SMUD is concerned the FERC recommended soft-price cap proposal, while well intentioned will create more reliability problems for California than it will solve. This is because California is not an electric island, but rather a fully integrated electric participant in the Western States Coordinating Council (WSCC) grid comprising most of the western United States. Imposing a cap on a portion of the integrated grid creates arbitrage opportunities within the WSCC and could encourage power to be exported from California to other areas within the WSCC that are not encumbered with any price cap. Yet, as the Commission has found it is important to deal with the energy crisis in California and to take proactive steps to ensure such problems do not spread to other states within the WSCC. At the same time it is critical to provide sufficient monetary incentive to encourage development of much needed generation resources in the WSCC. Accordingly, SMUD offers for consideration the following conceptual proposal which builds upon the good ideas in the FERC Order and upon the load differentiated price cap evaluated by the ISO Board, in an attempt to balance the competing interests for just and reasonable consumer prices with sufficient incentive to encourage generation resource development.

SMUD's proposal is as follows:

1. The following price caps would only apply to transactions for the sale and purchase of electric energy for terms less than one month in duration and would apply until 12/31/2002, unless extended by the FERC. These price caps would apply to the entire WSCC.

2. FERC approved Cost of Service Rates would be adopted for all thermal generation having a heat-rate (HHV) equal or greater than 14,000. Additionally, peaker plants under a 14,000 heat-rate could elect to apply for either a FERC approved Cost of Service Rate or play the market subject to the price caps. This election would be made for at least a one-year period and recognizes that peaker units often purchase gas supply in the daily spot market at prices that often are higher than the monthly Henry Hub index price used in determining the price caps. It is anticipated that if a peaker plant desires to pursue the cost of service rate approach, that the requested rate would be derived from a formula that includes a daily gas price index.

3. Two price caps would be adopted for all thermal units having a heat-rate less than 14,000 (HHV). One cap would be an On-peak price cap applying to all on-peak hours (as defined by the WSCC or their successor) and a different Off-peak price cap for all other hours.
4. The On-peak price would be calculated as follows:

\[
\text{(The product of the NYMEX Henry Hub gas price for the applicable delivery month (based upon the average of the closing price for the last three days of trading) times an imputed heat-rate of 20,000 Btu/kWh) plus $10/MWh.}
\]

For example, if the January 2001 Henry Hub gas price was $7.00/MMBtu, the On-peak price cap for January 2001 would be:

\[
(7 \times 20) + 10 = 150/MWh
\]

5. The Off-peak price would be calculated as follows:

\[
\text{(The product of the NYMEX Henry Hub gas price for the applicable delivery month (based upon the average of the closing price for the last three days of trading) times an imputed heat-rate of 14,000 Btu/kWh) plus $10/MWh.}
\]

For example, if the January 2001 Henry Hub gas price was $7.00/MMBtu, the Off-peak price cap for January 2001 would be:

\[
(7 \times 14) + 10 = 106/MWh
\]

The rationale for this approach is as follows:

- The cost of service rate is necessary to ensure the older more inefficient thermal units run during the approximate 5% of the hours when needed to meet peak load conditions and are able to recoup marginal costs including a reasonable rate of return. These units need to be differentiated from the newer more efficient units and should not be the "tail wagging the dog" for purposes of setting the market price.

- The imputed heat-rates of 20,000 and 14,000, on-peak and off-peak, respectively, provide significant margin above the actual heat rate for new units, which have actual heat-rates ranging from 6,800 to 8,500. This plus the adder of $10/MWh should be more than enough monetary incentive to encourage development of new generation, while at the same time providing some minimal price protection for consumers for a two year period.

- FERC precedent exists for establishing a region-wide price cap for power. The FERC has previously approved the Western State Producing Pool Agreement (WSPP), which used to establish a maximum rate that could be charged for short-term energy.

- Having the price cap apply only to energy transactions less than one month in duration creates further incentive for parties to negotiate longer-term agreements, supporting the Commission's Order to move most the energy transactions into the forward bilateral markets. This should also assist generation developers in obtaining financing by providing more price

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DOE003-0170

Obtained and made public by the Natural Resources Defense Council, March/April 2002
certainty through negotiation of these forward contracts.

- The region-wide application of these price caps better parallels the physical reality of how power actually flows and should simplify scheduling between control areas by eliminating "ping-pong" and similar gaming schemes. This also facilitates locating generation where needed from a physical flow perspective rather than have localized price cap issues determine where new plants are sited.

- Utilizing Henry Hub as the gas variable, captures the variability of gas price in determining the price cap. It does not matter that gas at this location is not utilized to actually fuel plants in the WSCC. Sufficient heat-rate margin has been built in to the price-cap to capture the difference in gas price among regions, particularly when recognizing that nearly all baseload plants use a portfolio of gas contracts. These portfolios typically include multi-year, multi-month and monthly block purchases, with minimal purchases of gas in the daily spot market. The price differential between these longer term contracts and the Henry Hub prices are much less pronounced than daily spot prices, in fact in many months, portfolio prices are likely lower than the Henry Hub monthly index price. This Henry Hub contract is widely traded and generally recognized as the proxy for gas price in North America. This proposal also recognizes that peaker plants, by the unpredictable nature of their load, rely much more on daily spot gas purchases. This is equitably addressed by offering peaker plants, irrespective of heat-rate, the option of seeking a FERC approved Cost of Service rate which includes the cost of gas purchased on a daily basis.

