

PROFILES IN ELECTRICITY ISSUES:

DEMAND SIDE MANAGEMENT (DSM)

SUMMARY

Many states are requiring their jurisdictional electric utilities to extend their business activities to the customer (or demand) side of the meter. These demand side management or DSM programs often are implemented as part of a utility's least-cost or integrated resource plans. Such plans require utilities to consider demand side resources as well as traditional sources of supply. Some advocates of DSM programs claim that these programs can minimize customers' total cost of energy services, including selected societal costs such as environmental externalities. Utilities attempt to influence ratepayer appliance and equipment purchases and usage behavior (i.e., "manage" the demand side) by offering cash incentives to participating ratepayers. These incentives are in addition to the savings resulting from energy usage reductions or load shifts and can constitute a subsidy.

ELCON strongly supports efforts to improve the efficiency of energy utilization, including conservation. Industrial electricity consumers have made and will continue to make substantial investments in energy efficient equipment, technologies, and facilities. Such investments, where cost-effective, can help ensure the competitiveness of U.S. industry in domestic and international markets, address the nation's energy security interests, and make substantial contributions to a cleaner environment. However, for reasons set forth in this *Profile*, ELCON has serious concerns regarding the design and implementation of many DSM programs.

In this *Profile*, ELCON examines the appropriate role of DSM programs in a utility's least-cost planning effort and recommends procedures for: identifying cost-effective DSM options; measuring their actual resource value; and determining the level of financial incentives that is both efficient and equitable.

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Summary of ELCON's Position on Demand Side Management

1. ELCON supports cost-effective demand side management programs. A utility should only implement DSM programs that are consistent with the minimization of its long-term revenue requirements necessary for an adequate, reliable and efficient electric supply.
2. Prior to implementing DSM programs, utilities should set rates based on cost-of-service, and without subsidies, so as to send appropriate price signals. Rates should be established for a full range of services, including time-of-use, curtailable and interruptible rates.
3. Where "market barriers" exist that discourage end-use efficiency improvements, information programs should be directed to mitigate those barriers and encourage efficient demand side behavior.
4. The acquisition of demand side resources should start with the development of an overall resource plan. The resource plan should begin with a determination of need and include both demand and supply options.
5. Demand and supply options must be properly compared. The maximum payment a utility should make for a demand side resource is the avoided cost minus the bill savings. Financial incentives should not be paid for demand side resources which already are economic to implement under existing rates.
6. Competitive bid solicitations may be used for the acquisition of quantifiable DSM resources.

7. The energy and capacity savings and costs of DSM programs should be measured with the same standard of accuracy as estimates of capacity, energy output, losses, availability, reliability and economic life of supply side resources. In all cases, metered capacity and energy, whether provided by DSM or traditional supply, should be given preference in a utility's resource plan.
8. Selected social costs (such as environmental externalities) should not be internalized. Resources should be compared using actual costs, including the costs required to comply with environmental laws and regulations.
9. Embedded cost-of-service standards should be applied to the recovery of both demand and supply resource costs. Fixed costs should be recovered in the fixed (demand-related) component of rates and variable costs should be recovered in the variable (energy-related) component of rates.
10. DSM programs that target large industrial ratepayers should be carefully designed to minimize: (a) adverse impacts on the competitive markets in which industrial ratepayers operate; (b) the participation of so-called "free-riders;" and (c) subsidization of DSM participants by other industrial ratepayers who previously had implemented demand side programs at their own expense.
11. A utility's overall allowed rate of return should reflect the aggregate risk of all its supply and demand side investments. Utilities should not be given financial incentives to implement DSM programs.
12. Regulatory commissions must not require mandatory DSM programs. Utilities must always retain the responsibility and accountability to manage the use of their system resources whether demand side or supply side. All investments - including DSM program investments -- should be subject to prudence and used-and-useful reviews.

