The Energy Policy Act (EPAct) of 1992, the most significant Federal energy policy in a decade, has the potential, if fully implemented, to reduce electricity bills significantly for consumers, to improve the nation's energy efficiency and to reduce the emission of global warming gases.

The Act is a large and comprehensive piece of legislation that impacts nearly every producer and user of energy in the United States. This paper examines two sections of the Act which create new duties for state public utility regulators: Conservation and Energy Efficiency by Electric Utilities (Sec. 111) and Long Term Wholesale Purchase Standards (Sec. 712) and discusses the policy implications of the changes recommended in these sections.

These sections of EPAct create both new opportunities and new obligations for regulated electric utilities and for state regulators. They promote integrated resource planning (IRP) for regulated electric utilities and increase the resource choices available for consideration in a utility's IRP process. This broader range of choices is encouraged in three ways. First, new production tax credits and subsidies will make renewable resources cost competitive. Secondly, demand-side investments will become more financially attractive to utilities. Finally, the potential number of competitive providers of all resources will increase as a result of changes in the Public Utility Holding Company Act and FERC-regulated transmission access.

What Does EPAct Cover?

The new obligations created for state public utility regulators are contained in amendments to the Public Utility Regulatory Policies Act of 1978 (PURPA). Four new ratemaking standards are set out for commission consideration, all of which directly impact the electric utility IRP processes. State regulatory authorities must consider each of these new standards for each electric utility over which it has rate authority. However, adoption is voluntary and left to the discretion of each commission.

In their review of the regulated utility provisions of EPACT, the American Council for an Energy Efficient Economy (ACE3) and the Alliance to Save Energy (ASE), made the following energy saving estimates for the years 1993-2010.

| Saves:  | 4.6 Quads of Energy (mostly coal and gas) |
| Saves:  | 275 billion kWh |
| Avoids: | Construction of 104 (500 mw) coal plants |
| Reduces:| 20% of the projected electricity growth |
| Reduces:| by 34% carbon emission |

In considering each standard, commissions must determine whether its adoption will advance the three original purposes of PURPA:
1. Conserve energy supplied by electric utilities
2. Make more efficient use of the utilities' facilities and resources
3. Establish equitable rates for electric consumers

Conservation and Energy Efficiency by Electric Utilities, Title I, Sec. 111

Three of the Act's four standards for regulatory consideration fall under this section. If enacted into state laws, these standards offer the greatest promise for the country's utilities to improve their energy resource selection and use.

These three standards are:

1. Integrated Resource Planning
2. Investments In Conservation and Demand Management (Demand-side Profitability)
3. Energy Efficiency Investments in Power Generation and Supply

Integrated Resource Planning, Sec. 111(a)(7)

All state commissions must consider the adoption of an IRP process that requires utilities to develop an analytical framework to compare equitably and systematically supply and demand-side resources. Through the development of such a framework, a fair evaluation of the full range of resource alternatives can be undertaken to determine what mix of resources will best provide customers with the lowest cost service that is also reliable, diverse and capable of being effectively dispatched to meet load. This analytical framework must include a methodology to evaluate and verify savings from energy conservation and demand-side investments and to monitor the durability of the savings over time.

Electric utilities employing IRP are required to provide opportunities for public participation and comment during the planning process. Further, the Integrated Resource Plan must be regularly updated, and finally it must be implemented.

Investments In Demand Management (Demand-side Profitability), Sec. 111(a)(8)

This standard requires that utilities' investments in energy conservation and demand-side management be as profitable as supply-side investments. This is an issue that was addressed in a resolution adopted by NARUC in 1989. At that time, NARUC concluded that regulatory reform was needed to remove the disincentive to IRP and to make the successful implementation of a utility's least cost plan its most profitable course of action. In considering demand-side profitability, calculations must take into consideration income which is lost when sales are reduced as a result of energy conservation and efficiency investments. Cost recovery policies together with the need for a positive incentive for demand-side activities should also be included when implementing this standard. (Mechanisms for recovering lost revenue are described in Moskovitz, et.al. "Weighing Decoupling vs Lost Revenues: Regulatory Considerations," The Electricity Journal, November 1992.)
While it is important for the signals to be clear to the utility that there is no penalty for vigorous pursuit of demand-side options, EPAct recognizes that care must be taken to document conservation and energy efficiency savings so that the utility does not improperly benefit from overly ambitious predictions of savings. The Act therefore specifies that investments made in conservation and efficiency must be monitored and evaluated to determine if the savings that were expected were, in fact, achieved so that neither the utility nor its customers is penalized by or benefits from inaccurate estimates.

