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JUN 23 2000 js
Missouri Public Service Commission

STATE OF MISSOURI
PUBLIC SERVICE COMMISSION

In the Matter of the Joint Application of UtiliCorp United Inc. and Empire District Electric Company for Authority to Merge 2000-Empire District Electric Company with UtiliCorp United Inc. and, in Connection Therewith, Certain Other Related Transactions	))))))	Case No. EM-369

AFFIDAVIT OF MARTIN G. KUSHLER

STATE OF ~~MISSOURI~~ MICHIGAN)
) ss.
COUNTY OF Ingham)

Martin G. Kushler, being duly sworn on his oath, hereby states that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters were true and correct to the best of his knowledge, information and belief.

Martin G. Kushler

Subscribed and sworn to before me this 20 day of June, 2000.

Glenda G. Jeffery
Notary Public, Ingham County, MI
My Commission Expires on Feb. 20, 2002

Glenda G. Jeffery
Notary Public, State of Michigan
County of Ingham

My commission expires: 2-20-2002

Exhibit No:	
Issues:	Merger Impact and Commitment by Joint Applicants (UtiliCorp United Inc. and Empire District Electric Co.) to Provide Energy Efficiency Programs to Customers
Witness:	Martin Kushler
Sponsoring Party:	Missouri Department of Natural Resources' Energy Center
Type of Exhibit:	Rebuttal Testimony
Case No.:	EM-2000-369

IN THE MATTER OF THE MERGER APPLICATION OF UTILICORP UNITED INC.

AND

EMPIRE DISTRICT ELECTRIC COMPANY

REBUTTAL TESTIMONY

OF

MARTIN KUSHLER

AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI
PRE-FILED REBUTTAL TESTIMONY OF
MARTIN KUSHLER
OF THE
AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY

Q. Please state your name and business address.

A. My name is Martin G. Kushler. My business address is 2617 Donna Drive, Williamston, Michigan.

Q. What is your occupation?

A: I am the Co-Director of the Utilities Program for the American Council for an Energy Efficient Economy (ACEEE), a non-profit organization, with headquarters in Washington, D.C., dedicated to research and policy development in the area of energy efficiency. ACEEE fulfills its mission by:

(1) Conducting in-depth technical and policy assessments;

(2) Advising governments and utilities;

(3) Working collaboratively with businesses and other organizations;

(4) Publishing books, conference proceedings, and reports;

(5) Organizing conferences and workshops;

(6) Informing consumers.

My basic responsibility at ACEEE is to conduct research and develop policy in the area of utility-related energy efficiency activities, and to provide consultation and assistance to policy-makers and interested parties at the state and federal level.

Q. What additional professional experiences do you have that have helped prepare or qualify you for your testimony today?

A. I have worked in the field of energy and utility programs for over 20 years. For over a decade I was the Supervisor of the Program Evaluation Section at the Michigan Public Service Commission (MPSC), where I was responsible for overseeing the evaluation of all energy efficiency programs conducted by Michigan regulated utility companies. In that capacity I testified before the MPSC in numerous regulatory hearings. I have also published a large number of professional papers and articles on utility energy efficiency policy, research and evaluation, and for the past six years have been the President of the Board of Directors of the National Energy Program Evaluation Conference. A brief resume is attached to this testimony as Exhibit MGK-1.

Q. On whose behalf are you appearing in this case?

A. I am testifying on behalf of the Missouri Department of Natural Resources' Energy Center (MDNR/EC).

Q. What is the purpose of your testimony?

A. The purpose of this testimony is to recommend the adoption of strong energy efficiency policies and programs as a strategy to help assure that average ratepayers benefit from the merger between Utilicorp United, Inc, d/b/a Missouri Public Service ("MPS") and Empire District Electric Company ("Empire").

Q. Do you have concerns that average ratepayers will not benefit from the proposed merger?

A. It is axiomatic that shareholders will receive substantial financial gains from the proposed merger of MPS and Empire, otherwise the companies' management would not be pursuing it. However, for customers and the public in general, the situation is markedly different. They are being asked to accept the consequences of a merger which, at best, leaves them with substantial uncertainty and risk. At worst, it could present significant adverse impacts. Therefore, to ensure that there are at least some public benefits resulting from the merger, specific energy efficiency commitments must be included in the merger agreement. This is the only way to assure that the public receives these benefits, and a good way to see that at least some aspect of public interest is served by the merger.