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INTRODUCTION

Increasingly, states are requiring utilities to implement least-cost planning (LCP) or integrated resource planning (IRP) [1]. Common to all these efforts is the explicit encouragement of demand side management or DSM programs, especially conservation. Regulatory policies implementing LCP or IRP attempt to establish a "level playing field" in which utilities are required to evaluate DSM programs on equal terms with traditional supply side resources when planning for the future energy and capacity needs of their ratepayers.

Utility DSM programs typically offer financial incentives to defray some or all of the cost of high efficiency appliances and end-use equipment, weatherization measures, and control technologies that help ratepayers utilize electricity more efficiently. These incentives may include cash rebates, low (or zero) interest loans, free installation or other services, and special rates. The financial incentives are sometimes deemed necessary to compensate for market imperfections or barriers that allegedly prevent the adoption of energy efficiency improvements even though they may already be cost-effective for the ratepayer to implement.

The procedures by which DSM resources are integrated with traditional supply into a "least-cost" plan is the source of considerable debate. Some of the key issues in this debate are:

- *What is the appropriate relationship between rates and DSM programs?*
- *How should alleged "market barriers" to energy-efficiency improvements be overcome?*
- *How should the cost-effectiveness of DSM programs be determined relative to traditional supply side resources? Should DSM programs be allowed to bid in a utility's competitive bid solicitations for new capacity?*
- *How should DSM programs be monitored, verified and evaluated once they have been implemented? What is the real capacity and energy resource value of DSM programs?*

- *How should program costs be allocated and recovered from ratepayers if utilities do implement DSM programs?*
- *Should utilities be given incentives to implement DSM programs?*
- *Should regulated utilities provide services on the customer's side of the meter where competitive end-use markets already exist?*
- *What regulatory oversight is appropriate?*

WHAT IS THE APPROPRIATE RELATIONSHIP BETWEEN RATES AND DSM PROGRAMS?

Prior to implementing DSM programs, utilities should set rates based on cost-of-service so as to send appropriate price signals. Rates should be established for a full range of services, including time-of-use, curtailable, and interruptible rates.

Setting the Right Price Signal

Utilities should correct and improve the price signals sent to ratepayers, particularly by offering time-sensitive and other rates. Other ways to greatly improve price signals include the elimination of cross-class subsidies that may be promoted in rate designs and cost allocations procedures, prohibiting the recovery of nonfuel related expenses in the fuel adjustment clause, and the removal of front-end loading of capital cost recovery.

Utilities typically offer their ratepayers a limited number of tariffs, which may include customer, demand, and energy charges for a fixed grade of service. Such bundled electricity rates and services are inefficient and can be anticompetitive. The provision of highly bundled services often forces ratepayers to pay for services they do not need, which can encourage uneconomic bypass. This also severely restricts opportunities for market specialization, thereby limiting or preventing the availability of goods and services that ratepayers want or need. Market specialization is a necessary feature of efficient, competitive markets.

Ratepayers should be provided a broader range of options and thus, greater opportunities for efficient energy usage. This allows the efficiencies of decentralized, competitive markets to be captured by consumers and stockholders. Where cost justified, a broad menu of rates and services should be offered by utilities to all customer classes. These would include, for example, rates based on system reliability and supply availability constraints such as interruptible or curtailable rates.

Time-Sensitive Rates

Rates to all consumers of electricity should be based on costs actually incurred by utilities in providing the service. Where economically justified, electricity rates should send time-sensitive price signals, reflecting the actual costs incurred by utilities at different times of day or season. Time-sensitive rates should be sent to residential and commercial class customers, as well as to industrial ratepayers where it is most commonly done. Time-sensitive, cost-based price signals would tell customers more accurately how their consumption impacts the utility and, more likely, would result in more efficient utilization of electrical energy. Examples of time-sensitive rates include: time-of-day (TOD) or time-of-use (TOU) rates; real-time pricing; and seasonal rates.

Utilities should offer only those rates which are consistent with its actual cost structure, are cost-effective to implement, and meet the diverse needs of its ratepayers.