Please contact Tom Ingwers of SMUD at (916)732-5704, or Jim Tracy of SMUD at (916)732-6492, if you have questions or comments about this Sliding Scale Regional Price Cap Proposal.
Clean Coal Technology
Support for Clean Coal Technology Research and Development

Our quality of life is inextricably linked to an abundant, reliable and affordable supply of energy. Americans, on whole, have lived prosperous lives largely due to a booming economy powered by electricity. Electricity powers the tools and machinery of our factories that make up the old and current economy and the computers and services that drive the new economy.

Today, more than one half of U.S. electricity is generated from coal-based power plants. As the modern technology economy grows, so goes electricity demand. By the year 2020, the Energy Information Administration projects that U.S. electricity consumption will grow on average 1.8% annually, and coal will continue to generate half of all the electricity produced.

In the wake of the ongoing energy supply shortages and reliability concerns occurring in various regions of the country, there is increasing recognition that new electric capacity is needed. Due to its availability and affordability, coal offers numerous advantages over other fuel sources in meeting these energy demands. The challenge facing future coal use is to convert it into a cleaner, more efficient resource. While overall emissions for U.S. coal-based generating plants have been reduced by over 20% over the last 30 years, electricity produced from coal has tripled and pressure exists to further reduce emissions.

Congress and the Administration should promote programs and initiatives to preserve a diversity of fuel supply through affordable and reliable electricity. An important step toward meeting this goal is the creation of advanced coal technology programs to improve the emissions from coal-based generating plants. Legislation has been introduced to provide incentives to develop advanced clean coal technologies. S. 60, “National Electricity and Environmental Technology Act” by Senators Robert Byrd (D-WV) and Mitch McConnell (R-KY), among others, would authorize the Department of Energy to develop and deploy clean coal technology programs for both existing and new coal-generating facilities. Specifically, the bill would:

- Accelerate technology research and development for new and existing coal-based generation facilities.
- Provide tax incentives to privately-owned utilities and their equivalent in the form of tradable or refundable credits for not-for-profit utilities to pursue clean coal technologies for emission reductions and efficiency improvements in existing facilities.
- Similar financial incentives would be provided for early commercial application of advanced coal-based generating technologies

NOW, THEREFORE, BE IT RESOLVED: That APPA urges Congress and the administration to stimulate the development and use of advanced technologies that will allow the U.S. to utilize its most abundant energy resource, coal, to help meet the growing demand for clean, affordable, and reliable electricity; and

BE IT FURTHER RESOLVED: That APPA supports legislation that provides incentives to encourage the retrofitting and repowering of existing coal-based generating units with state-of-the-art emission control technologies. Such legislation should include tax credits for private electric utilities and their equivalent in the form of tradable or refundable credits for not-for-
profit electric utilities, for emission reductions and efficiency improvements in existing coal-based generating facilities and for early commercial applications of advanced coal-based generating technologies; and

BE IT FURTHER RESOLVED: That APPA supports the pursuit of accelerated technology R&D programs for the development of the next generation advanced clean coal based generation facilities, and will encourage the Department of Energy, EPA, EPRI, and other related organizations to increase their support in these activities.

Approved by the APPA Legislative and Resolutions Committee, February 5, 2001.
Energy and Environmental Principles
Public Power’s Energy and Environmental Principles

In the 21st century, how we achieve our environmental goals will have a tremendous effect on energy supply and security as well as economic growth. The American Public Power Association (APPA) feels strongly that we should not lessen or compromise our commitment to environmental quality. As a nation, however, we should not be required to choose either environmental protection or energy security. Public power believes that we must find solutions that address both of these priorities without sacrificing either.

Our past approaches both to regulation and resource development have been inconsistent with today’s challenges and opportunities. Often we make environmental, economic, or energy policy decisions to accomplish single-purpose objectives, with little regard to the impact on other national priorities. The key to success is to establish a balanced approach. If our decision-makers will take a broader, global and modern perspective to environmental and energy concerns, America can establish and pursue strong environmental policies while sustaining a cleaner, but diversified generation resource mix.

APPA is proud of its long-standing support for attainment of our national environmental goals. As locally controlled entities, our members are highly responsive to community and consumer needs. A priority concern shared by all consumers is the desire to protect and enhance America’s environment. We share this concern and have consistently supported those policies that will lead to development of cleaner fossil generation and renewable energy.

We call upon Congress and the Administration to address environmental concerns on an inclusive basis, with a full understanding and evaluation of the impacts and opportunities that decisions have on energy supply, energy security, and economic growth. In this regard, APPA has prepared a set of overarching principles designed to guide the development of energy and environmental policy.

NOW, THREFORE, BE IT RESOLVED: That APPA calls for the development of energy and environmental policies that provide for achieving both environmental quality and energy goals by taking into account, among other considerations, the following factors:

- Human health
- Environmental protection
- Electric reliability
- Energy costs
- Technology-based and incentives-driven solutions; and

BE IT FURTHER RESOLVED: That America’s economic well-being depends on a diverse, balanced, cleaner, more efficient and economical energy mix that promotes energy conservation and includes coal, oil, gas, nuclear, hydropower and other renewable sources of energy; and

BE IT FURTHER RESOLVED: That proper implementation of environmental goals must be based on sound science, include cost-effective approaches, and provide quantifiable benefits; and
BE IT FURTHER RESOLVED: That in the interest of consumers, local and state governments should be afforded maximum flexibility in devising strategies to meet environmental standards.