Q: What are some of the areas of concern regarding possible adverse effects of the merger on average customers and the public in general?

A. I'm sure there are a number of areas of concern, but two that quickly come to mind are the issues of market power and environmental impacts.

Q: What concerns you about the issue of market power?

A. Clearly, the consolidation within the electric industry in Missouri that is presented by the proposed merger increases the market power of the resulting economic entity. The Applicants dismiss the market power issue. In the testimony of UtiliCorp's Vice President – Regulatory Services, John McKinney, Mr. McKinney states that "[r]etail competition does not yet exist in Missouri, and we are not sure when choice will come for retail customers" and therefore "[i]t is premature to consider retail market power issues at this time" [Testimony, December 1999, pgs. 31-32]. However, this cavalier dismissal cannot obscure the fact that ratepayers still bear the risk of adverse consequences from this increased market

power. Unfortunately, if retail competition does come into effect, experience has shown that residential customers and small businesses typically do not attract competitive offers from the market. These sectors will remain largely captive to the existing utility electricity providers. The experience from other states that have already begun restructuring is that residential customers don't participate in the competitive market. Excess market power by the incumbent utilities contributes to and exacerbates that result.

Therefore, in either case, with or without retail competition, average customers will have little recourse to reduce their bills. One way to help mitigate the potential adverse effects of market power in this area is through energy efficiency programs. From an economic perspective, energy supply and energy efficiency are substitutes for each other in that both can be used to meet a customer's energy needs. Energy efficiency can help reduce the consumer's dependency upon electric utility prices. Energy efficiency is therefore an alternative resource that the consumer can use to reduce their overall bills and operating costs, their primary concern, even if rates are higher than they should be due to market power. Energy efficiency thus tends to mitigate the risk from increased market power and helps protect the consumer.

Q. What about environmental impacts?

A. In addition to the financial effects of the merger there are the environmental effects of pollution. It is important that consumers are not worse off than before the merger. Unfortunately, there is a risk that this objective will not be met. Some customers may be harmed due to a lessening of air emission strategy from what would occur for separate utilities absent the merger. This is most apparent in the testimony given by Vern J. Siemek,

Director of Business Services for UtiliCorp Energy Delivery, when he states, "...a minimum savings of $500,000 of capital costs for compliance with NOx environmental standards was estimated that is possible by using one site to attain the NOx emission reductions for both companies. The ultimate savings could be much higher if the equipment to comply with the standards can be built on one site rather than several sites." [Testimony, December 1999, pg. 14]. This creates an adverse impact to the citizens of Missouri by lowering the level of environmental compliance at the local level. In other words, before the measure more than one plant site was to be modified whereas after the merger only one plant will be modified. The citizens around the plant that is not updated are harmed since they experience greater environmental harm than would otherwise occur with two distinct utilities.

Nox emissions are important to reduce because they contribute to tropospheric ozone and smog. They are associated with chronic lung disease, lung cancer, and cause greater susceptibility to bronchitis, pneumonia and other respiratory infections. This additional pollution is detrimental to the environment, detrimental to public health, and therefore detrimental to the public interest. Energy efficiency programs can help reduce these effects because they reduce the need to construct additional power plants and the burning of additional fossil fuel in existing plants. Since every form of energy generation affects the environment in some way, energy efficiency is the most environmentally friendly option because it prevents pollution from being generated.

In addition to preventing more pollutants from entering the environment, energy efficiency can produce environmental benefits by helping to prevent the need for the construction of additional transmission lines and distribution equipment. This would also reduce utility

costs, including the need for increased environmental siting reports, thus saving the utility money and providing the citizenry with the added benefits of a lower amount resources allocated to transmission and distribution expenses.