ELCON believes that time-sensitive rates based on actually incurred costs provide the consumer with the proper price signals necessary to make rational decisions on energy consumption. ELCON opposes time-sensitive rates based on computations of unknown future costs or on costs associated with hypothetical capacity configurations. Time-sensitive rates based on these so-called "marginal costs" require arbitrary revenue adjustments to meet the revenue requirements allowed by law. Such adjustments result in deviations from cost-of-service and distortion of the proper price signal [2].

Rates to each customer class should reflect the costs incurred in meeting their respective loads. Subsidizing one class at the expense of another is counterproductive to least-cost goals. For example, subsidized residential rates encourage those customers to consume more than they otherwise consume. This discourages cost-effective conservation behavior and purchases of energy-efficient appliances. Alternatively, artificially high industrial rates encourage industrial firms to relocate electricity-intensive operations or to explore the option to generate their own electricity, including cogeneration.

ELCON believes that it would be counterproductive to implement DSM programs involving cash incentives for end-use equipment or appliance purchases before rates are corrected to send cost-based price signals. Utility DSM programs will neither be efficient nor equitable without the establishment of appropriate price signals.

HOW SHOULD ALLEGED "MARKET BARRIERS" TO ENERGY-EFFICIENCY IMPROVEMENTS BE OVERCOME?

Informed customers are able to make better consumption and purchasing decisions than uninformed customers. In fact, information is essential if competitive markets are to operate efficiently. ELCON supports utility efforts that help maximize the amount and quality of information in competitive end-use markets. Information programs involving direct customer contacts, targeted advertising and marketing, joint ventures with equipment and appliance suppliers, educational workshops, and technical assistance assure the efficient operation of the end-use markets. But utilities also must have adequate in-house market research and marketing expertise so as to more efficiently communicate the right information to their customers. To the extent that the costs of such programs are minimal, information programs make sense. However, some can be quite expensive. These should be carefully evaluated to assure that they are cost justified. In all cases, the direct beneficiaries of a program should pay the costs.

Information programs must be carefully designed and implemented so as to avoid disrupting or distorting legitimate end-use appliance and equipment markets. For example, utility information programs must not favor one supplier over another, nor should one brand of appliance be promoted at the expense of another brand, all else equal. Consumers must always have full reign to exercise their choices, including the option to switch fuels, if competition is to be allowed to work.

SHOULD A DETERMINATION OF NEED BE REQUIRED PRIOR TO IMPLEMENTING DSM PROGRAMS?

The acquisition of demand side resources should start with the development of an overall resource plan. The resource plan should begin with a determination of need and include both demand and supply options. The plan should also include the utility's supply alternative. This plan should be available for public review and comment.

HOW SHOULD THE COST-EFFECTIVENESS OF DSM PROGRAMS BE DETERMINED?

Determining the cost-effectiveness of DSM programs requires: careful estimates of the actual success of each DSM program in meeting its stated objectives; consideration of any cash payments or financial incentives given to participating ratepayers; and estimates of the programs' impacts on the cost-of-service of both participating and non-participating ratepayers.

The following example illustrates the added complexities of evaluating DSM resources as compared to traditional supply side resources. If a utility needs new capacity to meet forecasted load growth, it should be indifferent to whether that capacity is met with DSM resources or with traditional supply sources. However, from a ratepayer perspective, the options may not be the same. Under the DSM option, non-participants could be worse off depending upon how the costs of the DSM option are split between the utility and the participants (See Fig.1).

Figure 1

COMPARING DSM RESOURCES WITH TRADITIONAL SUPPLY

If a utility needs 100 MWs of new capacity to meet forecasted load growth, it should be indifferent to whether that capacity is met with DSM resources (e.g., by reducing 100 MWs of existing loads) or with traditional supply sources such as a new coal-fired generating unit, so long as each option costs the same and results in the delivery of an identical resource. However, from a ratepayer perspective, the options may not be the same.