Approved by the APPA Legislative and Resolutions Committee, February 5, 2001.
Multi-pollutant Strategy
THE WHITE HOUSE
WASHINGTON

March 13, 2001

The Honorable Larry E. Craig
United States Senate
Washington, D.C. 20510

Dear Senator Craig:

Thank you for your letter of March 6, 2001, asking for the Administration's views on global climate change, in particular the Kyoto Protocol and efforts to regulate carbon dioxide under the Clean Air Act. My Administration takes the issue of global climate change very seriously.

As you know, I oppose the Kyoto Protocol because it exempts 80 percent of the world, including major population centers such as China and India, from compliance, and would cause serious harm to the U.S. economy. The Senate's vote, 95-0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns.

As you also know, I support a comprehensive and balanced national energy policy that takes into account the importance of improving air quality. Consistent with this balanced approach, I intend to work with the Congress on a multipollutant strategy to require power plants to reduce emissions of sulfur dioxide, nitrogen oxides, and mercury. Any such strategy would include phasing in reductions over a reasonable period of time, providing regulatory certainty, and offering market-based incentives to help industry meet the targets. I do not believe, however, that the government should impose on power plants mandatory emissions reductions for carbon dioxide, which is not a "pollutant" under the Clean Air Act.

A recently released Department of Energy Report, "Analysis of Strategies for Reducing Multiple Emissions from Power Plants," concluded that including caps on carbon dioxide emissions as part of a multiple emissions strategy would lead to an even more dramatic shift from coal to natural gas for electric power generation and significantly higher electricity prices compared to scenarios in which only sulfur dioxide and nitrogen oxides were reduced.
This is important new information that warrants a reevaluation, especially at a time of rising energy prices and a serious energy shortage. Coal generates more than half of America's electricity supply. At a time when California has already experienced energy shortages, and other Western states are worried about price and availability of energy this summer, we must be very careful not to take actions that could harm consumers. This is especially true given the incomplete state of scientific knowledge of the causes of, and solutions to, global climate change and the lack of commercially available technologies for removing and storing carbon dioxide.

Consistent with these concerns, we will continue to fully examine global climate change issues — including the science, technologies, market-based systems, and innovative options for addressing concentrations of greenhouse gases in the atmosphere. I am very optimistic that, with the proper focus and working with our friends and allies, we will be able to develop technologies, market incentives, and other creative ways to address global climate change.

I look forward to working with you and others to address global climate change issues in the context of a national energy policy that protects our environment, consumers, and economy.

Sincerely,

George W. Bush
Resolution: 01-4
Sponsor: APPA Energy and Environment Task Force

In Support of a Multi-pollutant Integrated Approach to Air Quality and a Greenhouse Gas Strategy

Air quality and other environmental issues are likely to play a prominent role in the 107th Congress. In addressing air quality, there is considerable discussion over taking a comprehensive, incentives-based approach to tougher regulation of air emissions. Key elements include an integrated program for controlling multiple air pollutants (NOx, SOx, and mercury), using market-based mechanisms, and reform of existing regulations to achieve emission reductions at lower costs while assuring electric reliability, reasonable electric costs, and energy security.

Some advocate the inclusion of greenhouse gas emissions controls as part of a multi-pollutant emissions reduction approach. In contrast, the American Public Power Association (APPA) believes that a greenhouse gas strategy should be developed as a separate program that considers both the discrete characteristics of greenhouse gases (as distinct from identifiable public health consequences of pollutants) and the need to address greenhouse gases. Unlike health-based pollutants that have measurable cost/benefit ratios and emissions reduction technologies that take these into account, there are no similar benchmarks by which to measure the costs and benefits of carbon capture technologies available to assist industry and policy makers in establishing policies for the reduction of these gases.

Given this uncertainty, APPA believes the Federal government should evaluate and develop an incentive program for greenhouse gas emissions reduction, and work with all industries to develop carbon capture, sequestration and avoidance technologies. The technological challenges posed by carbon dioxide (CO2) reductions, the fact that CO2 is not a pollutant that poses imminent health risks, and the fact that CO2 emissions and reduction policies are directly coupled to electricity generation and energy policy, strongly suggest placing any federal oversight or management responsibility of such gases within the U.S. Department of Energy.

NOW THEREFORE, BE IT RESOLVED: That the American Public Power Association will actively participate in the ongoing air quality debate in order to emphasize the need to develop energy and air quality policies that assure achievement of both environmental quality and energy security goals; and

BE IT FURTHER RESOLVED: That Congress and the Administration should address simultaneously environmental, energy and air quality goals by pursuing a multi-pollutant approach for regulated pollutants with maximum flexibility. For controlling health-based air emissions, air regulation should continue to move away from unit-by-unit, command and control approaches to approaches that integrate flexible programs such as emissions cap and trade programs; and

BE IT FURTHER RESOLVED: That climate change programs should include all greenhouse gases, be based on sound science and take into account that emissions that might affect climate change are distinct from emissions characterized as pollutants, which have a clearly defined and well understood effect on public health. Greenhouse gas emission reduction programs should focus on commercializing existing greenhouse gas emissions reduction technologies, which are
limited in their ability to reduce all greenhouse gases, and on developing the next generation technologies for producing electricity and reducing all greenhouse gas emissions; and

**BE IT FURTHER RESOLVED:** That any federal climate change program designed either to address greenhouse gas concerns or to promote the development of technology or competitively neutral incentive-based solutions should be administered by the U.S. Department of Energy.