Beyond reducing pollutants such as NOx, there is considerable effort underway to mitigate global climate change. In an attempt to accomplish the task of reducing carbon dioxide emissions, there is the future risk of a carbon tax on the generation of electricity. Energy efficiency does not have any emissions, and programs designed to encourage saving energy over adding generation will reduce the vulnerability of the local economy to such taxes. Energy efficiency is the lowest cost environmental strategy to provide the energy services that everyone needs with the most cost-effective and environmentally benign method possible.

Q. What if it cannot be conclusively demonstrated that the merger will produce environmental or market power harm to customers?

A. A conclusive demonstration of future outcomes is seldom, if ever, a realistic standard. At a minimum, the merger creates risks for customers in these areas, as well as others. As discussed above, one advantage of the proposed energy efficiency programs is that they help to mitigate the risks of adverse outcomes in each of these two areas. Moreover, even in the absence of direct environmental or market power harm from the proposed merger, I still recommend that strong energy efficiency programs be required. The environmental and economic benefits from such programs would still be an important way to help assure that average customers and the general public receive at least some benefits from

the proposed merger. This seems only fair, given the general risks they would endure while shareholders pursue the benefits of the merger these companies seek.

Q. Is there any precedent for the inclusion of energy efficiency programs as a condition of a utility merger.

A. There are several. One of the first occurred in 1994 in the merger between PSI Energy Corporation in Indiana and Cincinnati Gas and Electric in Ohio to form Cinergy Corporation. This merger was included an agreement to implement Energy Efficiency programs to save energy equal to 1% of peak and 1% of energy for each of the first five years.

Another is the merger of PacifiCorp and Scottish Power in the state of Washington in 1999. The details of the merger contained conditions to provide programs such as energy efficiency measures, weatherization, and budget counseling to low-income customers. The utility agreed to incorporate a range of measures that included energy efficiency advice, implementation of energy efficiency measures, and establishing pilot programs, among others. Scottish Power/PacifiCorp agreed to spend $300,000 of shareholder funds per year for the implementation of bill payment assistance and energy efficiency programs in the first three years after the merger. (WUTC Docket No. UE-981627).

Even a more recent example is occurring in the upcoming merger of Northern States Power and New Century Energies, Inc. In Minnesota, NSP agreed that even after the merger it would be subject to applicable Minnesota statutes, including but not limited to, provisions related to requirements for conservation and renewable energy. This agreement is meant to preserve the sizeable energy efficiency and renewable programs that NSP has implemented

over the years. NSP has also agreed to a number of provisions requiring them to perform various research projects and feasibility studies for increased use of energy efficiency and renewable energy, beyond the substantial amounts already required by statute (MN PUC Docket E, G002/PA-99-1031).

As you can see, provisions for energy efficiency programs in regard to utility mergers do exist and provide a great opportunity for the state to ensure that customers receive real benefits from utility mergers.

Q. But isn't the requirement for energy efficiency programs "old fashioned" and out-of-step with the recent trend toward a policy of "restructuring" the electric industry in this country?

A. Not at all. For the past four years one of my key job responsibilities, first at the Michigan Public Service Commission and now with ACEEE, has been to carefully monitor the progress of electric restructuring in the states. At this point, a total of 23 states have restructured, and 18 of those states have included some policy requirement supporting energy efficiency programs. I maintain a periodically updated state-by-state summary table of state public benefits policies and funding levels on our ACEEE web site (**www.aceee.org**). Exhibit MGK-2 presents a copy of that table. It is clear that even in restructured states, regulators and policymakers have recognized the value to ratepayers and the public of having energy efficiency programs.

Q. How do average ratepayers and the general public benefit from energy efficiency programs?

A. In addition to the market power mitigation and environmental benefits discussed above, energy efficiency programs provide a number of other important benefits. First, and most obviously, they provide substantial direct bill savings for customers that participate in the programs. Second, because saving energy through energy efficiency programs costs less than building and operating a power plant, energy efficiency programs can reduce the total system cost to all customers of meeting customer electricity service needs. Indeed, large-scale comprehensive energy efficiency programs, serving all sectors (residential, commercial and industrial), have been shown to save electricity at a utility levelized cost of less than 3 cents per kWh - - and sometimes less than 2 cents per kWh. Third, by reducing total system demand, energy efficiency can help reduce peak load price spikes, as well as having a general dampening effect on market electricity prices by lowering demand. Finally, they can have a beneficial effect on the overall state economy by reducing expenditures on imported energy and retaining those dollars in the pockets of customers, to be re-spent in the local economy. This can be particularly beneficial for a state like Missouri, which imports 95% of the energy resources it consumes.