Under the DSM option, non-participants could be worse off depending upon how the costs of the DSM option are split between the utility and the participants. For example, they would be worse off if they were allocated any portion of the lost revenues foregone by participants. In that case, non-participants would be directly subsidizing the bill savings of participants. To prevent subsidies, ELCON believes that the maximum payment a utility should make for any DSM resource is the avoided cost minus the bill savings that would occur due to the DSM program.

The presence of lost revenues (or "avoided net revenues") distinguishes the procurement of DSM resources from that of traditional supply.

Four cost-effectiveness tests have been proposed to evaluate DSM programs:

- The *Participant Test* compares the customer's bill savings due to participation in a DSM program with the customer's out-of-pocket costs. This test measures the attractiveness of a DSM option to the customer.
- The *Non-Participant Test* compares the avoided supply costs to the DSM program costs of both participant and the utility. The costs are adjusted for the lower electricity requirements of DSM options versus comparable supply side resources to measure the impact of the program on rates. This test can identify whether one customer or customer class is subsidizing benefits received by the participating customer or customer class.

- The *Revenue Requirements Test* compares the avoided supply costs to the DSM program costs of the utility (excluding participant costs), to measure the impact of the program on the utility's total revenue requirement.
- The *Total-Resource Cost Test* compares avoided supply costs to total program costs (which includes costs paid by both the utility and the participant) to measure the relative costs of demand and supply options, exclusive of cost-of-service allocation and rate impact. A variation of this test, called the *Societal Cost Test*, attempts to internalize selected social costs (such as environmental externalities) in the test.

Exclusive use of cost-effectiveness methodologies such as the Participant Test or the Total-Resource Cost Test can result in the adoption of DSM measures that result in interclass or intraclass revenue subsidies because these tests ignore revenue shifts or income transfers.

The Non-Participant Test can be used to address this situation. If the utility's costs of the DSM program is equal to or less than the supply option, non-participating ratepayers would prefer the DSM option only if the utility's cost for that resource were less than or equal to the difference between the utility's avoided cost minus the bill savings that would occur due to the DSM program.

More effective than these tests, the market can be used to select the most cost-effective options. Several states allow DSM programs to be submitted as bids in all-source competitive bid solicitations. In these cases, DSM programs would compete directly with supply side bids, and the bidding process itself determines the relative cost-effectiveness.

ELCON believes that only DSM programs that are evaluated according to the following principles are cost-effective and therefore truly least-cost:

1. Demand and supply resources must be properly compared. A utility should only implement DSM programs that are consistent with the minimization of its long-term revenue requirements necessary for an adequate, reliable and efficient electric supply.
2. Utilities should not give financial incentives to ratepayers for demand side measures which already are economic to implement under existing rates.
3. The maximum payment a utility should make for any DSM resource is the avoided cost minus the bill savings that would occur due to the DSM program. Financial incentives that exceed that difference are ratepayer-to-ratepayer income transfers or subsidies. Subsidies result in inefficient price signals and should not be used.

4. Competitive bid solicitations may be used for the acquisition of quantifiable DSM resources. DSM resources should not be selected in competitive bid solicitations based on arbitrary quotas.
5. ELCON believes programs that share the savings between participants and non participants can be offered to participating customers to the extent they are consistent with the minimization of long-run revenue requirements and do not impose cross-customer or cross-class subsidies.
6. The Total Resource Cost Test should not be used in isolation to select qualifying DSM measures from the universe of DSM candidates. This can result in cross-class or cross-customer subsidies. This effectively results in the taxation of some customers or customer classes for the sole benefit of other customers or customer classes. This form of taxation generally would be without legislative authorization.
7. Selected social costs (such as environmental externalities) should not be internalized in utility resource plans. Resources should be compared using actual costs, including the costs required to comply with environmental laws and regulations.

HOW SHOULD DSM PROGRAMS BE MAINTAINED, VERIFIED AND EVALUATED?

DSM programs are not yet comparable to supply side resources because their aggregate operational characteristics have not been defined or demonstrated in comparable terms such as reliability and availability. Utilities must therefore carefully screen and select from the universe of DSM measures only those that are capable of achieving the intended results.

