

ħ.

URIGINAL

RECEIVED-FPSC

APR 2

PH L:

Steel Hector & Davis LLP 215 South Monroe, Suite 601 Tallahassee, Florida 32301-1804 850.222.2300 850.222.8410 Fax www.steelhector.com

April 21, 1999

Charles A. Guyton 850.222.3423

Via Hand Delivery

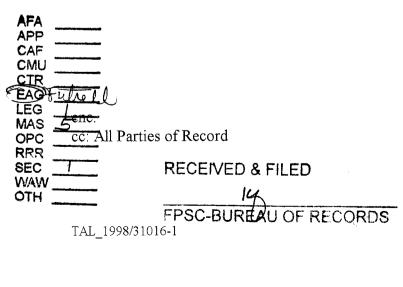
Blanca S. Bayó, Director Records and Reporting Florida Public Service Commission 4075 Esplanade Way, Room 110 Tallahassee, Florida 32399-0850

Re: Adoption of Numeric Conservation Goals by Florida Power & Light Company Docket No. 971004-EG

Dear Ms. Bayó:

Enclosed please find the original and fifteen (15) copies of Florida Power & Light Company's Motion to Compel LEAF's Responses to Florida Power & Light Company's First Set of Interrogatories to LEAF in Docket No. 971004-EG. Also enclosed is an additional copy of the Motion which we request that you stamp and return to our runner.

If you or your staff have any questions regarding this transmittal, please contact me at 222-2300.



Very truly yours,

ades & Sum

Charles A. Guyton

DOCUMENT	NUMBER-DAT	E
----------	------------	---

05135 APR 21 8

Miami West Palm Beach

h Tailahassee

Key West

London

F Garacas RFCORSão Paulo PORTINI, aneiro

ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

)

)

In Re: Adoption of Numeric Conservation Goals for Florida Power & Light Company

See alter

Docket No. 971004-EG April 21, 1999

Florida Power & Light Company's Motion To Compel LEAF's Responses To Florida Power & Light Company's First Set Of Interrogatories To LEAF

Pursuant to Rule 28-106.204 and 28-106.206, Florida Administrative Code and Florida Rule of Civil Procedure 1.380(a), Florida Power & Light Company ("FPL") moves to compel responses to certain interrogatories posed by Florida Power & Light Company to LEAF in docket number 971004-EG. As grounds for its motion, FPL states:

1. On March 5, 1999, pursuant to Rule 1.340, Florida Rules of Civil Procedure and Rule 28-106.206, Florida Administrative Code, FPL hand delivered to LEAF Florida Power & Light Company's First Set of Interrogatories to LEAF. A copy of those interrogatories is attached as Attachment A. Including subparts to the 19 interrogatories, FPL posed 48 questions to LEAF.

2. On March 15, 1999, LEAF submitted to FPL and the parties, but not to the Commission, a document entitled "LEAF'S OBJECTIONS, MOTION FOR PROTECTIVE ORDER, AND WRITTEN RESPONSE TO FPL'S FIRST SET OF INTERROGATORIES" (hereinafter "Objections"). A copy of LEAF's Objections is attached as Attachment B. In its Objections LEAF objected to 34 of the 48 questions FPL posed to LEAF.

> DOCUMENT NUMBER-DATE 05135 APR 21 S FPSC-RECORDS/REPORTING

1

3. On March 29 counsel for FPL attempted to contact counsel for LEAF to discuss LEAF's Objections. LEAF's counsel was unavailable, so FPL's counsel sent a letter to LEAF's counsel explaining why FPL's questions were appropriate and requesting LEAF's counsel to contact FPL's counsel to discuss LEAF's Objections. A copy of FPL's letter to LEAF is attached as Attachment C. As of the date of the filing of this motion, FPL's counsel has not heard from LEAF's counsel regarding LEAF's Objections.

4. On April 5, 1999 LEAF provided limited responses to some of FPL's First Set of Interrogatories and stated objections (some restatements, some new) to other interrogatories (hereinafter "LEAF's Response"). A copy of LEAF's Response is attached as Attachment D.

5. FPL seeks a Commission order compelling LEAF to answer the following interrogatories objected to by LEAF: 6a-6d, 7a-7g, 8a-8c, 9a-9e, 10b-10f, 11, 12, 13, 14a, 14b.

LEAF's Relevancy Objections

6. LEAF objected to interrogatories 6a-6d, 7a-7g, 8a-8c, 9a-9e and 11 as "not relevant." Each of these interrogatories is designed to discover the broad, unspecified interests pled by LEAF in its petition to intervene. Each of these interrogatories attempt to discover the factual basis, if any, for LEAF's standing in this proceeding. LEAF's surprising suggestion that its alleged substantial interests are "not relevant" reinforce the need for discovery to test whether LEAF has standing to participate in this proceeding. If LEAF's pled interests truly are "not relevant," then LEAF's party status should be revisited.

7. Having pled that LEAF and its members have substantial interests that will be adversely affected by this proceeding, it is incumbent upon LEAF to come forward at hearing and prove the allegations in its pleading. In the seminal case on third party standing in administrative cases in Florida, the Second District Court of Appeals observed that if an applicant (such as FPL in this case) challenges the standing of a third party (such as LEAF in this case) at hearing, then the third party must "produce evidence to show their substantial environmental interests will be affected...." *Agrico Chemical Company v. Department of Environmental Regulation*, 406 So. 2d 478, 482 (Fla 2d DCA 1981), *rev. denied 415 So.2d 1359 (Fla. 1982)*. FPL challenges LEAF's standing¹, and it is incumbent upon LEAF to prove that the interests they pled have been or will be adversely affected by this proceeding.²

8. LEAF's suggestion that FPL has waived its ability to contest LEAF's claim of standing is erroneous. LEAF has affirmatively alleged standing. The burden of proof is on the party asserting the affirmative of the issue before an administrative tribunal. *See, Florida Dept.* of HRS v. Career Services Commission, 289 So.2d 412, 414 (Fla. 4th DCA 1974); *Sunshine Ranches Homeowners Assoc. v. Broward County*, 12 FALR 3549, 3554. FPL contests the factual basis of LEAF's alleged interests, so it could not contest LEAF's standing through a motion to dismiss. FPL's only means of challenging the factual basis for LEAF's claim of adversely affected substantial interest is to contest it at hearing, which FPL intends to do. If FPL had waited until after hearing to contest LEAF's failure to prove standing, then FPL would have

¹ In its preliminary issue list FPL submitted an issue putting LEAF's standing at issue.

² Contests of standing involving disputed issues of facts are properly resolved in a factfinding proceeding. *Sullivan v. Northwest Florida Water Management District*, 490 So.2d 140, 142 (Fla. 1st DCA 1986); *Boca Raton Mausoleum, Inc. v. Dept. Of Banking*, 510 So.2d 1060, 1063 (Fla 1st DCA 1987). "The burden is also on the challenger, when standing is resisted, to prove standing." *State Dept. of HRS*, 367 So.2d 1045, 1052 (Fla. 1st DCA 1979).

waived its ability to contest LEAF's standing *(see, Sand Hill Community Improvement Assoc. v. City of Lynn Haven*, 14 FALR 494, 496 and cases discussed therein), but FPL has put LEAF on notice of its intent to contest LEAF's standing at hearing, so there has been no waiver of the standing issue by FPL.

9. Discovery of a party's alleged substantial interests is appropriate where the party's standing is challenged. *See, State Department of Administration, Division of Personnel v. State Department of Administration, Division of Administrative Hearings,* 326 So.2d 187, 189 (1st DCA 1976) (discovery of facts of whether a petitioner is substantially affected is proper).

10. Questions 6a-6d, 7a-7g, 8a-8c, 9a-9e and 11 address LEAF's professed interest in securing environmental and health benefits allegedly associated with energy efficiency programs. Any doubt as to whether these questions are relevant and properly posed to LEAF has been put to rest by an issue that LEAF seeks to raise in this proceeding. LEAF's preliminary issue 7 reads: "Should the environmental and health costs and benefits of energy resource alternatives be included as the Commission compares the costs and benefits of demand vs. Supply-side resources?" In its preliminary issue list LEAF acknowledges that questions regarding the purported environmental benefits of energy efficiency programs are relevant for consideration in this proceeding. Having raised that issue, it is disingenuous to suggest that interrogatories that attempt to address LEAF's understanding of those purported benefits are irrelevant.

11. LEAF also objects to questions 12 and 13 as "not relevant." Question 12 addresses LEAF decision to participate in this proceeding and question 13 addresses the relationship between LEAF and the Pace University Energy Project. These questions directly address LEAF's standing and whether LEAF is really acting on behalf of its members as it professes in its pleading or whether LEAF is acting for the Pace University Energy Project which could not meet the standing requirements of Florida law. Once again, this goes to basic questions of standing, and discovery as to standing is appropriate. Indeed, such discovery is the only means by which FPL may reasonably address what may be an improper attempt by Pace to circumvent standing law in Florida.

LEAF's Work Product Objections

ъ 🐌

12. LEAF objects that the information called for in interrogatories 6d, 7f, 9a, 9b, 9e, 10b-10f and 11 is privileged work product. Each of these interrogatories simply attempts to elicit from LEAF information which LEAF is required to plead and prove to establish standing. LEAF's petition to intervene made no effort to plead how LEAF's alleged substantial interests are protected by or fall within the zone of interest of this proceeding. FPL is not seeking to discover the mental impressions or strategy of LEAF's attorney. FPL is merely seeking to discover the information which LEAF must plead and prove to demonstrate it has standing to participate in this proceeding.