Q. Are you recommending specific energy efficiency programs for implementation?

A. I am not attempting to specify particular energy efficiency programs in this testimony. There are a number of excellent program models available, but my general preference is to have program selection and design be something which is cooperatively developed between the pertinent parities (e.g., the utility, the regulatory commission, the state energy office or other appropriate state administrative agency, interested community/environmental groups, etc.) I have been involved in a number of such

collaborative efforts and have generally found them to be very productive. In this case, I would certainly recommend that the Applicant utilities work with the Missouri Department of Natural Resources' Energy Center in such a process.

Q. Please summarize the central conclusions of your testimony.

A. As a matter of good public policy and simple fairness, it is important that the proposed merger not result in benefits for shareholders only. The shareholders and company management obviously propose this merger with the expectation of financial benefit, whereas customers and the general public, at a minimum, face uncertainty and risk. Requiring the provision of energy efficiency programs as a condition of this merger will help mitigate some of those risks and, more generally, will help assure that there are at least some benefits for customers and the citizens of Missouri.

Q. Does that conclude your testimony?

A. Yes.

MARTIN G. KUSHLER

EDUCATIONAL INFORMATION:

Michigan State University, Ph.D., 1981.
Major: Community Psychology. Minor: Research and Program Evaluation.
Graduate program emphasizing the development implementation and evaluation of innovative community service programs. Primary area of research: energy conservation programs.
Graduated with high honors. GPA: 4.0/4.0

POSITIONS HELD:

1998-Present Co-Director, Utilities Program, American Council for an Energy Efficient Economy (ACEEE).

Responsible for directing a wide variety of national, regional and state-level research and policy analysis projects for ACEEE, in the area of utility related energy efficiency and public benefit programs and policies. Duties also involve providing information and technical assistance to state officials, regulators, utilities and other stakeholders. Recent projects include the completion of a 50-state review and compilation of the status of public benefits policies under restructuring, and partnering with the Energy Center of Wisconsin and the DOE Chicago Regional Office to launch a new collaborative to pursue Market Transformation in the midwest. Currently serve on the steering committee for that new group.

1987-1997 Supervisor, Evaluation Section, Michigan Public Service Commission (MPSC).

Responsible for planning and coordinating all program evaluation activities for the MPSC, including both government and utility funded energy programs. Duties included supervising the design and implementation of monitoring systems and evaluation plans for all energy conservation programs operated by the seven major electric and gas utilities regulated by the MPSC. Also supervised three full-time professionals and two to eight part-time staff, as well as managed outside contractors to provide additional technical evaluation services. Responsible for analyzing a wide range of energy issues before the MPSC and presenting results in a variety of forums, including executive and legislative meetings and as an expert witness in Commission case hearings. Have served on various committees and policy review groups on topic areas such as least-cost utility planning and the development of economic incentives for utilities to pursue energy efficiency programs. Duties have also included establishing and serving as the Staff representative on several multi-party DSM evaluation collaboratives.

1981-1986 Manager of Evaluation for Interagency Evaluation Projects, Michigan Energy Administration (MEA)

Project Manager for the statewide evaluation of the first two major utility conservation programs in Michigan: The Residential Conservation Service (RCS) home energy audit program, and a special ceiling insulation program for low-income customers. Functioned as an interagency liaison from the Energy Administration to the Michigan Public Service

Commission (MPSC). Designed the comprehensive program monitoring and evaluation plan for the Michigan RCS Program, one of the largest in the nation. Also responsible for developing implementing and coordinating all necessary evaluation activities, including involvement in regular meetings and work sessions with the six participating utility companies and MPSC staff. Supervised an evaluation team of up to two full-time and eight part-time positions. Additional duties included testifying as an expert witness in MPSC utility cost recovery hearings and making presentations regarding RCS evaluation methodology to organizations such as the National Governors Association and the U.S. Department of Energy.