The actual performance of DSM programs is highly variable and uncertain because of ratepayer discretion to modify their energy utilization and purchasing behavior in response to price, technology, or lifestyle changes. The characteristic of DSM programs to operate as designed is often called *persistence*.

Financial incentives given to DSM program participants reduce the effective price of the energy service. A lower price can increase demand in terms of overall consumption of the service. This is often called a *rebound effect*. For example, incentives for high-efficiency air conditioners may result in the purchase of a larger-sized unit, more frequent operation of the unit, or operation at a lower setpoint.

Estimates of a DSM program's value as a real capacity or energy resource must factor in the rebound effect, the lack of persistence, and technological factors. Unfortunately, chronic disappointment with the results of utility DSM efforts has tended to focus attention on utility motivations and not actual DSM effectiveness.

ELCON believes that the following principles should be used to measure the actual impacts of DSM programs:

1. The effectiveness of DSM programs must be based on actual savings and costs and not solely on theoretical or the potential engineering estimates of savings or costs. Energy and/or capacity savings must be measured against actual baseline usage. Estimates of energy and/or capacity savings must be decreased by reasonable estimates of:
 - Conserved loads which would have occurred without the incentive, including estimates of reductions by "free-riders", i.e., participants who otherwise would have conserved without the incentive;
 - Simultaneous increases in usage by participating customers resulting from the effective price decrease due to the incentive;
 - New loads which are encouraged by inefficient subsidies and/or price signals; and
 - Conserved loads which are subsequently reimposed on the system because of customer mobility or other reasons.
2. Customer usage behavior must be measured and validated before and after the implementation of any DSM program offering. Participating customer behavior should be compared to control group behavior over the same time period.
3. The end-use load shape impacts of DSM programs must be directly measured where incentives are given for capacity (kW) savings. Measurement costs should be allocated to DSM direct program costs.
4. In all cases, metered capacity and energy, whether provided by DSM or traditional supply, should be given preference in a utility's resource plan.

HOW SHOULD DSM PROGRAM COSTS BE ALLOCATED AND RECOVERED FROM RATEPAYERS?

The allocation to ratepayers of the costs of any utility demand or supply side investment or expense should be based on detailed and accurate embedded cost-of-service studies. These

studies should be used by commissions, routinely updated (e.g., at least as often as the utility files for new rate changes), and be subject to public notification and comment.

Rates should be designed to recover the costs of providing service and to reflect the manner in which those costs occur. Whether provided by supply side or demand side resources, or both, the costs of providing electric service can be separated into three categories:

- *Capacity costs* are the costs associated with facilities necessary to respond to each customer's kilowatt demand on the system, including a reserve margin necessary to maintain an acceptable level of service reliability. Capacity costs include the cost of DSM programs that effect customer kW demand but which may or may not effect customer energy (kWh) consumption. The DSM program costs for a program designed to reduce summer peaking loads by offering customer rebates for energy efficient air conditioners is an example of capacity costs on the demand side. The costs of gas-fired turbines installed for the same purpose is an example of capacity costs on the supply side.
- *Customer costs* are the costs incurred in servicing customer accounts, including a portion of distribution costs, hookup, metering and meter reading, bill preparation, customer accounting, and certain demand side program costs such as marketing expenses.
- *Energy costs* are the costs incurred in the production of the kilowatthours (kWh) used by a system's customers, including the costs of energy conservation programs which effect only kWh consumption. For most supply side resources, the primary energy cost is fuel costs.

Within each of these categories, certain costs are referred to as being fixed and others are variable. *Fixed costs* are those that, in total, do not vary with output (i.e., total sales plus losses). *Variable costs* are those that change in total as output changes. Total variable costs increase as output increases and decrease as output decreases. Any rate structure used to recover the costs of providing service should reflect the fact that some costs are fixed and some are variable.