13. The purpose of a pleading such as LEAF's petition to intervene is to provide notice to the other parties of the professed interest of LEAF and how its interests are protected by the proceeding. That is why the procedural rules applicable to intervention require a statement of the statutes, rules or other legal authority that entitles a party to relief. FPL cannot challenge what LEAF is required to but fails to plead. LEAF should not be able to avoid a challenge to its standing by failing to plead the minimum legal authority that is its basis for intervention. LEAF should be compelled to respond to FPL's discovery that is designed to learn what LEAF's professed interests and injuries are and how they are intended to be protected by this proceeding.

LEAF's Objections Regarding Inferences

i 💦 🕨

14. LEAF also objects to interrogatories 7c and 9d on the ground that each question allegedly infers that LEAF's petition states that LEAF favors increased pollution (LEAF Objections 4 and 5). Neither question has any inference about LEAF's petition. However, both questions test the assertions in the LEAF petition.

15. Question 9d simply asks:

"In regard to paragraph 5 of LEAF's petition to intervene, please explain in detail ... how energy efficiency that avoids new, efficient baseload power plants with low emission rates decreases system emissions."

In paragraph 5 of LEAF's petition to intervene, LEAF alleges that the quality of unspecified natural resources allegedly used by LEAF's members are put at risk "by construction and operation of power plants that may result from increased electricity sales or increased use of more polluting energy generation options rather than energy efficiency and clean renewable energy." Question 9d asks LEAF to explain how the energy efficiency LEAF advocates to avoid construction and operation of new power plants with low emission rates will decrease system emissions. FPL is not inferring that LEAF is advocating pollution. FPL is trying to understand why LEAF alleges that employing energy efficiency to avoid new power plants with low emission rates will place the quality of natural resources at risk. FPL believes that the addition of new, baseload power plants with low emission rates and low heat rates will actually lower total system emissions below what they would be if DSM were added, and FPL is entitled to discover what information LEAF has that would suggest otherwise.

16. Question 7c asks:

6

In its petition to intervene, LEAF claims a substantial interest in "securing the environmental and health benefits of utility energy efficiency programs and increased use of clean renewable energy to meet energy service needs." In regard to this asserted interest, please explain in detail ... how utility energy efficiency programs result in environmental and health benefits if they avoid baseload power plants with lower heat rates and emission rates requiring existing power plants with higher heat rates and emission rates to generate more than they would if the avoided power plants had not been built.

LEAF's premise underlying LEAF's quotation referred to in Interrogatory 7c is that energy efficiency programs will achieve environmental and health benefits. FPL questions that underlying premise, if the programs actually avoid new units with low heat rates and low emission rates. Consequently, FPL asks LEAF to explain how the energy efficiency programs that it claims it has an interest in seeing implemented will achieve environmental and health benefits.

17. Suggesting that an interrogatory draws an improper or false inference from LEAF's pleading is not a valid basis for an objection. Whether a question draws an improper inference could and should have been addressed in the answer to which FPL was entitled. However, to remove any dispute as to whether FPL has drawn an incorrect inference, the Commission could compel LEAF to answer question 9d and 7c by disregarding the introductory language provided by FPL for context and simply answering the questions beginning with the language "please explain in detail." That removes the basis for any inference.

LEAF's Objections That Questions Are Vague

i 👘 🖒 🕨

18. LEAF objects to question 14 as vague because the question "does not describe the DSM referred to." The DSM being referred to is the energy efficiency programs LEAF refers to

in its petition to intervene. FPL's seeks LEAF's understanding of how DSM that LEAF advocates would affect FPL's total system fuel use and total system air emissions. If LEAF has not performed such an analysis, then it can say so. If it does not know, it can say so. If LEAF's mystery DSM decreases system fuel use and air emissions, then LEAF should explain how it does so. If LEAF's DSM increases system fuel use and air emissions, then LEAF should admit it. At any rate, the question is straightforward and deserving of an answer, which the Commission should compel.

Conclusion

. .

19. LEAF has posed a series of meritless objections to legitimate interrogatories submitted by FPL. Many of those interrogatories were necessitated by the inadequacy of LEAF's pleading in this case. FPL contests LEAF's standing, and the burden is on LEAF to (a) prove its standing and (b) at least identify the rules statutes or other authority that entitles LEAF to relief. LEAF's statements that its substantial interests are "not relevant" raise serious doubts as to LEAF's ability to prove standing and may warrant the Commission revisiting LEAF's party status. LEAF cannot legitimately claim work product to excuse it from identifying the legal authority it should have pled to show standing under the Commission's rules and standing case law. FPL's questions do not infer that LEAF favors pollution; they test LEAF's assertions, but even if FPL's questions did infer that LEAF favors pollution, that is not a legitimate basis to refuse to answer an interrogatory. LEAF's suggestion that FPL's question regarding the impact of DSM on system fuel usage and emissions is vague is without merit. LEAF's problem is that LEAF cannot prove standing and cannot prove its assertion that energy efficiency programs will

result in environmental benefits, and it simply wants to avoid having to answer questions that will expose the weakness of its positions. FPL's motion to compel should be granted.

ч **Р**

WHEREFORE, FPL respectfully requests that the Prehearing Officer compel LEAF to answer interrogatory numbers 6a-6d, 7a-7g, 8a-8c, 9a-9e, 10b-10f, 11, 12, 13, 14a, 14b in Florida Power & Light Company's First Set of Interrogatories to LEAF.

Respectfully submitted,

Steel Hector & Davis, LLP Suite 601 215 South Monroe Street Tallahassee, Florida 32301

Attorneys for Florida Power & Light Company

Charles A. Guyton By:

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of Florida Power & Light Company's Motion to Compel Leaf's Responses to Florida Power & Light Company's First Set of Interrogatories to Leaf were served by Hand Delivery (when indicated with an *) or US Mail this 21st day of April, 1999 to the following:

Leslie Paugh, Esquire * Division of Legal Services Florida Public Service Commission 2540 Shumard Oak Boulevard Gunter Building, Room 370 Tallahassee, Florida 32399-0850

McWhirter Law Firm Vicki Kaufman, Esquire 117 South Gadsden Street Tallahassee, Florida 32301

McWhirter Law Firm John McWhirter, Esquire Post Office Box 3350 Tampa, Florida 33601-3350

Lee L. Willis, Esquire James D. Beasley, Esquire Ausley & McMullen 227 South Calhoun Street Tallahassee, Florida 32301

Jack Shreve, Esquire Office of Public Counsel 111 West Madison Street Tallahassee, Florida 32399

Executive Office of the Governor The Florida Capitol Tallahassee, FL 32399-0001 Kenneth Hoffman, Esquire Rutledge, Ecenia, Underwood, Purnell & Hoffman 215 South Monroe, Suite 420 Tallahassee, Florida 32301

Legal Environmental Assistance * Foundation Gail Kamaras 1114 Thomasville Road, Suite E Tallahassee, Florida 32301

Jeffrey A. Stone, Esquire Beggs & Lane Post Office Box 12950 Pensacola, Florida 32576-2950

James A. McGee, Esquire Florida Power Corporation Post Office Box 14042 St. Petersburg, Florida 33733

Susan Geller Resource Insight 347 Broadway Cambridge, MA 02139-1715

Charles A. Guyton

TAL_1998/30948-1

ATTACHMENT A

i • • •

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

.] - М. — ф. Э.

In Re: Adoption of Numeric Conservation)Docket No. 971004-EGGoals for Florida Power & Light Company)March 5, 1999

FLORIDA POWER & LIGHT COMPANY'S FIRST SET OF INTERROGATORIES TO LEGAL ENVIRONMENTAL ASSISTANCE FOUNDATION, INC. (NOS. 1-19)

Pursuant to Rule 1.340, Florida Rules of Civil Procedure and Rule 28-106.206, Florida Administrative Code, Florida Power & Light Company ("FPL") propounds the following interrogatories to Legal Environmental Assistance Foundation, Inc. ("LEAF"). These interrogatories shall be answered under oath by you or through your agent who is qualified to answer and who shall be fully identified, with said answers being served as provided pursuant to the Florida Rules of Civil Procedure or order of the Commission.

Provide the name, address and relationship of each person answering the following inquiries and identify which question(s) each person answered.

If an interrogatory calls for the disclosure of information which is deemed confidential, please provide FPL with a nondisclosure agreement satisfactory to LEAF which would allow the provision of an answer to FPL for purposes of this proceeding.

• • •

1. Please provide the name, business position and business address of each witness LEAF intends to call in Docket No. 971004-EG.

ر ج و ۲

2. Please indicate for each of the witnesses identified in response to Interrogatory 1 whether LEAF considers the witness to be an expert witness, and, if so, please state for each witness the witness' expertise for purposes of Docket No. 971004-EG.

ر ۲ ه ع

3. Please state for each witness identified in response to Interrogatory 1 the qualifications of each witness, including collegiate, graduate and post graduate education and degrees, work experience, publications, and honors.

1 1 K. 1

.

4. Please provide for each witness identified in response to Interrogatory 1 a list of prior testimony, including the agency, court or other body, the docket number, the resulting order number and whether cross examination of the witness was conducted.

. . .

5. Please provide the name, business position and business address of each witness LEAF is aware will testify in this proceeding.

- 6. In its petition to intervene, LEAF indicates that one of its corporate purposes is "protection of public health and the environment." Please explain in detail:
 - (a) how the public health is or will be affected by the establishment of conservation goals in these proceedings;
 - (b) how the environment is or will be affected by the establishment of conservation goals in these proceedings;
 - (c) the immediate injury to public health and the environment LEAF has suffered or is likely to suffer as a result of these proceedings; and
 - (d) how these proceedings are intended to protect the public health and environment.

