compensating providers of spinning capacity on a basis of a clearing price rather than cost as well as inducing response by on-line, margin resources through compensation.

Costs of spinning reserves would be allocated to load serving entities by load ratio. Load serving entities would be allowed to enter bilateral agreements to buy spinning reserv

Bush unveils power plans

Republican Presidential candidate George W. Bush's comprehensive energy policy announcement last week included some provisions for power generation. The plan advocates:

- Investing $2 billion over 10 years to fund research in "clean coal" technologies;
- Investing $1 billion over 10 years to establish clear rules to help efficient utilities purchase nuclear plants;
- Streamlining the re-licensing process for hydroelectric projects;
- Opposing the building of dams; and
- Supporting federal legislation restructuring the electric utility industry.

The plan also would include legislation to require electric utilities to reduce harmful emissions and would support tax credits for electricity produced from renewable and alternative fuels at a cost of $1.4 billion over 10 years.
Shaw Pours Cold Water on Hot Market

The distributed generation market in the U.S. in the last nine months has undergone "a sea change such as I have never seen and I go back in this business to 1985," Bob Shaw, a venture capitalist, told a conference in Washington this week. He thinks that there might be a touch of irrational exuberance here.

Shaw of New Hampshire-based Arete Ventures some years ago was one of the first to spot the potential of distributed generation and to invest heavily and successfully in it. That the market has followed his lead was evident from the fact that the three-day conference organized by InterTech of Portland, Me., attracted almost 200 paying customers, a relatively huge figure in today's competitive and overcrowded energy conference universe.

Paradoxically, though, Shaw now believes that the distributed generation investment market may be over-heating (he compares it to dot.com stocks) and that it may be time to step away from it, for the moment at any rate. Shaw argues that there is now far too much money chasing far too few investment opportunities.

Shaw credits John Markham, a little-known journalist for Microsoft's financial network, with setting off the feeding frenzy by writing a piece in January this year predicting that PlugPower's (a fuel cell company) shares would increase in value by 10,000 percent in the next decade. Plug shares rocketted, reaching a market capitalization finally of $6.5 billion. Fuel cell-maker Ballard Power and other shares, such as AstroPower, American Superconductor, Avista Energy, and Superconductivity Inc., rode along on the coattails. Some shares gained more than 800 percent in less than a year. "We used to think that 20 percent was good for one year," Shaw noted wryly.

Shaw pointed to economic journalist George Gilder and consultants Mark Mills and Peter Huber as others who have added fuel to the frenzy. "The Venture Capital Journal," he said, "declared power technology 'the next big thing' and writers around the world have picked up the theme."

"Every investment bank has discovered this space now," Shaw added. "A year ago, it didn't have the attention of anyone in the financial community. The private offerings of companies that a year ago were struggling to raise money now are oversubscribed."

Shaw has lost none of his faith in distributed generation energy technology (microturbines, fuel cells, advanced batteries, and the like), which he believes will transform a computerized world ever more dependent on reliable electricity supply. He just worries that there is too much "dumb money" and "herd effect" out there today.

A somber audience listened to him quietly but applauded loudly at the end.

Computer Climate Models Debunked on El Niño

Claims that computer climate models successfully predicted the 1997-98 El Niño phase of the El Niño Southern Oscillation are

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By Bryan Lee, Dow Jones Newservices, 202-852-6647, mailto:bryan.lee@dowjones.com

WASHINGTON (Dow Jones)--Accelerating the depreciation of electricity generation units will enhance competition by encouraging investment in new power plants, the Edison Electric Institute told Congress Tuesday.

"Investors will demand a return of, and a higher return on, their investments in building and maintaining power plants over a much shorter period of time," said Theodore Vogel, vice president and tax counsel for DTE Energy Co. (DTE).

He testified before the House Ways and Means Committee's oversight panel on behalf of EEI's Alliance of Energy Suppliers, which represents the competitive power interests of the investor-owned utility trade group.

The tax code currently requires power plant investments to be depreciated over a 15- to 20-year timeframe. Vogel called for shortening that to seven years.

Rapid technological change means that generation equipment becomes obsolete more quickly than when the depreciation schedule was originally established, he said.

The shorter depreciation schedule will encourage investment in new generation technologies that are more efficient than the portfolio of coal-fired plants that dominates U.S. supply today, he said.

"Congress should legislate incentives to encourage the construction of new or more efficient electric generation facilities," Vogel testified, citing chronic energy-supply problems in various regions of the U.S. and projections that U.S. electricity demand will grow at more than 5% annual rate.

"Congress must act now," Vogel said, citing the depreciation issue as a barrier to investments in power plants in regions such as California, which has confronted the prospect of blackouts this summer.

Vogel supported congressional passage of H.R. 4959, sponsored by three members of the tax-writing Ways and Means Committee, to accelerate depreciation for electric generation assets.
EEI Asks Congress for Accelerated Power Plant Depreciation.

October 4, 2000

Chief Executive
Member Company

EEI’s energy supply division, the Alliance of Energy Suppliers, is aggressively seeking to change Federal tax laws by shortening the depreciable lives of generating assets from 15-20 years under current law to seven years. Last week, Mr. Ted Vogel, Vice President and Tax Counsel for DTE Energy Company, testified on behalf of EEI before the Oversight Subcommittee of the Ways and Means Committee in support of the proposed accelerated depreciation legislation for generation assets, H.R. 4959.

At this critical transition period for the industry, with regions of the nation facing power supply emergencies, the industry must step forward with proactive policies that reflect the technical, environmental, and economic realities of the marketplace that will promote new electric generating capacity. EEI has led the industry’s effort to enact H.R. 4959, introduced by Representatives Bill Thomas (R-CA), Bill Jefferson (D-LA), and Phil English (R-PA) that would shorten the tax depreciation lives of generating assets to seven years. Mr. Vogel called on Congress to pass this legislation to encourage investment in urgently needed new generation facilities. The complete text of Mr. Vogel’s testimony is available on our website at www.eei.org.
Enclosed is information describing the EEI-led coalition to promote the enactment of H.R. 4959 called the Coalition of Depreciation Equity (CODE). We look forward to your active participation in CODE. For more information on the Coalition, please ask your staff to call Theresa Sanders at the Alliance of Energy Suppliers at the above number.

Sincerely,

Thomas R. Kuhn
President

TRK:ts
cc: Washington Representatives