**Energy Efficiency Investments in Power Generation and Supply, Sec. 111(a)(9)**

The focus of this standard is to improve generation, transmission and distribution efficiency. In adopting this standard, commissions would review ratemaking policies, identify those which pose disincentives to efficiency and adopt new approaches that reward improved supply-side efficiency.

One place a state commission might first look to identify disincentives to efficiency is in the fuel cost adjustment practices. Fully reconciled fuel adjustment clauses are a disincentive to efficiency, as efficiency gains do not reward the utility (nor does the utility suffer loss) for inefficient operations which result in a greater use of fuel. For example, a power plant in need of maintenance will often consume more fuel to meet its required energy output. Because fuel costs are fully recovered from customers and repair costs are not, the utility is better off delaying maintenance and using more fuel.

**Protection for Small Businesses**

Although not a new PURPA standard in and of itself, Section III of the Act recognizes the impact that adoption of the standards could have on small energy service-related businesses. In response to this concern, when a state commission adopts either the IRP or the demand-side profitability standard, it must also consider the impact of these standards on small businesses engaged in the design, sale, supply, installation or servicing of energy conservation, energy efficiency or other demand-side management equipment. This requirement stems from a concern that a utility, by design or inadvertently, may exert its monopoly power to squeeze out competitors who are or could provide energy conservation services.

Utility energy conservation programs can encourage, as well as discourage, market opportunities for small businesses. A utility which provides all energy conservation through the use of in-house programs and direct purchase from select vendors effectively cuts out the small competitors. On the other hand, utilities such as New England Electric Systems (NEES) and Pacific Gas and Electricity (PG&E) have relied extensively on local

### Timetables

- Consideration of the wholesale purchase standard (Sec. 712) must be completed within one year of the adoption of the Act, by October 24, 1993.
- Consideration of the conservation and energy efficiency standards (Sec. 111) must begin within two years of the enactment of the Act, by October 24, 1994 and be completed by October 24, 1995.
businesses to supply and install efficiency products. That has improved private sector inventories of energy-efficient equipment such as motors, lights and windows.

Request for Proposal Programs use market forces to identify providers of demand-side services. Such programs create markets where they did not exist previously and can expand opportunities for small business providers.

**Long-term Power Purchase Standard, Title VII, Sec. 712**

This fourth standard of EPAct describes four issues which must be looked at by a state commission when considering the long-term purchase of power from a wholesale generator.

If this standard is adopted, a state commission would ask the following four questions when reviewing wholesale power purchases.

- What are the utility's capital costs and retail rates when power is purchased from a long-term, wholesale power supplier and how do these compare to the capital costs and retail rates that would occur if the utility constructed its own generating facility?
- Does the financing structure of exempt wholesale generators, which can carry a higher level of debt than equivalent facilities built by utilities, threaten the reliability of power purchased from the wholesale generator or provide an unfair advantage for the wholesale generator when compared to the utility?
- Does it make sense to implement a mechanism for advanced approval or disapproval for a specific wholesale power purchase?
- Should a reasonable assurance of adequate fuel supply be a condition of pre-approval of purchased power?

In general, most state commissions examine these questions as a matter of course when reviewing wholesale power purchases. Adoption of this standard simply assures that the proper questions will be asked.

**Criteria, Procedures for Consideration of the Four Standards**

**Criteria**

Each state commission is required to consider the four standards and determine whether or not they are appropriate to adopt in light of the objectives of the 1978 PURPA law.