. . . .

- 7. In its petition to intervene, LEAF claims a substantial interest "in securing the environmental and health benefits of utility energy efficiency programs and increased use of clean renewable energy to meet energy service needs." In regard to this asserted interest, please explain in detail:
 - (a) if the interest asserted is the interest of LEAF or of LEAF's members;
 - (b) what are the environmental and health benefits of utility energy efficiency programs and how such are such benefits properly quantified;
 - (c) how utility energy efficiency programs result in environmental and health benefits if they avoid baseload power plants with lower heat rates and emission rates requiring existing power plants with higher heat rates and emission rates to generate more than they would if the avoided power plants had been built;
 - (d) whether LEAF is attempting to secure environmental and health benefits of utility energy efficiency programs and increased use of clean renewable energy to meet energy service needs even if the efficiency programs and the increased use of clean renewable energy is not cost-effective under the Commission's conservation cost-effectiveness tests;
 - (e) the immediate injury LEAF has suffered or is likely to suffer in securing environmental and health benefits as a result of these proceedings; and
 - (f) how these proceedings are intended to protect LEAF's claimed interest in securing environmental and health benefits of utility energy efficiency programs; and
 - (g) whether LEAF is attempting to secure environmental and health benefits of utility energy efficiency programs and increased use of clean renewable energy to meet energy service needs even if the efficiency programs and the increased use of clean renewable energy will increase total system fuel consumption and total system air emissions.

د د بو د

- 8. In paragraph 5 of LEAF's petition to intervene, LEAF makes allegations regarding a substantial number of LEAF's members. Please state the following:
 - (a) the total number of LEAF members;
 - (b) the number of LEAF members in Florida; and
 - (c) the number of LEAF members served by
 - (I) Florida Power & Light Company
 - (ii) Florida Power Corporation
 - (iii) Tampa Electric Company
 - (iv) Gulf Power Company.

۱ ۱ ۱

- 9. In regard to paragraph 5 of LEAF's petition to intervene, please explain in detail:
 - (a) the particular natural resources the quality of which are placed at risk by the results of this proceeding;
 - (b) whether these proceedings determine need for or permit the construction of power plants;
 - (c) what is meant by the phrase "increased electricity sales," including the baseline employed to measure the increase;
 - (d) how energy efficiency that avoids new, efficient baseload power plants with low emission rates decreases system emissions; and
 - (e) all the other regulatory proceedings which will have to occur before the utilities in these proceedings will be allowed to construct power plants and whether those proceedings would afford LEAF an opportunity to protect its substantial interests alleged in this proceeding.

, **.** .

- 10. In regard to LEAF's petition to intervene, please explain in detail:
 - (a) the relief LEAF seeks;
 - (b) the specific rules in Chapter 25-17 FAC that entitle LEAF to the relief it seeks;
 - (c) the specific rules in Chapter 25-22 FAC that entitle LEAF to the relief it seeks;
 - (d) the specific statutory provisions of Chapter 120 that entitle LEAF to the relief it seeks;
 - (e) the specific statutory provisions of Chapter 366 that entitle LEAF to the relief it seeks; and
 - (f) any additional legal authority upon which LEAF relies for the relief it seeks.

11. Please explain in detail how LEAF's pled interests in this case meet the two pronged test for substantial interests articulated in <u>Agrico Chemical Co. v. Department of</u> <u>Environmental Regulation</u>, 406 So.2d 478 (1st DCA 1981).

) • • •

12. Please explain in detail how the decision was made for LEAF to request to intervene in Docket Nos. 971004-EG, 971005-EG, 971006-EG and 971007-EG, identifying all the persons participating, including LEAF staff, LEAF members and persons or organizations outside of LEAF.

, , , , , ,

13. Please explain in detail the relationships between LEAF and the Pace University Energy Project and identify all documents that explain the relationship.

د • •

- 14. Please explain in detail LEAF's understanding of how DSM affects FPL's:
 - (a) total system fuel use;
 - (b) total system air emission.

15. Please state the DSM goals which LEAF believes are appropriate for FPL for the years 2000-2009 and identify all analyses supporting such goals.

ء غد مه ۹

16. Please identify which generating units in FPL's "Supply Only" generation expansion plan presented in Dr. Sim's testimony could be avoided by cost-effective DSM.

د ه مه د

17. If the generating units LEAF identified in response to Interrogatory 16 were avoided with DSM, please state whether FPL's total system fuel use and air emissions would increase or decrease and identify all analyses supporting these conclusions.

د د بو ۱

- 18. Please identify every DSM measure LEAF believes FPL did not analyze but should have analyzed in developing FPL's estimate of reasonably achievable DSM savings potential, and for each such measure state:
 - (a) the measure's kWh savings (per participant);
 - (b) the measure's summer and winter kW savings (per participant):
 - (c) the measure's administrative cost (in \$/participant); and
 - (d) the measure's participant cost;
 - (e) the source of the data for each response to (a) through (d) and
 - (f) the reasons the measure should have been evaluated.

. . .

19. Please identify all persons who prepared, or assisted in the preparation of, the interrogatories and requests for production submitted by LEAF to FPL in Docket No. 971004-EG, and state which interrogatories and requests for production each such person prepared or assisted in the preparation of.

ATTACHMENT B

د ۹ مو ۱

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Adoption of Numeric Conservation Goals for Florida Power & Light Company DOCKET NO .: 971004-EG

LEAF'S OBJECTIONS. MOTION FOR PROTECTIVE ORDER, AND WRITTEN RESPONSE TO FPL'S FIRST SET OF INTERROGATORIES

Intervenor, Legal Environmental Assistance Foundation, Inc., ("LEAF"), pursuant to Order No. FPSC-98-0384-PCO-EG, files the following Objections, Motion for Protective Order, and Written Response to Florida Power and Light Company's ("FPL's) First Set of Interrogatories to LEAF.

RESERVATION OF RIGHTS

The objections stated herein are preliminary in nature and are made at this time for the purpose of complying with the ten day notice requirement set for in the Order Establishing Procedure in this docket. Should additional grounds for objection be discovered as LEAF reviews its responses to interrogatories, LEAF reserves the right to supplement, or revise or modify its objections at or before the time it serves answers to interrogatories. Should LEAF determine that at protective order is necessary with respect to any of the information requested by FPL, LEAF reserves the right to file a motion with the Commission seeking such an order.

GENERAL OBJECTIONS

LEAF raises a general objection to any interrogatory, to the extent that it calls for information that is privileged, not relevant or calculated to lead to discovery of admissible evidence, or is otherwise exempt from discovery under applicable laws. LEAF raises a general objection to any interrogatory, to the extent that it is vague, ambiguous, overly broad, imprecise, or uses terms that are subject to multiple interpretations and are not properly defined or explained. LEAF raises a general objection to any interrogatory that seeks to impose obligations on LEAF which exceed the requirements of the Florida Rules of Civil Procedure or Florida law. LEAF raises a general objection to any interrogatory to the extent that responding to it would be unduly burdensome, expensive, oppressive, or excessively time consuming.

MOTION FOR PROTECTIVE ORDER

To the extent that LEAF's objections to FPL's interrogatories require, by virtue of the authority contained in <u>Slatnick v. Leadership Housing Systems of Florida, Inc.</u>, 368 So.2d 79 (Fla. 3rd DCA 1979), a Motion for Protective Order, LEAF's objections are to be construed as a request for a

1 1999

RECEIVED

1

1

Protective Order.

OBJECTIONS TO SPECIFIC INTERROGATORIES

Subject to, and without waiver of the foregoing rights and general objections, LEAF makes the following specific objections to FPL's First Set of Interrogatories:

 LEAF objects to these interrogatories on the bases of relevance: 6a - 6d (inclusive), 7a - 7g (inclusive), 8 a - c (inclusive, plus subparts), 9 a - e (inclusive), 12, 13.

2. LEAF objects to these interrogatories in that they call for information that is protected and privileged as legal work product: 6d, 7f, 9b, 9e, 10b - 10f, 11.

3. LEAF objects to the request in interrogatory 7b to explain how such benefits are "properly quantified" as vague in that the purpose of the quantification is not stated.

4. LEAF objects to interrogatory 7c to the extent that it purports to restate an assertion from LEAF's Petition since, contrary to the inference presented in the question's restatement, the cited phrase from LEAF's petition states no claim favoring increased pollution.

5. LEAF objects to interrogatory 9d because it purports to restate an assertion from LEAF's Petition and, contrary to the question's restatement, paragraph 5 of LEAF's Petition states no claim favoring increased pollution.

6 Since the plan presented in Dr. Sim's testimony has not been ruled appropriate, LEAF objects to Interrogatories 16 and 17 as potentially irrelevant and, if not irrelevant, unduly burdensome. LEAF further objects to these questions as vague.

7. LEAF objects to Interrogatory 14 as vague.

By:

Debra Swim, Esquire Legal Environmental Assistance Foundation, Inc. 1114 Thomasville Road, Suite E Tallahassee, Florida 32303

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that true and correct copies of LEAF's Objections, Motion for Protective Order, and Written Response to Florida Power and Light Company's ("FPL's) First Set of Interrogatories to LEAF was mailed this 15th day of March, 1999 to:

Leslie Paugh, Esq. Division of Legal Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0950

Vicki Kaufman, Esq. 117 S. Gadsden St. Tallahassee, FL 32301

John McWhirter, Esq. P.O. Box 3350 Tampa, FL 33601

Lee L. Willis, Esq. James D. Beasley, Esq. Ausley & McMullen 227 South Calhoun St.