Approved by the APPA Legislative and Resolutions Committee, February 5, 2001.
Issue Brief

Air Quality Proposals
March 2001

Summary: There is growing recognition and increasing support for the need to take a holistic approach to energy supply and air quality as Congress begins reviewing proposals to reauthorize the Clean Air Act. Proposals under serious consideration would provide for a comprehensive, incentives-based approach to tougher regulation of air emissions. Key elements include regulation of multiple air pollutants (NOx, SO2 and mercury), using market-based mechanisms and reforming existing regulations.

At the same time, there is increasing interest in developing strategies for reducing greenhouse gases (ghgs) to address climate change concerns. Under discussion are plans that would provide targeted incentives for entities that voluntarily reduce emissions and a federal incentives program for research and development for technologies to capture or sequester ghgs. Another strategy that has attracted some congressional interest and industry criticism is a proposal to include CO2 in a multi-pollutant cap and trade program.

Regulatory and Congressional Action: In addition to the numerous requirements imposed by the Clean Air Act on electric utilities to tighten emissions of criteria pollutants, a number of congressional proposals introduced in the 106th Congress would limit CO2 emissions. Both Democrats and Republicans in the House and Senate introduced legislation to capture carbon emissions at 1990 levels. One proposal by Rep. Henry Waxman (D-CA) was supported by over 100 cosponsors. Also under consideration was a multi-pollutant cap and trade bill that would include CO2. It is likely that Senator Smith (R-NH), Chairman of the Senate Environment and Public Works Committee, will sponsor similar proposals in the 107th Congress. Already this year, new House Science Committee Chair Boehlert (R-NY) introduced H.R. 25, legislation that would require emission reductions of sulphur dioxide and nitrogen oxide from 30 to 70 percent of 1990 levels.

Background: The primary driver of this legislative activity is private electric utility concern over new source review (NSR) litigation with the U.S. Environmental Protection Agency (EPA). Some companies are seeking to resolve their current NSR litigation with EPA through a multi-pollutant bill including SO2, NOx, mercury and CO2, a non-pollutant greenhouse gas. Potential fines amount to hundreds of millions of dollars for some of these companies. In addition, these companies see an opportunity to obtain both a competitive advantage and to gain financially under this legislative approach. It is instructive to note that high SO2 emitting utilities received the vast majority of SO2 allowances in the initial Acid Rain Title of the 1990 Clean Air Act. These same companies probably see a similar opportunity in a multi-pollutant cap and trade system with CO2 that will award the greatest number of allowances to coal plants.

The American Public Power Association is the national service organization representing the nation's more than 2,000 local publicly owned electric utilities.
APPA Position: APPA is proud of its long-standing support for attainment of our national environmental goals. As locally controlled entities, our members are highly responsive to community and consumer needs. A priority concern shared by all consumers is the desire to protect and enhance America’s environment. We share this concern and will support policies that will result in the development of cleaner fossil generation and renewable energy.

In a recent report it was found that public power systems, across the board, have lower emissions of pollutants. It is also true that public power generating utilities own a proportionately higher number of scrubbed units. Therefore, public power systems, as a whole, have invested more in cleaner energy resources and technology than other electric utility sectors.

APPA calls upon Congress and the Administration to develop air quality proposals in concert with energy policy goals. On this basis, decision-makers will have an opportunity to fully understand and evaluate the impact and opportunities decisions made for one set of goals will have on other objectives. Along these lines, Congress should pursue multi-pollutant approaches for regulated pollutants with maximum flexibility afforded local and state decision-making authorities. Air regulation in general should move away from a unit-by-unit, command and control approach to one that integrates flexible programs.

On the question of including ghg controls in a multi-criteria pollutant approach, APPA believes that ghg reduction strategies should be developed as a separate program that recognizes ghg emission impacts. This approach recognizes both the discrete characteristics of ghg from health-based pollutants and the need to address ghg emissions. In general, Congress should develop voluntary and incentives-based climate change proposals that include all greenhouse gases and focus on providing greater federal support for research and development. Specific incentives should be developed both to help deploy existing technologies for carbon capture and to develop the next generation technologies for producing electricity.
Other Issue Briefs
Issue Brief

Existing “Private Use” Tax Laws Inhibit Electricity Competition and Development of Stronger, More Reliable Markets
March 2001

Summary: The evolution of the electric utility industry, rapidly changing developments in wholesale electricity markets and increased competition have created a situation where the federal tax code private use restrictions hamper public power’s ability to adjust to emerging energy policies and adapt to a more volatile energy market. These private use restrictions decrease the flexibility that public power systems need to respond to wholesale competition at the federal level and improve the reliability of regional markets and the national bulk-power grid. In addition, as community-owned electric utilities in states that have restructured their retail electric utility markets take steps to conform their operations to these new state policies, they are immediately confronted with greater challenges from the federal tax code.

Collectively, public power has approximately $72 billion in outstanding tax-exempt bonds. In most cases, implementation of state restructuring plans—and even Federal Energy Regulatory Commission (FERC) policies designed to provide open transmission access for competitive wholesale markets—will jeopardize the financial standing of these public power communities and harm millions of bondholders across the U.S. Specifically, if community-owned utilities participate in competitive markets and violate private use restrictions, their outstanding tax-exempt bonds could become retroactively taxable to the date of issuance.