Also responsible for designing and conducting a series of comprehensive evaluation projects, jointly funded by the Michigan Department of Labor and MEA, focusing on the Low-Income Home Weatherization Program and the newly created Energy Assurance Program. Responsible for developing evaluation plans to meet management information needs and for consulting with program management regarding the redesign and improvement of program services. Duties included the design of all data collection and analysis strategies, supervision of the weatherization evaluation team, and the establishment and coordination of program monitoring and data collection activities involving the Department of Labor; the Department of Social Services; the Michigan Public Service Commission; the major utility companies; and individual weatherization program operators. Duties also included preparing materials and data summaries for the Governor's Weatherization Monitoring Committee and the House/Senate Weatherization Oversight Committee. Responsible for writing all project evaluation reports and for presenting results to state program management as well as to various interested regional and national audiences.

OTHER PERTINENT EXPERIENCE

In addition to the specific responsibilities of the above positions, Dr. Kushler has maintained a close familiarity and active involvement with energy efficiency research and policy nationwide, through activities such as the following:

- Being a member of the Planning Committee of the National Energy Program Evaluation Conference since 1989, and serving as President of the Board of Directors for the past 5 years.

- Attending and presenting professional papers at every one of the biennial ACEEE Summer Study on Energy Efficiency in Buildings since 1982. Co-chair of the "National and Regional Conservation Programs" panel at the 1988 conference. Co-chair of the "Governmental Programs" panel for the 1990 conference. Lead author of invited paper on the future of evaluation at the 1992 conference.

- Providing independent consultant services to numerous states and the federal government, assessing various aspects of regulatory policy regarding energy efficiency.

- Providing technical assistance to policy makers in a variety of forums, including: legislative proceedings, regulatory hearings, technical conferences, an invited address to the National

Governors Association, and invited testimony before Congress.

Table 1
Summary Table of Public Benefit Programs and Electric Utility Restructuring

Arizona	In Dec96, the ACC ordered retail competition beginning in Jan99 and completed by Jan03. Later updated to begin Jan01. ACC rule requires SBC for LI, EE and RE. Funding determined in indiv. utility cases. Also a proposed charge for "Environmental Portfolio Standard" (see RE). Table is for IOUs only.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $	TBD	9.0	TBD	18+	27.0+	ACC rule proposed: 0.2% by 2001, up to 1.1% by 2007. Half must be solar elec.	Fuel mix and emissions are required by ACC rule.
		mills/kWh	TBD	0.4	TBD	0.85	1.25+		
		% rev.	TBD	0.3	TBD	0.6	0.9+		
		admin.	TBD	utility	utility	utility			
California	In Sept96, AB1890 was signed into law. Full retail access for all customer types began Apr98. Funding is through a non-bypassable wires charge. Totals in table are just the 4 large IOUs. Small IOUs and muni's are also spending over $100 million on pub ben. Table shows annual average over 4 yr authorization in legis.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $	62.0	218+	81.0	135.0	496+	None.	Yes. A "power content label" is required for generation mix.
		mills/kWh	0.4	1.3	0.5	0.8	3.0		
		% rev.	0.4	1.3	0.5	0.8	3.0		
		admin.	CEC	Utility	CPUC	CEC			
Connecticut	In April 1998 Public Act 98-28 was signed into law. Phases in retail access during 2000. It funds EE, RE, and LI. RE ramps up over time, average is in table. Support for R&D is imbedded in the RE programs. Funds are collected through a non-bypassable wires charge.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $	in RE	87.0	TBD	22.0	109+	Two tier, limits hydro starting at 6% and escalating to 13% by the year 2009.	Included in bill with-out specifics.
		mills/kWh	in RE	3.0	TBD	0.75	TBD		
		% rev.	in RE	3.0	TBD	0.75	TBD		
		admin.	EE &RE	collab.	DPUC	St. Auth.			
Delaware	Restructuring Act signed in March 1999. Has two SBCs: 0.178 mills/kWh for EE "incentive" programs, overseen by DE Economic Dev. Office, 0.095 mills/ kWh for LI bill asst. & EE, overseen by Dept. of Health & Soc. Services. An additional $250,000 from rates is to go to customer education, esp. regarding RE.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		1.5	0.8	0.3	2.6	None.	Not required. Law says Commission "may" promulgate rules.
		mills/kWh		0.18	0.1	0.03	0.3		
		% rev.		0.3	0.15	0.05	0.5		
		admin.		state	state	state			
Illinois	In Dec97, PA 90-561 was signed. It provides funding for EE, RE and LI (although EE and RE are at low levels), using non-bypassable flat monthly charges on customer bills. ("mills/kWh" equiv. includes $ from gas & electric.) Also, one-time ComEd $250 million Clean Energy Trust fund ok'd by legis. May 99(not in table).		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		3.0	75.0	5.0	83.0	None.	All electricity retailers would be required to disclose generation mix and emissions.
		mills/kWh		0.03	0.6	0.04	0.7		
		% rev.		0.04	0.8	0.05	0.9		
		admin.	Dept of Cmrce. & Comm. Affairs						
Maine	In May97, a state restructuring law was passed. The PUC has proposed, and legislature has authorized, up to approx.$17 million/yr. for EE via statewide charge in distribution rates (equiv. to max. of 1.5 mills/kWh). State Planning Office will oversee. Original law also requires LI asst. funding as shown. R&D is voluntary fund		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		17.2	5.5		22.7	30% starting Mar00. Limited to facilities of 100-MW or less.	Yes. Fuel mix and emissions disclosure is required.
		mills/kWh		1.5	0.5		2.0		
		% rev.		1.5	0.5		2.0		
		admin.	TBD	state	utility				