Mollie Lampi, Esq. Pace University Energy Project 122 S. Swan Street Albany, NY 12110 Jack Shreve, Esq. Office of Public Counsel 111 W. Madison Tallahassee, FL 32399-1400

Charles A. Guyton, Esq. Steel, Hector & Davis 215 S. Monroe St., Suite 601 Tallahassee, FL 32301-1804

Jeffrey A. Stone, Esq. Beggs & Lane P.O. Box 12950 Pensacola, FL 32576-2950

James A. McGee, Esq. Florida Power Corporation P.O. Box 14042 St. Petersburg, FL 33733

a Sum

Debra Swim, Esq.

ATTACHMENT C

. ≱x ≠ . 4



Steel Hector & Davis LLP 215 South Monroe, Suite 601 Tallahassee, Florida 32301-1804 850.222.2300 850.222.8410 Fax www.steelhector.com

Charles A. Guyton 850.222.3423

Via Hand Delivery

Debra Swim, Esquire Legal Environmental Assistance Foundation, Inc. 1114 Thomasville Road, Suite E Tallahassee, Florida 32303

Re: LEAF's Objections To FPL's First Set Of Interrogatories Docket No. 971004-EG

Dear Deb:

Since I missed you today, I wanted to follow-up with you regarding FPL's pending discovery to LEAF. Perhaps by my committing this to paper we can facilitate our discussion.

March 29, 1999

LEAF has objected to Interrogatories 6a-6d, 7a-7g, 8a-c, 9a-e, 12 and 13 on the grounds of relevance. I am somewhat surprised that LEAF would suggest that the grounds for its intervention are irrelevant, yet that is precisely what you suggest by raising this objection to interrogatories 6-9. Either FPL's inquiries about your grounds for intervention are relevant or your grounds are irrelevant and LEAF's party status should be revisited. It will be incumbent upon LEAF to prove its alleged interest at trial, and FPL's interrogatories attempt to discover just what those alleged interests are. I suppose I have a choice either to move to compel or to ask the Commission to remove your party status, but the better route would be for LEAF to simply answer the fairly asked questions.

As to questions 12 and 13, it is most relevant for FPL to be apprised of how LEAF decided to become involved in this proceeding and just how Pace was involved in that decision. LEAF's pleading is so summary and conclusory that it fairly raises the question whether LEAF is simply acting as a front for Pace, which clearly has no interest that would support intervention.

LEAF also raises a work product objection to interrogatories 6d, 7f, 9b, 9e, 10b-f and 11. Interrogatories 6d, 7f, 9b and 9e fairly ask LEAF to address its understanding of how this proceeding or other proceedings are intended to protect the interests LEAF has alleged as supporting intervention. The questions go to whether there has been or is likely to be an immediate injury to LEAF's interests. That is a fact issue that is fairly addressed through discovery. It is hardly privileged work product. Is it LEAF's position that because its executive and Staff members are lawyers that this question cannot be answered without revealing work product? Questions 10b-f are Debra Swim, Esquire March 29, 1999 Page Number 2

an attempt to have LEAF provide the information which should have been pled in its petition to intervene, information to which FPL is entitled as an adverse party. LEAF's citation of legal authority is so broad that it is not meaningful. FPL requests citations which should already have been pled. That is hardly privileged work product. Question 11 requests facts, not legal opinions. It asks LEAF to state the facts that pertain to the two tests for standing. FPL is not interested in your attorneys' work product. It simply wants to know what the facts are that LEAF believes entitles LEAF's members to intervention. Has LEAF or its members suffered an injury, if so what? What immediate injury may LEAF and its members face as a result of this proceeding?

LEAF's objects to the phrase "properly quantified" in question 7b as being vague. FPL seeks to know how LEAF believes the benefits LEAF has cited as a ground for intervention are properly quantified. LEAF has referred to "environmental and health benefits" associated with energy efficiency programs and use of clean renewable resources. FPL's inquiry is simple and straightforward - what are those benefits and how should they be quantified for purposes of this proceeding, if at all.

Questions 7c does not infer that LEAF favors increased pollution. Question 7c attempts to unravel the mystery of how LEAF believes it will achieve "environmental and health benefits" by advocating DSM that would avoid power plants with low heat rates and low emissions. The question is intended to have LEAF assume that avoidance of FPL plant additions through increased DSM would actually increase FPL total system emissions. If that assumption were true, then what is LEAF's interest "in securing environmental and health benefits of utility energy efficiency programs?"

Question 9d makes no inference. It merely asks LEAF how energy efficiency that avoids new, efficient baseload power plants with low emission rates decreases systems emissions.

As to questions 14, 16 and 17, just what is it that LEAF considers vague and does not understand? They are straightforward inquiries, but we will be happy to clarify any confusion LEAF may have that is causing it to be unable to answer the questions. It is hard for me to dignify the suggestion that the inquiries in 16 and 17 are not relevant. Whether or not Dr. Sim's testimony is ultimately accepted by the Commission as the basis for its decision, it is certainly relevant. As to the requests being burdensome, what is the burden? LEAF cannot identify potential avoided units or state whether avoiding the units would increase or decrease system fuel use and emissions? Is this a matter of LEAF's analysis being incomplete? If not, then how is there a burden on LEAF? I look forward to discussing this further with you. Debra Swim, Esquire March 29, 1999 Page Number 3

Deb, I will readily acknowledge that since I wrote these questions, I am hardly impartial. Having said that, I believe the questions are relevant and sufficiently clear to allow an answer. I stand ready to provide further clarification. I would much prefer such a dialogue over filing a motion to compel, so once you are back in the office, lets discuss this further.

Sincerely,

Charlie

× · · .

Charles A. Guyton

TAL_1998/30796-1

ATTACHMENT D

а А. — к

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Adoption of Numeric Conservation Goals for Florida Power & Light Company DOCKET NO.: 971004-EG Filed: April 5, 1999

LEAF'S NOTICE OF SERVICE OF ANSWERS TO FPL'S FIRST SET OF INTERROGATORIES

Intervenor, Legal Environmental Assistance Foundation, Inc., ("LEAF"), has this date furnished its answers to Florida Power and Light's First Set of Interrogatories to LEAF by hand delivery to the offices of Charles Guyton, 215 South Monroe Street, Suite 601, Tallahassee, FL 32301-1804.

DATED this 5th day of April, 1999.

Respectfully submitted,

Debra Swim

DEBRA SWIM Legal Environmental Assistance Foundation, Inc. 1114 Thomasville Road, Suite E Tallahassee, FL 32303-6290 (850) 681-2591

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the foregoing Notice of Service was furnished by hand delivery(*) or U.S. Mail on this 5th day of April, 1999 to:

Leslie Paugh, Esq. Division of Legal Services Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0950

Vicki Kaufman, Esq. 117 S. Gadsden St. Tallahassee, FL 32301

John McWhirter, Esq. P.O. Box 3350 Tampa, FL 33601

Lee L. Willis, Esq. James D. Beasley, Esq. Ausley & McMullen 227 South Calhoun St. Jack Shreve, Esq. Office of Public Counsel 111 W. Madison Tallahassee, FL 32399-1400

Charles A. Guyton, Esq.* Steel, Hector & Davis 215 S. Monroe St., Suite 601 Tallahassee, FL 32301-1804

Jeffrey A. Stone, Esq. Beggs & Lane P.O. Box 12950 Pensacola, FL 32576-2950

James A. McGee, Esq. Florida Power Corporation P.O. Box 14042 St. Petersburg, FL 33733

Debra Swim

DEBRA SWIM

LEAF's Response to FPL's First Set of Interrogatories DOCKET NO. 971004-EG

£ + 1

1. Please provide the name, business position, and business address of each witness LEAF intends to call in Docket 971004-EG.

Paul Chernick, 347 Broadway, Cambridge, MA 02139-1715 President, Resource Insight, Inc.

LEAF reserves the right to call additional witnesses.

2. Please indicate for each of the witnesses identified in response to Interrogatory 1 whether LEAF considers the witness to be an expert witness and, if so, please state for each witness the witness' expertise for purposes of Docket No. 971004-EG.

LEAF considers Mr. Chernick an expert witness. His expertise for the purposes of this docket has not been determined.

3. Please state for each witness identified in response to Interrogatory 1 the qualifications of each witness, including collegiate, graduate and post graduate degrees, work experience, publications and honors.

See Attachment A.

4. Please provide for each witness identified in response to Interrogatory 1, a list of prior testimony, including the agency, court or other body, the docket number, the resulting order number, and whether cross examination of the witness was conducted.

A list of Mr. Chernick's prior testimony, dates, location, and identifying docket numbers, starts on page 9 of Attachment A. To the best of Mr. Chernick's recollection, he was cross examined in all cases listed but for item numbers 7, 17, 36, 54, 85, 86, 89-91, 104, 116, 123, 126, and 139. To the extent LEAF's response lacks other information requested, LEAF objects to providing it since the attached list of prior testimony states docket numbers, agencies or other identifying information which allow FPL to access such information as easily as LEAF could.

5. Please provide the name, business position, and business address of each witness LEAF is aware will testify in this proceeding.

LEAF's answer to Interrogatory 1 identifies witnesses LEAF now intends to call. Witnesses LEAF believes FPL will call are identified in FPL's prefiled testimony. Debbie Evans, has stated an intention to address the Commission at the hearing. Her business position/address are unknown.

6. In its petition to intervene, LEAF indicates that one of its corporate purposes is "protection of public health and the environment." Please explain in detail:

a. How the public health is or will be affected by the establishment of conservation goals in these proceedings.

b. how the environment is or will be affected by the establishment of conservation goals in these proceedings.

c. the immediate injury to public health and the environment LEAF has suffered or is likely to suffer as a result of these proceedings; and

d. how these proceedings are intended to protect the public health and environment.