Three years ago, the Internal Revenue Service (IRS) issued temporary rules to attempt to address some of the private use problems and provide clarity, but instead of finalizing the rules, a slightly modified and temporary version of the rules was reissued in January 2001. The lack of permanent rules hinders the ability of public power systems to develop long-term strategies necessary to participate fully in the fast-moving electricity marketplace. Legislation is needed to remedy the situation and provide the necessary certainty for systems to make decisions about how new facilities may be financed and how to operate in today’s electric utility market.

The Private Use Problem Clearly Defined: Under current federal tax law, electric utilities owned and operated by units of state and local government (“community-owned utilities”) issue tax-exempt bonds to finance their capital investments. These bonds are subject to the private use rules in the federal tax code designed to prevent private parties from benefiting from lower-cost tax-exempt financing. These private use rules impose two significant restrictions on community-owned utilities with tax-exempt financed transmission and generation facilities:

The American Public Power Association is the national service organization representing the nation’s more than 2,000 local publicly owned electric utilities.
1. The private use rules severely limit the ability of community-owned electric systems to sell power (from tax-exempt financed generation facilities) to individual customers on negotiated terms; and

2. The rules severely restrict the use of community-owned utilities' transmission facilities by private businesses, including investor-owned utilities and power marketers, and could prevent the transfer of control of these facilities to third party, independent grid management organizations.

Both problems discourage community-owned utilities from embracing electricity restructuring and form a barrier to open and efficient electricity markets at both the wholesale and retail level. These problems, and the need for flexibility from private use restrictions, make it impossible for community-owned utilities to compete, even for their own existing customers, or to open up their transmission and distribution facilities to third parties.

**Financial Implications are Severe:** If community-owned utilities permit too much "private use," bondholders will retroactively lose the tax-exempt status of their investments and the utilities will be forced to redeem some or all of the bonds. Hundreds of communities nationwide will have to reimburse bondholders for their losses in addition to suffering increased financing costs for both existing facilities and future borrowings.

**Legislative Status and History:** The *Bond Fairness and Protection Act (BFPA)* was bipartisan legislation introduced on behalf of public power in the first session of the 106th Congress by Senators Slade Gorton (R-WA) and Bob Kerrey (D-NE) and Representatives J.D. Hayworth (R-AZ) and Bob Matsui (D-CA). Although the bill was not enacted into law during the 106th Congress, support for the BFPA grew considerably during the session, reaching 34 Senate co-sponsors and 131 House co-sponsors. The House Energy and Power Subcommittee included provisions of the BFPA in its comprehensive electricity restructuring legislation, H.R. 2944, and a hearing on energy tax issues was held in the Senate Finance Long-Term Growth, Debt and Deficit Reduction Subcommittee in October 1999. In addition, a wide variety of other entities publicly endorsed the BFPA, including seniors organizations, environmental groups, investor-owned utilities, state and local organizations, as well as individual companies such as Alcoa, Praxair, and Enron Corporation.

The BFPA would preserve local decision making about how to use tax-exempt bonding authority. It would allow each community owned electric system to "elect" to obtain relief from private use limits, but only if it also elects to forego the right to issue tax-exempt bonds for new generation facilities in the future. The bill provides each community two choices:

1. Lift the private use test on outstanding bonds (i.e., grandfather existing bonds), but only if the utility agrees to never again issue tax-exempt bonds to build new generation facilities, or

2. If no private use relief is needed, the utility can continue to issue tax-exempt debt under a clarified version of the existing private use rules.
This legislation was crafted to accomplish two objectives: a) permanently clarify existing tax laws and regulations regarding the private use rules so that they will work in a new competitive marketplace, and b) provide public power utilities the ability to open their transmission or distribution systems if they choose or as may be required by law. Both of the above would provide for more competition, prevent existing tax-exempt bonds from becoming retroactively taxable and keep rates low.

Throughout the 106th Congress, other sectors of the electric utility industry were also advancing legislative proposals related to their transitional tax needs. For example, the investor-owned utilities sought resolution of problems associated with the transfer of nuclear decommissioning funds and the formation of regional transmission organizations (RTOs). These issues, including private use and the BFPA, were the cause of substantial contention within the electricity industry. Realizing that the opportunity for legislative success would be greatly improved by resolving differences on the most contentious issues, representatives of public power and investor-owned utilities reached an agreement that allowed the two groups to combine these issues in a single bill that all could support.

This new legislation was introduced in July 2000 as the Electric Power Industry Tax Modernization Act by a large bipartisan delegation of House and Senate members, including Representatives J.D. Hayworth, Phil English, Jerry Weller, Bob Matsui and Richard Neal and Senators Frank Murkowski, Slade Gorton, Bob Kerry and James Jeffords. The bill gained quick support from members of the tax-writing committees in Congress, but ultimately fell victim to end-of-session wrangling over the size and scope of a major tax package. The bill will be reintroduced in the 107th Congress, probably during February 2001, with minor changes. This legislation offers a balanced approach to a fair and open marketplace by addressing four major issues:

- private use relief
- nuclear decommissioning transition
- promotion of sales or spin-offs of transmission assets to FERC-approved RTOs/Transcos
- equal treatment for Contributions in Aid of Construction (CIAC)