Table 1 cont.
Summary Table of Public Benefit Programs and Electric Utility Restructuring

Maryland	Restructuring Law signed in April 1999. Includes $34 million/yr. tax funded "Universal Service Fund" for bill assist. and EE for LI customers. (Table shows mills/kWh and % rev. equiv.) In addition, 2 of state's 3 largest utilities have 1 mill/kWh residential only SBC for EE ok'd thru settlements. (EE in table just for those)		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		13.0	34.0		47.0	PSC to conduct a feasibility study of an RPS and report by 2/1/2000.	Yes. Fuel mix and emissions disclosure is required.
		mills/kWh		1.00	0.6		0.6+		
		% rev.		0.4	0.9		0.9+		
		admin.		Utility	state				
Massachu-setts	In Nov97 comprehensive legislations was signed bringing retail access to all customers in 1998. Includes a non-bypassable wires charge for EE, RE and LI. Amounts ramp up for RE and down for EE. Averages shown in table. LI must get at least .25 mills of the EE SBC. (Note: RE excludes .25 mills/kWh for MSW)		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		130.0	Incl.	30.0	160.0	Requires a new 1% increment by 2003, 4% more by 2009, 1%/yr. thereafter.	Fuel mix and emissions disclosure is required. Member N.E. Disclosure Project
		mills/kWh		3.00	in	0.7	3.7		
		% rev.		3.00	EE	0.7	3.7		
		admin.		Utility	Utility	MTPC			
Montana	In May97, electric utility restructuring was signed into law. Retail access began July98 and is scheduled to be completed by July02. Using EE and RE funds for R&D is approved by the new statute. Funds will be collected using a "universal system benefit charge." LI must be at least 17% of total.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		TBD	TBD	TBD	14.0	None.	The PSC has proposed disclosure. Hearings are being held.
		mills/kWh		TBD	TBD	TBD	1.1		
		% rev.		TBD	TBD	TBD	2.4		
		admin.	Utility programs +						
Nevada	In July97, electric utility restructuring was signed into law. Subject to PUC review, retail access is scheduled for March 2000. Public benefit programs, including R&D, are specifically encouraged but funding is not provided by the statute. PUC is working on rules to implement the law, EE not addressed yet.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $	TBD	TBD	TBD	TBD	TBD	By Jan01 to be 0.2%. Add 0.2% bienially until 1% total in 2009, 1/2 to be new solar.	Bills must contain price variability, and generation mix.
		mills/kWh	TBD	TBD	TBD	TBD	TBD		
		% rev.	TBD	TBD	TBD	TBD	TBD		
		admin.							
New Hampshire	In May96, NHRSA was passed into law. Full retail access was to be implemented in Jan98, but conflicts over stranded costs have delayed the process. The statute authorizes funding for R&D, EE, RE and LI but initial PUC plan only funded LI. PUC is considering funding some EE as a result of a rehearing.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		TBD	13.0		TBD	None.	Participants in the New England Disclosure Project.
		mills/kWh		TBD	1.5		TBD		
		% rev.		TBD	1.3		TBD		
		admin.		TBD	county				
New Jersey	Restructuring law passed in Jan.99. Requires SBC funding for EE/RE at same level as existing DSM costs (approx. $235 million/yr.). Full SBC is 3.4 mills. Half would pay for costs from prior years, half for new programs. 25% of new must be RE. Numbers in table are new $ only.. LI sep. funded at prior levels.		**Details of SBC funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million$		87.5	10.1	30.0	127+	By Jan01 to be 0.5%. from "Class 1", by Jan.06 1.0%. Ramps up to 4% by 2012.	Required for fuel mix and emissions.
		mills/kWh		1.35	0.16	0.45	1.96		
		% rev.		1.35	0.15	0.45	1.95		
		admin.		Utility	Utility	Utility			