LEAF objects to Interrogatories 6a - 6d (inclusive) as calling for information that is not relevant, in that FPL waived any right to challenge LEAF's standing since it raised no objection to LEAF's Petition to Intervene and did not timely appeal the Commission order granting LEAF's Petition to Intervene. LEAF also objects to interrogatory 6d as calling for information that is privileged as legal work product.

7. In its petition to intervene, LEAF claims a substantial interest in "securing the environmental and health benefits of utility energy efficiency programs and increased use of clean renewable energy to meet energy service needs." In regard to this asserted interest, please explain in detail:

a. If the interest asserted is the interest of LEAF or of LEAF's members.

b. What are the environmental and health benefits of utility energy efficiency programs and how are such benefits properly quantified.

c. How utility energy efficiency programs result in environmental and health benefits if they avoid baseload power plants with lower heat rates and emission rates requiring existing power plants with higher heat rates and emission rates to generate more than they would if the avoided power plants had been built.

d. Whether LEAF is attempting to secure environmental and health benefits of utility energy efficiency programs and increased use of clean renewable energy to meet energy service needs even if the efficiency programs and increased use of clean renewable energy is not cost-effective under the Commission's cost-effectiveness tests.

e. The immediate injury LEAF has suffered or is likely to suffer in securing environmental and health benefits as a result of these proceedings.

f. How these proceedings are intended to protect LEAF's claimed interest in securing environmental and health benefits of utility energy efficiency programs.

g. Whether LEAF is attempting to secure environmental and health benefits of utility energy efficiency programs and increased use of clean renewable energy to meet energy service needs even if the efficiency programs and the increased use of clean renewable energy will increase total system fuel consumption and total system air emissions.

LEAF objects to Interrogatories 7a - 7g (inclusive) as calling for information that is not relevant, in that FPL waived any right to challenge LEAF's standing since it raised no objection to LEAF's Petition to Intervene and did not timely appeal the Commission order granting LEAF's Petition to Intervene. LEAF also objects to Interrogatory 7c because it falsely infers LEAF's Petition asserts a claim favoring increased pollution; to Interrogatory 7d as vague as regards green pricing for solar; and to Interrogatory 7f as calling for information that is privileged as legal work product.

8. In paragraph 5 of LEAF's petition to intervene, LEAF makes allegations regarding a substantial number of LEAF's members. Please state the following:

a. the total number of LEAF's members;

4. T. I

- b. the number of LEAF members in Florida;
- c. the number of LEAF members served by
 - I) Florida Power & Light Company
 - ii) Florida Power Corporation
 - iii) Tampa Electric Company
 - iv) Gulf Power Company

LEAF objects to Interrogatories 8a - 8c (inclusive, plus subparts) as calling for information that is not relevant, in that FPL waived any right to challenge LEAF's standing since it raised no objection to LEAF's Petition to Intervene and did not timely appeal the Commission order granting LEAF's Petition to Intervene. LEAF also objects to Interrogatories 8c(ii), (iii), and (iv) as calling for information that would not be relevant, even if standing were deemed relevant.

9. In regard to paragraph 5 of LEAF's petition to intervene, please explain in detail:

a. the particular natural resources the quality of which are placed at risk by the result of this proceeding;

b. whether these proceedings determine the need for or permit the construction of power plants;

c. what is meant by the phrase "increased electricity sales," including the baseline employed to measure the increase.

d. how energy efficiency that avoids new, efficient baseload power plants with low emission rates decreases system emissions.

e. all other regulatory proceedings which will have to occur before the utilities in these proceedings will be allowed to construct power plants and whether those proceedings would afford LEAF an opportunity to protect its substantial interests alleged in this proceeding.

LEAF objects to Interrogatories 9a - 9e (inclusive) as calling for information that is not relevant, in that FPL waived any right to challenge LEAF's standing since it raised no objection to LEAF's Petition to Intervene and did not timely appeal the Commission order granting LEAF's Petition to Intervene. LEAF also objects to Interrogatories 9b and 9e as calling for information that is privileged legal work product.

- 10. In regard to LEAF's petition to intervene, please explain in detail:
- a. the relief LEAF seeks;

LEAF seeks conservation goals aimed to cost-effectively increase investments that reduce pollution. LEAF reserves the right to detail the relief it seeks in its testimony after completing its evaluation of utility filings.

b. the specific rules in Chapter 25-17, FAC that entitle LEAF to the relief it seeks;

c. the specific rules in Chapter 25-22, FAC that entitle LEAF to the relief it seeks;

d. the specific statutory provisions of Chapter 120 that entitle LEAF to the relief it seeks;

e. the specific statutory provisions of Chapter 366 that entitle LEAF to the relief it seeks; and

f. any additional legal authority upon which LEAF relies for the relief it seeks.

LEAF objects to interrogatories 10b - 10f (inclusive) as calling for information that is privileged as legal work product.

11. Please explain in detail how LEAF's pled interests in this case meet the two pronged test for substantial interests articulated in <u>Agrico Chemical Company v. Department of Environmental Regulation</u>, 406 So.2d 478 (1st DCA 1981).

LEAF objects to this question as calling for information that is not relevant, in that FPL waived any right to challenge LEAF's standing since it raised no objection to LEAF's Petition to Intervene and did not timely appeal the Commission order granting LEAF's Petition to Intervene. LEAF also objects to this question as calling for information that is privileged as legal work product

12. Please explain in detail how the decision was made for LEAF to request to intervene in Docket Nos. 971004-EG, 971005-EG, 971006-EG and 971007-EG, identifying all the persons participating, including LEAF and LEAF staff, LEAF members and persons or organizations outside of LEAF.

LEAF objects to this question as calling for information that is not relevant and not calculated to lead to the discovery of admissible evidence. Notwithstanding, and without waiving said objection, LEAF states that its decision to intervene in this case followed LEAF's internal procedures.

13. Please explain in detail the relationships between LEAF and the Pace University Energy Project and identify all documents that explain that relationship.

LEAF objects to this question as calling for information that is irrelevant and not calculated to lead to the discovery of admissible evidence in this case.

14. Please explain in detail LEAF's understanding of how DSM affects FPL's:

a) total system fuel use;

4, • =

b) total system air emission.

LEAF objects to Interrogatories 14a and 14b as vague because the question does not describe the DSM referred to.

15. Please state the DSM goals which LEAF believes are appropriate for FPL for the years 2000-2009 and identify all analyses supporting such goals.

The goals LEAF believes are appropriate for FPL are not known.

16. Please identify which generating units in FPL's "Supply Only" generation expansion plan presented in Dr. Sim's testimony could be avoided by cost-effective DSM.

LEAF objects to this question as unduly burdensome.

17. If the generating units LEAF identified in response to Interrogatory 16 were avoided with DSM, please state whether FPL's total system fuel use and air emissions would increase or decrease and identify all analyses supporting these conclusions.

See response to Interrogatory 16.

18. Please identify every DSM measure LEAF believes FPL did not analyze but should have analyzed in developing FPL's estimate of reasonably achievable DSM savings potential, and for each such measure, state:

- a. the measure's KWH savings (per participant);
- b. the measure's summer and winter KW savings (per participant);
- c. the measure's administrative cost (in \$/participant); and
- d. the measure's participant cost;
- e. the source of the data for each response to (a) through (d);
- f. the reasons the measures should have been evaluated.

LEAF is evaluating and conducting discovery on FPL's filings to ascertain what measures FPL tested for cost effectiveness. Since that evaluation is not complete, LEAF does not know which measures FPL did not analyze but should have and cannot respond to FPL's questions about them. Nonetheless, the following describes the measures which LEAF believes merit cost effectiveness evaluation because they have potential as a utility program. To the extent FPL did not so evaluate the cost effectiveness of said measures for this proceeding, LEAF believes it should have.

FPL should run cost effectiveness tests on each measure identified in Order No.: PSC-93-1679-PCO-EG as UP, CUE or a LEAF Supplemental measure, and on each measure now included in FPL's Commission-approved DSM programs that were not so identified in said Order ("currently offered measures"). Cost effectiveness evaluation is also warranted for other measures which the Commission, to follow up on directives in the last goal-setting proceeding or otherwise, determines should be considered in this case (e.g., solar/ natural gas substitution, solar green pricing, low income, or R&D measures).

Measure cost and savings data should conform to the best available information and, were sufficient information unavailable, FPL should compile it through appropriate investigation or research. The cost and savings data for UP and CUE measures should conform to that used to test these measures in the last goals case, updated to reflect current conditions. FPL's monitoring activities should supply data for "currently offered measures". Data for LEAF supplemental measures should be secured by contacting utilities that have experience with said measures and by reviewing reports or other literature documenting said measures. Early last year LEAF provided FPL with such literature, references thereto, and contacts within such utilities.

19. Please identify all persons who prepared, or assisted in the preparation of, the interrogatories and requests for production submitted by LEAF to FPL in Docket No. 971004-EG, and state which

interrogatories and request for production each such person prepared or assisted in the preparation of.

Debra Swim prepared each interrogatory and request. Paul Chernick, Jonathan Wallach, and Susan Geller assisted with each interrogatory and request, except that only Paul Chernick and Susan Geller assisted with interrogatory numbers 89 - 95 and associated requests; only Jonathan Wallach assisted with interrogatory numbers 1 - 6, 80 - 88 and associated requests; and only Susan Geller assisted with interrogatory numbers 106 - 111 and associated requests.