ELCON strongly believes that fixed costs should be recovered in the fixed, demand-related component of rates and variable costs should be recovered in the variable, energy-related component of rates.

SHOULD UTILITIES BE GIVEN INCENTIVES TO IMPLEMENT DSM PROGRAMS?

The Regulatory Compact

Electric utilities are natural monopolies that are affected with the public interest. Regulatory authorities have statutory responsibilities to regulate this industry in a manner intended to benefit society as a whole. Utilities are granted an exclusive franchise area to accomplish this objective. In return, they agree to provide adequate and reliable service in a nondiscriminatory manner at reasonable rates to all consumers in their franchise area. Utilities are granted an opportunity to recover all prudently incurred costs on assets that are used-and-useful in both a physical and economic sense. Utilities also are given an opportunity to earn a fair rate of return on investments required to provide service to customers. This allowed -- not guaranteed -- rate of return must reflect the aggregate risk of all the utility's investments. A primary objective of economic regulation is to limit cost recovery from ratepayers to prudently incurred costs plus a fair rate of return.

Many advocates of DSM programs argue that the traditional regulatory compact creates a strong disincentive to the implementation of DSM programs which emphasize conservation. The "disincentive" is created by the perception that lost sales (conservation) do not contribute to earnings and may reduce utility profits. They have proposed a number of regulatory mechanisms for correcting the perceived disincentive [3]. These include incentive rates of return, so-called "decoupling" procedures such as the electric revenue adjustment mechanism (ERAM), and cost recovery through the fuel adjustment clause (FAC) or other tariff riders.

The Appropriate Rate of Return for DSM Investments

Only prudently incurred costs of regulated utility assets should be borne by ratepayers. These assets, which are used-and-useful, should be rolled into rate base, except costs that can be specifically assignable to an individual customer or customer class. A utility's overall allowed rate of return should reflect the aggregate risk of all its supply and demand side investments. Each category of investment, including DSM programs, should be allowed a rate of return that is commensurate with that investment's risk.

If regulators effectively reduce the risk of DSM program investments relative to other investments, they also should lower the allowed rate of return. A higher allowed rate of return (or "incentive" rate of return) is justified only if there is a commensurate increase in the utility's risk associated with those investments. ELCON believes that an otherwise appropriate rate of return must be reduced if utilities are guaranteed recovery of DSM program costs (e.g., through

the FAC) or they receive "bonus" payments for achieving targeted demand reduction goals. Such preferential treatment is counter to the principles of least-cost planning because it distorts the "level playing field" between demand side and supply side resources.

Recovery of "Lost" Revenues

Avoided net revenues resulting from DSM programs should be treated like the many other factors that are estimated as part of the utility's rate case filing to establish the sales estimate which forms the basis of the revenue requirement determination. Estimates of lost sales should be factored into the utility's total revenue requirements for the test year over which base rates are determined. Regulatory accounting procedures that effectively "decouple" profits from kWh sales will distort a utility's motivation to efficiently plan and operate its business, and may result in cross-class or cross-customer subsidies. ELCON opposes the use of procedures such as ERAM. However, if mechanisms such as ERAM are implemented, then the utility's allowed rate of return must be reduced commensurate with any reduction in the utility's risk.

The FAC or other tariff riders are absolutely not the appropriate mechanism for the recovery of avoided net revenues that result from DSM implementation. ELCON believes that, to the extent it is necessary, the FAC should be used solely for adjusting rates for rapid changes in the costs of fuels.

SHOULD REGULATED UTILITIES PROVIDE SERVICE ON THE CUSTOMER SIDE OF THE METER WHERE COMPETITIVE END USE MARKETS ALREADY EXIST?

Under the scenario described in this Profile, utilities would not just be traditional suppliers of electricity, they also are given the license to increasingly make or influence decisions regarding how, when, and where electricity will be consumed. This blurs the historic brightline between the appropriate roles of utilities and consumers. In essence, they would usurp what has traditionally been the exclusive right of consumers to plan and control their energy using behavior.