Table 1 cont.
Summary Table of Public Benefit Programs and Electric Utility Restructuring

New Mexico	Legislation to restructure (SB 428) was signed in April 1999. An SBC of 0.3 mills/kWh is required, which goes to fund consumer educ., LI energy efficiency, and renewable energy promotion. Numbers in table are specified min. or max. figures. Funds to be administered by the state Dept. of Environment.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million$			0.5+	4.0	5.0+	Utility Standard Offer must have 5% NM renewables, plus offer extra green rate.	Required for fuel mix and emissions.
		mills/kWh			incl.	incl.	0.3		
		% rev.			0.1	0.4	0.5		
		admin.			state	state			
New York	In May96, the PSC issued Order 96-12. All state IOUs filed rate and restructuring plans. A July98 Order identified $78 million per year for an SBC to fund EE, LI and R&D, administered by NYSERDA. R&D includes $4 million for solar & wind. (EE in table doesn't incl. Approx. $100 million/yr. by power author.)		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $	14.0	54.0	10.0	in R&D	78.0	None.	Required by PSC Order dated 12/15/98. Working on design to start in 2000.
		mills/kWh	0.1	0.6	0.1		0.8		
		% rev.	0.1	0.5	0.1		0.7		
		admin.	state	state	state				
Ohio	Restructuring Law (SB3) signed in July 1999. Includes an SBC for up to $15 million/yr. for an "Energy Eff. Revolving Loan Fund" admin. by the state, plus a "Universal Service Rider" for LI bill asst. and efficiency. LI in table based on recent historical spending. (EE does not incl. addtl. agreements by indiv. utilities.)		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		15.0	100.0		115.0	None.	Yes. Fuel mix and emissions disclosure is required.
		mills/kWh		0.1	0.7		0.8		
		% rev.		0.15	1.1		1.25		
		admin.		state	state				
Oregon	Law passed in July 1999. Includes a "public purpose charge" to fund EE, RI and LI, equiv. to 3% of total IOU revenues (approx. $50 million). Requires 63% of funds for EE (incl. MT) and 19% to RE. PUC to develop rules. LI gets 18% of PPC for weatherization, plus extra $10 million for bill payment assistance (incl. in table totals).		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		31.5	19.0	9.5	60.0	None. (a "green rate" option is required, however)	Yes. Fuel mix and emissions disclosure is required.
		mills/kWh		1.0	0.6	0.30	1.9		
		% rev.		1.9	1.1	0.60	3.6		
		admin.		TBD	state	TBD			
Pennsyl-vania	In Dec96, a restructuring law was signed. Retail access to be phased-in over 2 yrs. starting Jan99. Law requires EE and LI minimum funding at existing levels (10m and 26m). Exact levels determined in indiv. utility cases have been higher than minimum. EE includes some renewables. LI includes 20% for efficiency.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		11.0	85.0	2.0	98.0	Being addressed in indiv util cases. Also, bidders for "last resort" service need 0.2%.	Yes. Fuel mix is required. (but not emissions data.)
		mills/kWh		0.1	0.7	0.02	0.8		
		% rev.		0.1	0.9	0.02	1.0		
		admin.		Utility	Utility	Utility			
Rhode Island	Retail competition phased in by Jan98. Final spending plans exceeded the legislated minimum of 2.3 mills per kWh. Some funding on R&D for "near commercialization" renewables. Funds collected through a non-bypassable wires charge, except low-income efficiency and rate discounts which are funded in rates, not the SBC.		**Details of SBC Funding**					**Renewables Portfolio Standard**	**Generation Disclosure**
			R&D	**EE**	**LI**	**RE**	**Total**		
		million $		14.0	in rates	2.5	16.5	None.	Participant of NE Disclosure Project.
		mills/kWh		2.1	in rates	0.5	2.6		
		% rev.		2.1	in rates	0.4	2.5		
		admin.		Collab.	utility	Collab.			