I HEREBY CERTIFY that I am authorized to answer these interrogatories on behalf of Legal Environmental Assistance Foundation, Inc., and that the answers to the interrogatories are true and correct.

Debra Swim

BY: Debra Swim, Attorney

STATE OF FLORIDA COUNTY OF LEON

BEFORE ME THE UNDERSIGNED AUTHORITY, personally appeared Debra Swim who, being first duly sworn, deposes and says that s/he has read the foregoing answers and that they are true.

SWORN AND SUBSCRIBED BEFORE ME this _____ day of _____, 1999.

NOTARY PUBLIC. STATE OF FLORIDA AT LARGE

Alt (1993) de constant Part Contractorio de constant El Part Contractorio de constant El Part Constant Part constant Mensor Part Constantens And the second second

Qualifications of

PAUL L. CHERNICK

Resource Insight, Inc. 347 Broadway Cambridge, Massachusetts 02139-1715

SUMMARY OF PROFESSIONAL EXPERIENCE

President, Resource Insight, Inc. Consults and testifies in utility and insur-1986ance economics. Reviews utility supply-planning processes and outcomes: as-Present sesses prudence of prior power planning investment decisions, identifies excess generating capacity, analyzes effects of power-pool-pricing rules on equity and utility incentives. Reviews electric-utility rate design. Estimates magnitude and cost of future load growth. Designs and evaluates conservation programs for electric, natural-gas, and water utilities, including hook-up charges and conservation cost recovery mechanisms. Determines avoided costs due to cogenerators. Evaluates cogeneration rate risk. Negotiates cogeneration contracts. Reviews management and pricing of district heating systems. Determines fair profit margins for automobile and workers' compensation insurance lines, incorporating reward for risk, return on investments, and tax effects. Determines profitability of transportation services. Advises regulatory commissions in least-cost planning, rate design, and cost allocation.

- 1981–86 Research Associate, Analysis and Inference, Inc. (Consultant, 1980–81). Researched, advised, and testified in various aspects of utility and insurance regulation. Designed self-insurance pool for nuclear decommissioning; estimated probability and cost of insurable events, and rate levels; assessed alternative rate designs. Projected nuclear power plant construction, operation, and decommissioning costs. Assessed reasonableness of earlier estimates of nuclear power plant construction schedules and costs. Reviewed prudence of utility construction decisions. Consulted on utility rate-design issues, including small-power-producer rates; retail natural-gas rates; public-agency electric rates, and comprehensive electric-rate design for a regional power agency. Developed electricity cost allocations between customer classes. Reviewed district-heating-system efficiency. Proposed power-plant performance standards. Analyzed auto-insurance profit requirements. Designed utility-financed, decentralized conservation program. Analyzed cost-effectiveness of transmission lines.
- 1977-81 Utility Rate Analyst, Massachusetts Attorney General. Analyzed utility filings and prepared alternative proposals. Participated in rate negotiations, discovery, cross-examination, and briefing. Provided extensive expert testimony before various regulatory agencies. Topics included demand forecasting, rate design, marginal costs, time-of-use rates, reliability issues, power-pool operations, nuclear-power cost projections, power-plant cost-benefit analysis, energy conservation, and alternative-energy development.

EDUCATION

SM, Technology and Policy Program, Massachusetts Institute of Technology, February 1978.

SB, Civil Engineering Department, Massachusetts Institute of Technology, June 1974.

HONORS

Chi Epsilon (Civil Engineering)

Tau Beta Pi (Engineering)

Sigma Xi (Research)

Institute Award, Institute of Public Utilities, 1981.

PUBLICATIONS

"Environmental Regulation in the Changing Electric-Utility Industry" (with Rachel Brailove), International Association for Energy Economics Seventeenth Annual North American Conference (96–105). Cleveland, Ohio: USAEE. 1996.

"The Price is Right: Restructuring Gain from Market Valuation of Utility Generating Assets" (with Jonathan Wallach), International Association for Energy Economics Seventeenth Annual North American Conference (345–352). Cleveland, Ohio: USAEE. 1996.

"The Future of Utility Resource planning: Delivering Energy Efficiency through Distributed Utilities" (with Jonathan Wallach), International Association for Energy Economics Seventeenth Annual North American Conference (460–469). Cleveland, Ohio: USAEE. 1996.

"The Future of Utility Resource Planning: Delivering Energy Efficiency through Distribution Utilities" (with Jonathan Wallach), *1996 Summer Study on Energy Efficiency in Buildings*, Washington: American Council for an Energy-Efficient Economy 7(7.47–7.55). 1996.

"The Allocation of DSM Costs to Rate Classes," *Proceedings of the Fifth National Conference on Integrated Resource Planning*. Washington: National Association of Regulatory Utility Commissioners. May 1994.

"Environmental Externalities: Highways and Byways" (with Bruce Biewald and William Steinhurst), *Proceedings of the Fifth National Conference on Integrated Resource Planning*. Washington: National Association of Regulatory Utility Commissioners. May 1994.

"The Transfer Loss is All Transfer, No Loss" (with Jonathan Wallach), The *Electricity Journal* 6:6 (July 1993).

"Benefit-Cost Ratios Ignore Interclass Equity" (with others), DSM Quarterly, Spring 1992.

4 • •

"ESCos or Utility Programs: Which Are More Likely to Succeed?" (with Sabrina Birner), *The Electricity Journal* 5:2, March 1992.

"Determining the Marginal Value of Greenhouse Gas Emissions" (with Jill Schoenberg), Energy Developments in the 1990s: Challenges Facing Global/Pacific Markets, Vol. II, July 1991.

"Monetizing Environmental Externalities for Inclusion in Demand-Side Management Programs" (with E. Caverhill), *Proceedings from the Demand-Side Management and the Global Environment Conference*, April 1991.

"Accounting for Externalities" (with Emily Caverhill). *Public Utilities Fortnightly* 127(5), March 1 1991.

"Methods of Valuing Environmental Externalities" (with Emily Caverhill), *The Electricity Journal* 4(2), March 1991.

"The Valuation of Environmental Externalities in Energy Conservation Planning" (with Emily Caverhill), *Energy Efficiency and the Environment: Forging the Link*. American Council for an Energy-Efficient Economy; Washington: 1991.

"The Valuation of Environmental Externalities in Utility Regulation" (with Emily Caverhill), External Environmental Costs of Electric Power: Analysis and Internalization. Springer-Verlag; Berlin: 1991.

"Analysis of Residential Fuel Switching as an Electric Conservation Option" (with Eric Espenhorst and Ian Goodman), *Gas Energy Review*, December 1990.

"Externalities and Your Electric Bill," The Electricity Journal, October 1990, p. 64.

"Monetizing Externalities in Utility Regulations: The Role of Control Costs" (with Emily Caverhill), in *Proceedings from the NARUC National Conference on Environmental Externalities*, October 1990.

"Monetizing Environmental Externalities in Utility Planning" (with Emily Caverhill), in *Proceedings from the NARUC Biennial Regulatory Information Conference*, September 1990.

"Analysis of Residential Fuel Switching as an Electric Conservation Option" (with Eric Espenhorst and Ian Goodman), in *Proceedings from the NARUC Biennial Regulatory Information Conference*, September 1990.

"A Utility Planner's Checklist for Least-Cost Efficiency Investment" (with John Plunkett) in *Proceedings from the NARUC Biennial Regulatory Information Conference*, September 1990.

Environmental Costs of Electricity (with Richard Ottinger et al.). Oceana; Dobbs Ferry, New York: September 1990.

"Demand-Side Bidding: A Viable Least-Cost Resource Strategy" (with John Plunkett and Jonathan Wallach), in *Proceedings from the NARUC Biennial Regulatory Information Conference*, September 1990.

13 Y -

"Incorporating Environmental Externalities in Evaluation of District Heating Options" (with Emily Caverhill), *Proceedings from the International District Heating and Cooling Association 81st Annual Conference*, June 1990.

"A Utility Planner's Checklist for Least-Cost Efficiency Investment," (with John Plunkett), *Proceedings from the Canadian Electrical Association Demand-Side Management Conference*, June 1990.

"Incorporating Environmental Externalities in Utility Planning" (with Emily Caverhill), Canadian Electrical Association Demand Side Management Conference, May 1990.

"Is Least-Cost Planning for Gas Utilities the Same as Least-Cost Planning for Electric Utilities?" in *Proceedings of the NARUC Second Annual Conference on Least-Cost Planning*, September 10–13 1989.

"Conservation and Cost-Benefit Issues Involved in Least-Cost Planning for Gas Utilities," in *Least Cost Planning and Gas Utilities: Balancing Theories with Realities*, Seminar proceedings from the District of Columbia Natural Gas Seminar, May 23 1989.

"The Role of Revenue Losses in Evaluating Demand-Side Resources: An Economic Re-Appraisal" (with John Plunkett), *Summer Study on Energy Efficiency in Buildings, 1988*, American Council for an Energy Efficient Economy, 1988.

"Quantifying the Economic Benefits of Risk Reduction: Solar Energy Supply Versus Fossil Fuels," in *Proceedings of the 1988 Annual Meeting of the American Solar Energy Society*, American Solar Energy Society, Inc., 1988, pp. 553–557.

"Capital Minimization: Salvation or Suicide?," in I. C. Bupp, ed., *The New Electric Power Business*, Cambridge Energy Research Associates, 1987, pp. 63–72.

"The Relevance of Regulatory Review of Utility Planning Prudence in Major Power Supply Decisions," in *Current Issues Challenging the Regulatory Process*, Center for Public Utilities, Albuquerque, New Mexico, April 1987, pp. 36–42.