APP A Position: Greater volatility and competition in wholesale and retail electricity markets has created a situation where public power systems need more flexibility to adapt to changing circumstances. A balanced marketplace will include a variety of electricity suppliers, and each type of market participant (private utilities, electric cooperatives and community-owned electric providers) faces barriers to participation in competitive markets. Municipal financing concerns and private use restrictions are barriers that must be addressed as part of a reasonable approach to a fair and open marketplace. The Electric Power Industry Tax Modernization Act is a legislative solution that makes political and economic sense. This legislation, along with the rural cooperatives' 85/15 rule, should be packaged together and enacted by the 107th Congress.
Issue Brief

Reliability
March 2001

Summary: The United States has the most reliable electric system in the world, but recent events in California have demonstrated the delicate balance between reliability and markets that the electric grid must operate within. These events have also shown how unsettling the results can be if that balance is upset because to most consumers, reliability, knowing that the power will be there when they need it, is as important as low prices. Consequently, great care needs to be taken to ensure that the current level of reliability is not sacrificed in any restructuring of the industry. A competitive marketplace means many more participants will be executing an increasingly larger number of transactions every day, and most of these will focus on short-term costs rather than system stability. The current voluntary system of compliance with reliability standards worked reasonably well in the regulated environment in which the industry has operated, but will not provide the necessary safeguards is a competitive market. APPA urges Congress to require mandatory involvement by all industry participants in a national compliance program to ensure continued reliability.

It's More Than Just Turning on the Lights: The commodity of electricity is provided and consumed in virtually an instantaneous process. There are no large storage facilities scattered across the countryside for electricity already generated (as is the case with our water supply). Instead, the industry consists of a series of generating plants, high-voltage transmission wires and substations with transformers that reduce the voltage to levels that consumers can use. Operating a reliable electric system requires that two simultaneous conditions be present: adequacy and security. Adequacy is a measure of the capacity of the power supply facilities (generation and transmission) relative to the electrical load (demand) that they serve. A system with adequate operating reserves will have the strength to withstand system disturbances. Security refers to the balanced operating state of the system in terms of stability and loadings. Planners make protective decisions designed to limit the extent of system disturbances, and operators watch real-time conditions to ensure that an outage of a critical system component does not cause a sequential series of malfunctions. These necessary technical limits constrain the maximum capacity of the system and restrict the scope of the market available to suppliers and customers to that which is safe and reliable.

NAERO and the Evolving Reliability Structure: To ensure the reliability of the industry, the electricity delivery system of the United States (actually North America) is divided into ten regional reliability councils operating within three large interconnected grids. The ten regions are politically organized and represent the heart of the voluntary reliability system that currently operates. The three interconnected grids are differentiated along engineering lines and distinguish the large areas in which generated electricity can flow. The regional councils together form the North American Electric Reliability Council (NERC).
NERC is a non-profit, voluntary organization whose staff and activities are directed by a Board of Trustees. The Board currently is comprised of 38 electric industry executives, including the Board's officers, two representatives from each Regional Council, two electricity customer representatives, and others as needed to ensure at least two representatives from Canada and at least two representatives from each sector of the electric industry. NERC monitors the electric utility industry's voluntary compliance with policies, standards, principles, and guides, and assesses the future reliability of the bulk electric systems.

The NERC Board has approved and begun the transformation of NERC to the North American Electric Reliability Organization (NAERO), in which participation and acceptance of standards and practices would be mandatory. Federal legislation is required to give NAERO the enforcement tools necessary to ensure compliance and achieve a system that properly balances reliability and market pressures and decisions. An industry-wide effort to forge compromise on such legislation resulted in a proposal that was adopted by NERC's Board of Trustees and was advanced to Congress.

Reliability and the Evolving Markets: Deregulation of the wholesale electricity market has increased pressure on the transmission system in order to facilitate the trades and contracts that often span large areas across the 10 NERC regional councils. During each of the last two summers, severe price spikes occurred in the Midwest during peak demand season. Similar incidents took place in California ancillary markets. Some market participants point to the deregulated wholesale market and incomplete transition of the industry as reasons for the spikes, and argue that increased retail competition will solve pricing problems. However, most industry analysts believe generation problems (such as plants being placed off-line) and transmission limitations have had a greater influence. Others believe that market power abuses limiting access to certain transmission lines have also played a role.

The same forces that are driving NERC to change to NAERO and institute more definitive standards with enforcement powers are also driving the formation and use of Regional Transmission Organizations (RTOs) in state restructuring efforts and among regional operation councils to ensure a fair transmission/market relationship. Independent System Operators (ISOs) are a form of RTOs that operate on a non-profit basis to serve as impartial electricity "traffic cops" working to make sure that electricity promised through market agreements can be delivered without disruption to the regional transmission system the RTO serves. In an ISO, the existing owners of the infrastructure continue to own the lines, but cede operational and scheduling control to the ISO. Instead of ISOs, some private utility companies are pushing for the creation of "transcos," or for-profit transmission companies created through spin-offs or mergers of the transmission assets of private companies. Presumably separate boards would govern the transcos, but the level of independence from the parent company is, at times, questionable.

Whether it be an ISO or a transco, the creation of regional transmission authorities must be approved by the Federal Energy Regulatory Commission (FERC), which oversees and regulates the transmission and wholesale market activity of the industry. The issuance of
FERC Order 2000 in December 1999 provides further guidance as to how FERC intends to act in the approval of RTOs. While participation in RTOs is voluntary, FERC strongly encourages all participants to enter or form an RTO, and it intends to approve RTOs that meet strict criteria for independence, geographic scope, proper size, and that are able to address and maintain the highest reliability standards. FERC may also use mandatory participation in an RTO as a condition of merger approval.