Consumers presently acquire end-use equipment and appliances (including servicing) in competitive markets. Utilities do not operate in competitive markets. They are regulated monopolists by law. ELCON questions the appropriateness of allowing regulated entities to interfere with the operation of working competitive markets. For historical and institutional reasons, utilities do not share the same motivations with the entities in competitive markets. Allowing regulated suppliers to "compete" in these markets would encourage inefficiencies and create potential anticompetitive opportunities. ELCON challenges the notion that more

efficient end-use equipment and appliance markets can be established and maintained by regulatory or other forms of government interference in the existing marketplace.

Instead, ELCON supports market-driven efforts to improve the efficiency of energy utilization, including cost-effective demand side management. In response to energy price increases and price uncertainties, industrial electricity consumers have made and will continue to make substantial investments in energy efficient equipment and facilities that are proven cost-effective. Such investments help ensure the competitiveness of U.S. industry in domestic and international markets, as well as make substantial contributions to a cleaner environment.

WHAT REGULATORY OVERSIGHT IS APPROPRIATE?

ELCON believes that regulatory safeguards are necessary to minimize the potential abuse of market power if utilities are required to expand their reach to the customer side of the meter. The basic safeguards include:

1. Commissions must establish broad guidelines for the implementation of least-cost or integrated resource plans and DSM programs. Utilities must always retain the responsibility and accountability to manage the use of all their resources whether demand side or supply side.
2. Minimum filing requirements should be established that subject utilities' projected needs and planning assumptions to public review.
3. The acquisition of demand side resources should start with the development of an overall resource plan. The resource plan should begin with a determination of need and include both demand and supply options.
4. Prior to implementing DSM programs, commissions should require utilities to set rates based on cost-of-service so as to send appropriate price signals. Rates should include a full range of rates and services, including time-of-use, curtailable, and interruptible rates.
5. Utilities should not be allowed a return on DSM or supply side investments that are not both physically and economically used and useful.
6. All investments -- including DSM program investments -- should be subject to prudence and used-and-useful reviews.
7. The opportunity for public comment and review, including assured participation in the hearing process, must be guaranteed to all interested parties.

ELCON also believes that certain utility business arrangements may require additional regulatory oversight to assure adequate ratepayer protections. For example, many investor-owned electric utilities are combination companies selling both electricity and natural gas at retail. Such utilities may not implement DSM programs that maximize the benefits of these fuels to their dual-use ratepayers. Their promotional programs will be influenced by the different margins on unit sales of gas and electricity [4]. Regulatory oversight is necessary to prevent potential market abuses of utility combination companies which retail both electricity and natural gas. DSM programs of combination companies must not encourage uneconomic fuel switching, nor discourage economic fuel switching.

ELCON also opposes the establishment of unregulated DSM subsidiaries of regulated utilities without adequate regulatory oversight that prevents opportunities for self-dealing. Specifically, state regulators should be given the authority to disapprove pass-through of imprudent DSM resource purchases from unregulated affiliates.

Large scale DSM programs by members of utility holding companies and "tight" power pools present special opportunities for the abuse of market power, self-dealing, and mutual self-dealing. State regulators should be given the authority to protect ratepayers from these potential abuses.

ENDNOTES

- [1] Electric Power Research Institute. Status of Least-Cost Planning in the United States. EPRI EM-6133, Final report, (Palo Alto, CA: 1988), p.1. A more detailed discussion of ELCON's position on least-cost planning is contained in Profiles in Electricity Issues: Least-Cost Planning, which is available from ELCON upon request.
- [2] See Profiles in Electricity Issues: Time-of-Use Rates which is available from ELCON upon request.
- [3] A discussion of these proposals from the point of view of a former state regulatory commissioner is contained in: David Moskovitz, Profits & Progress Through Least-Cost Planning, National Association of Regulatory Commissioners, Washington, DC, November 1989.
- [4] Some regulatory commissions may prohibit or discourage DSM programs that achieve increased energy efficiency by fuel substitution.