Table 1 cont.
Summary Table of Public Benefit Programs and Electric Utility Restructuring

Texas	Restructuring Law signed in June 1999. Requires utilities to administer EE programs to achieve savings equiv. to 10% of annual load growth by 2004. PUC to establish rates and procedures. Also a small SBC for customer educ. and LI assistance & 10% LI rate discount. (That SBC not to exceed .065 mills/kWh.)		**Details of SBC Funding**					**Renewables**	**Generation**
			R&D	**EE**	**LI**	**RE**	**Total**	**Portfolio Standard**	**Disclosure**
		million $		TBD	TBD		TBD	Requires 2000 MW	PUC required to
		mills/kWh		TBD	TBD		TBD	of new renewables	develop rules to
		% rev.		TBD	TBD		TBD	by 2009. (Phase-in,	disclose enviro.
		admin.		utility				400 MW by 2003.)	impacts.
Vermont	VT has not yet restructured*, but in June 1999 S.137 passed, giving PSB the authority to establish an SBC to fund statewide EE thru a non-utility entity, in place of utility programs. $17.5 million/yr maximum. 5-year ramp-up budget was set in settlement, averages shown in table. *(in 1997, S.62 passed Senate but not House.)		**Details of SBC Funding**					**Renewables**	**Generation**
			R&D	**EE**	**LI**	**RE**	**Total**	**Portfolio Standard**	**Disclosure**
		million $		13.1	TBD	TBD	TBD	S62 required 2-tier,	S62 required price,
		mills/kWh		2.5	TBD	TBD	TBD	existing (up to 15%)	mix, pollutants, EE
		% rev.		2.6	TBD	TBD	TBD	& emerging (up to	notices, and terms.
		admin.		contract	TBD	TBD		4%) by 2007.	NE Disclosure Proj.
Wisconsin	Act 9 of 1999 passed Sept. 99 includes elec. Reliability provisions which designate the WI Dept. of Admin. as the state agency to design and implement public benefit programs. Industry restructuring has not yet been addressed. Totals in the table reflect best current estimate of funding levels when fully in place.		**Details of SBC Funding**					**Renewables**	**Generation**
			R&D	**EE**	**LI**	**RE**	**Total**	**Portfolio Standard**	**Disclosure**
		million $	1.5	78.3	64.2	3.8	147.8	Requires 0.5% by	Not addressed.
		mills/kWh	0.0	1.5	1.3	0.1	2.9	12/31/2001. Increases	
		% rev.	0.05	2.9	2.4	0.15	5.5	biennially to 2.2%	
		admin.	DOA	DOA	DOA	DOA		by 12/31/2011.	

TBD = To Be Determined
SBC funding amounts provided in the table are average annual funding levels.