Further evidence of the need to use RTOs to assist in maintaining grid reliability is offered by a recent report from the U.S. Department of Energy. The report found that “development of reliability management tools, technologies and operating procedures has lagged behind economic reforms in the electric industry.” Properly created, independent RTOs can perform many of the basic scheduling and planning functions that the report indicated were critical in maintaining the reliability of a regional system. This was supported by findings in the report that “responsibility for comprehensive planning has become blurred during the electric power industry’s transition (to competition), and consequently planning has been inadequate,” and that the necessary innovations in grid management have not kept pace with economic developments.

Congressional Action: Reliability concerns were a significant part of the legislative discussions that took place within the development of H.R. 2944, the restructuring bill passed in October 1999 by the House Energy and Power Subcommittee. The industry consensus legislative language to form NAERO was included in this legislation as Title II. Senator Slade Gorton (R-WA) and Representative Al Wynn (D-MD) also introduced the consensus language in the 106th Congress as free-standing bills, S. 2071 and H.R. 2602, respectively. After deliberations by the Senate Energy and Natural Resources Committee, S. 2071 emerged as the only electricity policy measure for which consensus could be achieved, and the bill eventually was passed unanimously on the Senate floor, only to stall in the House.

During the development of H.R. 2944, state utility commissioners and related groups brought up several issues (in the form of amendments) that work against national standards and reserve too much authority at the state level, such as establishing a single-state Affiliated Regional Reliability Entity (ARRE). Other language that was not a part of the original industry consensus related to FERC’s ability to establish interim procedures and standards, is also problematic. Negotiations occurred between supporters of the NERC/NAERO legislation, including APPA, and state and regional interests, but despite progress, final agreement was not reached on how to resolve some of these issues. Legislative text that embodies the negotiations was later included in a version of the bill that Representative Wynn reintroduced as H.R. 4941.

Early in the 107th Congress, the text of last year’s S. 2071 was introduced by Senator Gordon Smith (R-OR) on a stand-alone basis as S. 172. Representative Wynn re-introduced his version of the package this year as H.R. 312. In addition, Senate Energy and Natural Resources Committee Chairman Frank Murkowski (R-AK) has included the Wynn Bill in his broad, energy policy package.
**APPA Position:** APPA believes that reliability issues are paramount in any restructuring legislation. Toward that goal, APPA participated in the development of and supports the NERC/NAERO transition legislation. At the same time, APPA believes that federal legislators should address a number of interrelated issues critical to effective wholesale restructuring in order to address broader reliability concerns. APPA can support passage of stand-alone NERC/NAERO transition legislation if it is clear that no more comprehensive restructuring legislation will pass. APPA supports continued attempts to resolve the few remaining differences related to the proper role of regional transmission organizations.
Issue Brief

Clean Air Act – Significant Regulatory Activities
March 2001

Summary: Environmental regulatory activities under the Clean Air Act are going in the direction of significantly tighter emission limitation standards. Recent court actions have delayed the implementation schedule for some of these tighter standards but as a practical matter have not changed the overall direction of the regulations. EPA also is becoming increasingly aggressive in taking enforcement actions against electric utilities it believes are violating CAA requirements. For example, in November 1999 EPA initiated seven lawsuits against electric utilities and issued an administrative order against the Tennessee Valley Authority for alleged violations of the CAA New Source Review requirements.

In addition to new requirements for further emission reductions, EPA also has increased monitoring and reporting requirements for electric utilities. For example, the agency required additional mercury sampling and reporting in 1999, placed electric utilities with coal or oil-fired generating plants under its Toxic Release Inventory (TRI) reporting program, and significantly lowered the TRI reporting thresholds for some chemicals.

New and proposed regulatory requirements will result in increased pressure on all sources to reduce emissions – including APPA members with large and small electric generators. The problems faced in complying with new emission reduction requirements are made more difficult by the fact that the formal regulatory process is proceeding down several parallel but independent paths. The results likely will be an incremental ratcheting of emission reduction requirements over time with no assurance that the high cost of installing new emission control equipment will be fully recovered before becoming insufficient to meet future needs.

Regulatory Action: EPA currently is in the process of developing several new stringent standards and other emission reduction requirements under the Clean Air Act. The final outcome of these rulemaking proceedings will affect the extent to which utility power plant emissions are targeted for further reductions. Below is a list of some of the major ongoing environmental regulatory activities under the CAA.

In July 1997, EPA issued stringent new National Ambient Air Quality Standards (NAAQS) for particulate matter and for ozone. In May 1999, the U.S. Court of Appeals remanded the rule back to the agency for further justification of the levels at which the standards were set. The case has been appealed to the U.S. Supreme Court and a decision is expected sometime in the first half of 2001. Meanwhile, the agency has been directed to justify why it did not adopt a 5-minute standard for SO_{2} and has been threatened with litigation if it does not proceed with

APPA

The American Public Power Association is the national service organization representing the nation’s more than 2,000 local publicly owned electric utilities.

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regulation of CO₂ as a danger to the public health and welfare. Each of these actions may lead to more stringent standards and further requirements for additional emission reductions from power plants. While states have the ability to meet the requirements by reducing emissions from the sources they choose, utilities and large non-utility point sources are the most likely targets.