"Power Plant Phase-In Methodologies: Alternatives to Rate Shock," in *Proceedings of the Fifth NARUC Biennial Regulatory Information Conference*, National Regulatory Research Institute, Columbus, Ohio, September 1986, pp. 547–562.

"Assessing Conservation Program Cost-Effectiveness: Participants, Non-participants, and the Utility System" (with A. Bachman), *Proceedings of the Fifth NARUC Biennial Regulatory Information Conference*, National Regulatory Research Institute, Columbus, Ohio, September 1986, pp. 2093–2110.

"Forensic Economics and Statistics: An Introduction to the Current State of the Art" (with Eden, P., Fairley, W., Aller, C., Vencill, C., and Meyer, M.), *The Practical Lawyer*, June 1 1985, pp. 25–36.

"Power Plant Performance Standards: Some Introductory Principles," *Public Utilities Fortnightly*, April 18 1985, pp. 29–33.

"Opening the Utility Market to Conservation: A Competitive Approach," *Energy Industries in Transition, 1985–2000,* Proceedings of the Sixth Annual North American Meeting of the International Association of Energy Economists, San Francisco, California, November 1984, pp. 1133–1145.

"Insurance Market Assessment of Technological Risks" (with Meyer, M., and Fairley, W) Risk Analysis in the Private Sector, pp. 401–416, Plenum Press, New York 1985.

"Revenue Stability Target Ratemaking," *Public Utilities Fortnightly*, February 17 1983, pp. 35–39.

"Capacity/Energy Classifications and Allocations for Generation and Transmission Plant" (with M. Meyer), Award Papers in Public Utility Economics and Regulation, Institute for Public Utilities, Michigan State University 1982.

Design, Costs and Acceptability of an Electric Utility Self-Insurance Pool for Assuring the Adequacy of Funds for Nuclear Power Plant Decommissioning Expense, (with Fairley, W., Meyer, M., and Scharff, L.) (NUREG/CR-2370), U.S. Nuclear Regulatory Commission, December 1981.

Optimal Pricing for Peak Loads and Joint Production: Theory and Applications to Diverse Conditions (Report 77-1), Technology and Policy Program, Massachusetts Institute of Technology, September 1977.

REPORTS

ц I I

"Distributed Integrated-Resource-Planning Guidelines." 1977. Appendix 4 of "The Power to Save: A Plan to Transform Vermont's Energy-Efficiency Markets," submitted to the Vermont PSB in Docket No. 5854. Montpelier: Vermont DPS.

"Restructuring the Electric Utilities of Maryland: Protecting and Advancing Consumer Interests" (with Jonathan Wallach, Susan Geller, John Plunkett, Roger Colton, Peter Bradford, Bruce Biewald, and David Wise). 1997. Baltimore, Maryland: Maryland Office of People's Counsel.

"Comments of the New Hampshire Office of Consumer Advocate on Restructuring New Hampshire's Electric-Utility Industry" (with Bruce Biewald and Jonathan Wallach). 1996. Concord, N.H.: NH OCA.

"Estimation of Market Value, Stranded Investment, and Restructuring Gains for Major Massachusetts Utilities" (with Susan Geller, Rachel Brailove, Jonathan Wallach, and Adam Auster). 1996. On behalf of the Massachusetts Attorney General (Boston).

From Here to Efficiency: Securing Demand-Management Resources (with Emily Caverhill, James Peters, John Plunkett, and Jonathan Wallach). 1993. 5 vols. Harrisburg, Penn: Pennsylvania Energy Office.

"Analysis Findings, Conclusions, and Recommendations," vol. 1 of "Correcting the Imbalance of Power: Report on Integrated Resource Planning for Ontario Hydro" (with Plunkett, John, and Jonathan Wallach), December 1992.

4 .

"Estimation of the Costs Avoided by Potential Demand-Management Activities of Ontario Hydro," December 1992.

"Review of the Elizabethtown Gas Company's 1992 DSM Plan and the Demand-Side Management Rules" (with Jonathan Wallach, John Plunkett, James Peters, Susan Geller, Blair. Hamilton, and Andrew Shapiro). 1992. Report to the New Jersey Department of Public Advocate.

Environmental Externalities Valuation and Ontario Hydro's Resource Planning (with E. Caverhill and R. Brailove), 3 vols.; prepared for the Coalition of Environmental Groups for a Sustainable Energy Future, October 1992.

"Review of Jersey Central Power & Light's 1992 DSM Plan and the Demand-Side Management Rules" (with Jonathan Wallach et al.); Report to the New Jersey Department of Public Advocate, June 1992.

"The AGREA Project Critique of Externality Valuation: A Brief Rebuttal," March 1992.

"The Potential Economic Benefits of Regulatory NO_X Valuation for Clean Air Act Ozone Compliance in Massachusetts," March 1992.

"Initial Review of Ontario Hydro's Demand-Supply Plan Update" (with David Argue et al.), February 1992.

"Report on the Adequacy of Ontario Hydro's Estimates of Externality Costs Associated with Electricity Exports" (with Emily Caverhill), January 1991.

"Comments on the 1991–1992 Annual and Long Range Demand Side Management Plans of the Major Electric Utilities," (with John Plunkett et al.), September 1990.

"Power by Efficiency: An Assessment of Improving Electrical Efficiency to Meet Jamaica's Power Needs," (with Conservation Law Foundation, et al.), June 1990.

"Analysis of Fuel Substitution as an Electric Conservation Option," (with Ian Goodman and Eric Espenhorst), Boston Gas Company, December 22 1989.

"The Development of Consistent Estimates of Avoided Costs for Boston Gas Company, Boston Edison Company, and Massachusetts Electric Company" (with Eric Espenhorst), Boston Gas Company, December 22 1989.

"The Valuation of Externalities from Energy Production, Delivery, and Use: Fall 1989 Update" (with Emily Caverhill), Boston Gas Company, December 22 1989.

"Conservation Potential in the State of Minnesota," (with Ian Goodman) Minnesota Department of Public Service, June 16 1988.

"Review of NEPOOL Performance Incentive Program," Massachusetts Energy Facilities Siting Council, April 12 1988. "Application of the DPU's Used-and-Useful Standard to Pilgrim 1" (With C. Wills and M. Meyer), Massachusetts Executive Office of Energy Resources, October 1987.

"Constructing a Supply Curve for Conservation: An Initial Examination of Issues and Methods," Massachusetts Energy Facilities Siting Council, June 1985.

"Final Report: Rate Design Analysis," Pacific Northwest Electric Power and Conservation Planning Council, December 18 1981.

PRESENTATIONS

ų **•** •

"The Economic and Environmental Benefits of Gas IRP: FERC 636 and Beyond." Presentation as part of the Ohio Office of Energy Efficiency's seminar, "Gas Utility Integrated Resource Planning," April 1994.

"Cost Recovery and Utility Incentives." Day-long presentation as part of the Demand-Side-Management Training Institute's workshop, "DSM for Public Interest Groups," October 1993.

"Cost Allocation for Utility Ratemaking." With Susan Geller. Day-long workshop for the staff of the Connecticut Department of Public Utility Control, October 1993.

"Comparing and Integrating DSM with Supply." Day-long presentation as part of the Demand-Side-Management Training Institute's workshop, "DSM for Public Interest Groups," October 1993.

"DSM Cost Recovery and Rate Impacts." Presentation as part of "Effective DSM Collaborative Processes," a week-long training session for Ohio DSM advocates sponsored by the Ohio Office of Energy Efficiency, August 1993.

"Cost-Effectiveness Analysis." Presentation as part of "Effective DSM Collaborative Processes," a week-long training session for Ohio DSM advocates sponsored by the Ohio Office of Energy Efficiency, August 1993.

"Environmental Externalities: Current Approaches and Potential Implications for District Heating and Cooling" (with R. Brailove), International District Heating and Cooling Association 84th Annual Conference; June 1993.

"Using the Costs of Required Controls to Incorporate the Costs of Environmental Externalities in Non-Environmental Decision-Making." Presentation at the American Planning Association 1992 National Planning Conference; presentation cosponsored by the Edison Electric Institute. May 1992.

"Cost Recovery and Decoupling" and "The Clean Air Act and Externalities in Utility Resource Planning" panels (session leader), DSM Advocacy Workshop; April 15 1992.

"Overview of Integrated Resources Planning Procedures in South Carolina and Critique of South Carolina Demand Side Management Programs," Energy Planning Workshops; Columbia, S.C.; October 21 1991;

"Least Cost Planning and Gas Utilities." Conservation Law Foundation Utility Energy Efficiency Advocacy Workshop; Boston, February 28 1991.

s • •

"Least-Cost Planning in a Multi-Fuel Context," NARUC Forum on Gas Integrated Resource Planning; Washington, D.C., February 24 1991.

"Accounting for Externalities: Why, Which and How?" Understanding Massachusetts' New Integrated Resource Management Rules; Needham, Massachusetts, November 9 1990.

"Increasing Market Share Through Energy Efficiency." New England Gas Association Gas Utility Managers' Conference; Woodstock, Vermont, September 10 1990.

"Quantifying and Valuing Environmental Externalities." Presentation at the Lawrence Berkeley Laboratory Training Program for Regulatory Staff, sponsored by the U.S. Department of Energy's Least-Cost Utility Planning Program; Berkeley, California, February 2 1990;

"Conservation in the Future of Natural Gas Local Distribution Companies," District of Columbia Natural Gas Seminar; Washington, D.C., May 23 1989.

"Conservation and Load Management for Natural Gas Utilities," Massachusetts Natural Gas Council; Newton, Massachusetts, April 3 1989.