State commissions have the latitude to reject a standard if it is contrary to state law. They can also elect to implement partially or phase-in the standards in cases when immediate and full implementation would impose a hardship on ratepayers.

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**Resources Available from Federal Agencies**

The DOE has been authorized to provide grants of up to $250,000 for each state to support the consideration and implementation of the conservation and energy efficiency standards. The first grants are expected to be available by September 1994.

DOT contact: Linda de la Croix, 202-586-1851.
Procedures

State commissions are required to review the standards for all rate-regulated electric utilities, including investor-owned utilities, municipal utilities and cooperatives. In states where commissions have already considered the three conservation and energy efficiency standards, the prior proceedings will suffice in meeting EPAct's standard of consideration, providing that the written record ably reflects both what was considered and the final decision. This same grandfathering option does not apply to the wholesale purchase standard.

For all standards which require consideration, commissions must provide public notice and conduct a public hearing designed to allow all interested parties to communicate their views. A commission's final decision as to whether a standard will or will not be adopted, must be in writing and must be based upon the record and evidence presented at the hearing.

Questions Arising from EPAct

EPAct raises some very important questions regarding the structure of the electric utility industry.

Does EPAct's increased emphasis on IRP conflict with the increased emphasis on competition in the electric industry?

While this question is raised frequently by both regulators and utilities, IRP and competition are wholly compatible and, in fact, can strengthen one another. The goal of IRP is to reduce the cost of resource acquisition over a given period and the purpose of competition is to use the market place to see what resources are available in order to find those with the lowest cost. As with any policy, if not properly implemented, conflicts can occur. Conceptually, these two activities work well together.

The IRP process provides an analytical framework to feed market-based information into a company's own internal planning and cost analysis. Using the IRP process, a utility will first conduct its own analysis to identify its energy needs and to select resources it believes can meet those needs at the lowest total resource cost. After this analysis is done, market information can be collected and scrutinized to see whether there are resources that can meet the utility's demand for power at a cost lower than the utility believed it could achieve itself.

Used in this manner, IRP and wholesale competition go hand in hand to achieve the lowest cost/optimal resource mix. The IRP process establishes a framework for comparing a wide range of disparate resources and allows the selection of the ones which are truly the best value when taking into consideration such factors as cost, reliability and variety. The more diverse the resources a utility examines, the more the IRP process is needed, precisely because it provides a common framework to compare a broad array of supply- and demand-side resources with vastly different operating and cost characteristics -- from attic insulation to power from a gas-fired generator to photovoltaics to wind -- and decide which are the best value for a utility and its customers. The outcome of IRP will be improved as the number of options increases. Wholesale competition is a powerful way of adding choices to the process.
What is the relationship between EPAct and the Clean Air Act?

The passage of EPAct means that there will be a greater need than ever for cooperation between the DOE and the EPA. The Clean Air Act Amendments of 1990 provides utilities the opportunity to earn credits by reducing SO2 emissions with energy conservation investments when done under an IRP framework. The definition of IRP in the Clean Air Act is nearly identical to the definition found in EPAct. Yet despite this apparent similarity, there is still latitude as to how the Acts are interpreted and implemented at the state and federal levels. The Clean Air Act requires that the savings from energy conservation investments by regulated utilities be measured, verified and persist over time. State activity that meets this standard should also comply with Section 111 of EPAct. It is in the interest of state commissions for EPA and DOE to coordinate their views of IRP in an effort to minimize any confusion that could result from state regulatory implementation of the two Acts.

How does the Act treat retail wheeling?

The Act leaves the legality of retail wheeling up to each individual state. However, where the IRP process includes an opportunity for competitive wholesale market participation, it is unlikely that an individual retail customer would be able to attain supply-side resources below a utility's avoided cost. Those resources would already have been offered to and acquired by the utility.

Commissions need to approach retail wheeling with great caution. The retail wheeling sought in states in the past year has been antithetical to economic efficiency. Independent resources were offered at costs which were, in fact, greater than the utility's own avoided costs though lower than existing retail rates. Retail wheeling of resources which are more costly than the utilities' avoided cost increases the total cost of electricity resources.