Regarding pollution transport issues, in December 1999 EPA issued a revised final rule granting petitions filed by four Northeastern states seeking to reduce ozone pollution through reductions in NOx emissions from upwind sources. The petitions, filed under Section 126 of the CAA, allow downwind areas to seek relief across state boundaries. As a result of EPA's action, 392 utility and industry facilities in 12 upwind states will have to significantly reduce annual emissions of NOx by 2003. The agency said it also plans to address four other outstanding petitions in a separate action in the near future.

In 1998 EPA issued tough new requirements on 22 states and the District of Columbia that also are designed to address the regional transport of ozone in the Eastern part of the U.S. The agency's new regulations set a NOx budget for each state that will have the effect of significantly reducing NOx emissions from sources in that state, including affected electric generating sources. The regulations called for the states to submit state implementation plans (SIPs) by October 2000 that describe how they will achieve the reductions by May 2004. The rule is controversial because it is based on a collective contribution theory that set very low air quality impact levels (as little as 2 parts per million) and used a $2000 per ton cost threshold for establishing uniform reduction levels. Last June, the U.S. Court of Appeals upheld the rule and affirmed EPA's authority to implement the reduction obligations.

In April 1999 EPA issued its final regional haze rule creating a regulatory program that dramatically expands the previous visibility program. Under the new rule, all 50 states must establish goals for improving visibility and develop long-term strategies for reducing emissions of air pollutants that cause haze. States are required to conduct analyses aimed at reaching natural background conditions by 2064. EPA is encouraging states to subject existing large stationary sources (including utility boilers) to additional emission controls and place tight controls on new sources as a way of achieving the required reductions. In January of this year, EPA proposed amendments to its rule that would help states determine how to set limits for a number of older, large utility plants. The proposal also provides guidance for states to use in determining which plants must install emission controls and the type of controls they must use.

In July 1998, EPA proposed New Source Review (NSR) regulations that would broaden significantly the applicability of NSR requirements to major stationary sources of pollution. In addition, through a series of administrative and enforcement actions over the past two years—and without giving any opportunity for public comment—EPA has been interpreting the NSR rules so as to impose NSR requirements on many existing facilities that heretofore were not subject to the requirements. In November 1999, the Justice Department, acting on behalf of EPA, filed seven lawsuits against electric utility companies in the Midwest and the South and issued an administrative order against TVA. The agency also issued notices of violations to eight other facilities. EPA is alleging that the utilities violated the CAA NSR provisions by making major modifications to their plants without installing the equipment required to control emissions. Two of the utilities subject to the enforcement actions have since reached settlement agreements that reportedly will require billions of dollars in expenditures to install additional control equipment and make other changes to reduce emissions from their facilities.
Meanwhile, the agency is gathering additional information from other utilities. EPA's actions likely are in anticipation of issuing additional notices of violations and possibly also filing additional lawsuits.

After completing several major studies, on December 15, 2000, EPA finalized its determination that the risks associated with mercury emissions from fossil fuel-fired power plants warrant additional controls. In July 2000 the National Academy of Sciences issued a report supporting EPA's reference dose, the subject of much controversy, as scientifically justifiable for protecting the health of the vast majority of Americans. Also, in November 1998, in an effort to address some of the remaining uncertainties in its studies, EPA required electric generating facilities to collect and report on the mercury content of coal burned at their facilities, and required 84 plants to perform stack testing to measure mercury emissions. The agency now is developing alternative control strategies for reducing mercury emissions from power plants and will propose regulatory requirements by November 2003.

**APPA Position:** APPA fully supports the public's right to clean air and endorses the goals and objectives of the Clean Air Act to protect human health and the environment. APPA believes that this fundamental commitment to the environment, however, must be balanced by the responsibilities and obligations that public power has to the local citizens that own and are served by its electric systems. APPA urges EPA, therefore, to avoid implementing new emissions reduction requirements that cause substantial resource expenditures wholly incommensurate with any anticipated human health benefits.

In addition, APPA is concerned that EPA has not fully considered the affects of implementing its CAA regulatory programs on small municipal electric systems with small generating units. EPA's new programs may adversely and disproportionately affect small communities by requiring costly and unnecessary new emissions reduction equipment to be installed on small units or by imposing significant additional administrative burdens without providing meaningful environmental benefit. APPA believes that small communities should be able to use their small units efficiently and contribute to congressional and regulatory efforts to create a more competitive electric utility industry — if doing so will not result in any environmental detriment.

APPA also supports efforts to bring a rational approach to what currently is an uncoordinated patchwork of new Clean Air Act regulatory requirements. APPA believes that additional ways of minimizing the potential for stranded investments and reducing the uncertainties of incremental ratcheting of emission reduction requirements must be identified and implemented wherever reasonably practical. Furthermore, APPA believes that EPA's regulatory process under the CAA should not proceed in a vacuum. It must be an integral part of a national energy strategy that addresses such diverse issues as environmental impact minimization, electric utility industry restructuring efforts, and the potential for carbon reduction requirements due to climate change considerations.

Finally, APPA fully supports the public's right to have access to accurate and meaningful information regarding the presence and release of toxic substances — as well as any other emissions that may reasonably pose risks to the public health and environment. APPA believes that requirements for reporting such information, however, must have the effect of improving public knowledge and not lead to grossly erroneous conclusions about the impacts of these emissions — causing unwarranted concerns by the public.