New England Conference of Public Utilities Commissioners, Environmental Externalities Workshop; Portsmouth, N.H., January 22–23 1989.

"Assessment and Valuation of External Environmental Damages," New England Utility Rate Forum; Plymouth, Massachusetts, October 11 1985; "Lessons from Massachusetts on Long Term Rates for QFs".

"Reviewing Utility Supply Plans," Massachusetts Energy Facilities Siting Council; Boston, Massachusetts, May 30 1985.

"Power Plant Performance," National Association of State Utility Consumer Advocates; Williamstown, Massachusetts, August 13 1984.

"Utility Rate Shock," National Conference of State Legislatures; Boston, Massachusetts, August 6 1984.

"Review and Modification of Regulatory and Rate Making Policy," National Governors' Association Working Group on Nuclear Power Cost Overruns; Washington, D.C., June 20 1984.

"Review and Modification of Regulatory and Rate Making Policy," Annual Meeting of the American Association for the Advancement of Science, Session on Monitoring for Risk Management; Detroit, Michigan, May 27 1983.

ADVISORY ASSIGNMENTS TO REGULATORY COMMISSIONS

District of Columbia Public Service Commission, Docket No. 834, Phase II; Least-cost planning procedures and goals; August 1987 to March 1988.

Connecticut Department of Public Utility Control, Docket No. 87-07-01, Phase 2; Rate design and cost allocations; March 1988 to June 1989.

EXPERT TESTIMONY

Q • •

- 1. MEFSC 78-12/MDPU 19494, Phase I; Boston Edison 1978 forecast; Massachusetts Attorney General; June 12 1978.
- 2. MEFSC 78-17; Northeast Utilities 1978 forecast; Massachusetts Attorney General; September 29 1978.
- **3.** MEFSC 78-33; Eastern Utilities Associates 1978 forecast; Massachusetts Attorney General; November 27 1978.
- 4. MDPU 19494; Phase II; Boston Edison Company Construction Program; Massachusetts Attorney General; April 1 1979.
- 5. MDPU 19494; Phase II; Boston Edison Company Construction Program; Massachusetts Attorney General; April 1 1979.
- 6. ASLB, NRC 50-471; Pilgrim Unit 2, Boston Edison Company; Commonwealth of Massachusetts; June 29 1979.
- 7. MDPU 19845; Boston Edison Time-of-Use Rate Case; Massachusetts Attorney General; December 4 1979.
- 8. MDPU 20055; Petition of Eastern Utilities Associates, New Bedford G. & E., and Fitchburg G. & E. to purchase additional shares of Seabrook Nuclear Plant; Mass-achusetts Attorney General; January 23 1980.
- 9. MDPU 20248; Petition of MMWEC to Purchase Additional Share of Seabrook Nuclear Plant; Massachusetts Attorney General; June 2 1980.
- **10. MDPU** 200; Massachusetts Electric Company Rate Case; Massachusetts Attorney General; June 16 1980.
- 11. MEFSC 79-33; Eastern Utilities Associates 1979 Forecast; Massachusetts Attorney General; July 16 1980.
- 12. MDPU 243; Eastern Edison Company Rate Case; Massachusetts Attorney General; August 19 1980.
- 13. Texas PUC 3298; Gulf States Utilities Rate Case; East Texas Legal Services; August 25 1980.
- 14. MEFSC 79-1; Massachusetts Municipal Wholesale Electric Company Forecast; Massachusetts Attorney General; November 5 1980.

15. MDPU 472; Recovery of Residential Conservation Service Expenses; Massachusetts Attorney General; December 12 1980.

ų • •

- 16. MDPU 535; Regulations to Carry Out Section 210 of PURPA; Massachusetts Attorney General; January 26 1981 and February 13 1981.
- 17. MEFSC 80-17; Northeast Utilities 1980 Forecast; Massachusetts Attorney General; March 12 1981 (not presented).
- **18. MDPU** 558; Western Massachusetts Electric Company Rate Case; Massachusetts Attorney General; May 1981.
- **19. MDPU** 1048; Boston Edison Plant Performance Standards; Massachusetts Attorney General; May 7 1982.
- **20.** DCPSC FC785; Potomac Electric Power Rate Case; DC People's Counsel; July 29 1982.
- 21. NHPUC DE1-312; Public Service of New Hampshire-Supply and Demand; Conservation Law Foundation, et al.; October 8 1982.
- 22. Massachusetts Division of Insurance; Hearing to Fix and Establish 1983 Automobile Insurance Rates; Massachusetts Attorney General; October 1982.
- 23. Illinois Commerce Commission 82-0026; Commonwealth Edison Rate Case; Illinois Attorney General; October 15 1982.
- 24. New Mexico PSC 1794; Public Service of New Mexico Application for Certification; New Mexico Attorney General; May 10 1983.
- 25. Connecticut Public Utility Control Authority 830301; United Illuminating Rate Case; Connecticut Consumers Counsel; June 17 1983.
- 26. MDPU 1509; Boston Edison Plant Performance Standards; Massachusetts Attorney General; July 15 1983.
- 27. Massachusetts Division of Insurance; Hearing to Fix and Establish 1984 Automobile Insurance Rates; Massachusetts Attorney General; October 1983.
- 28. Connecticut Public Utility Control Authority 83-07-15; Connecticut Light and Power Rate Case; Alloy Foundry; October 3 1983.
- 29. MEFSC 83-24; New England Electric System Forecast of Electric Resources and Requirements; Massachusetts Attorney General; November 14 1983, Rebuttal, February 2 1984.
- **30.** Michigan PSC U-7775; Detroit Edison Fuel Cost Recovery Plan; Public Interest Research Group in Michigan; February 21 1984.
- **31. MDPU** 84-25; Western Massachusetts Electric Company Rate Case; Massachusetts Attorney General; April 6 1984.

32. MDPU 84-49 and 84-50; Fitchburg Gas & Electric Financing Case; Massachusetts Attorney General; April 13 1984.

(jr • •

- **33.** Michigan PSC U-7785; Consumers Power Fuel Cost Recovery Plan; Public Interest Research Group in Michigan; April 16 1984.
- 34. FERC ER81-749-000 and ER82-325-000; Montaup Electric Rate Cases; Massachusetts Attorney General; April 27 1984.
- 35. Maine PUC 84-113; Seabrook 1 Investigation; Maine Public Advocate; September 13 1984.
- **36. MDPU** 84-145; Fitchburg Gas and Electric Rate Case; Massachusetts Attorney General; November 6 1984.
- 37. Pennsylvania PUC R-842651; Pennsylvania Power and Light Rate Case; Pennsylvania Consumer Advocate; November 1984.
- **38.** NHPUC 84-200; Seabrook Unit 1 Investigation; New Hampshire Public Advocate; November 15 1984.
- **39.** Massachusetts Division of Insurance; Hearing to Fix and Establish 1985 Automobile Insurance Rates; Massachusetts Attorney General; November 1984.
- **40. MDPU** 84-152; Seabrook Unit 1 Investigation; Massachusetts Attorney General; December 12 1984.
- 41. Maine PUC 84-120; Central Maine Power Rate Case; Maine PUC Staff; December 11 1984.
- **42.** Maine PUC 84-113; Seabrook 2 Investigation; Maine PUC Staff; December 14 1984.
- **43. MDPU** 1627; Massachusetts Municipal Wholesale Electric Company Financing Case; Massachusetts Executive Office of Energy Resources; January 14 1985.
- 44. Vermont PSB 4936; Millstone 3; Costs and In-Service Date; Vermont Department of Public Service; January 21 1985.
- **45.** MDPU 84-276; Rules Governing Rates for Utility Purchases of Power from Qualifying Facilities; Massachusetts Attorney General; March 25 1985, and October 18 1985.
- 46. MDPU 85-121; Investigation of the Reading Municipal Light Department; Wilmington (MA) Chamber of Commerce; November 12 1985.
- **47.** Massachusetts Division of Insurance; Hearing to Fix and Establish 1986 Automobile Insurance Rates; Massachusetts Attorney General and State Rating Bureau; November 1985.
- **48.** New Mexico PSC 1833, Phase II; El Paso Electric Rate Case; New Mexico Attorney General; December 23 1985.

49. Pennsylvania PUC R-850152; Philadelphia Electric Rate Case; Utility Users Committee and University of Pennsylvania; January 14 1986.

v • •

- **50.** MDPU 85-270; Western Massachusetts Electric Rate Case; Massachusetts Attorney General; March 19 1986.
- 51. Pennsylvania PUC R-850290; Philadelphia Electric Auxiliary Service Rates; Albert Einstein Medical Center, University of Pennsylvania and AMTRAK; March 24 1986.
- **52.** New Mexico PSC 2004; Public Service of New Mexico, Palo Verde Issues; New Mexico Attorney General; May 7 1986.
- 53. Illinois Commerce Commission 86-0325; Iowa-Illinois Gas and Electric Co. Rate Investigation; Illinois Office of Public Counsel; August 13 1986.
- 54. New Mexico PSC 2009; El Paso Electric Rate Moderation Program; New Mexico Attorney General; August 18 1986. (Not presented).
- 55. City of Boston, Public Improvements Commission; Transfer of Boston Edison District Heating Steam System to Boston Thermal Corporation; Boston Housing Authority; December 18 1986.
- 56. Massachusetts Division of Insurance; Hearing to Fix and Establish 1987 Automobile Insurance Rates; Massachusetts Attorney General and State Rating Bureau; December 1986 and January 1987.
- 57. MDPU 87-19; Petition for Adjudication of Development Facilitation Program; Hull (MA) Municipal Light Plant; January 21 1987.
- 58. New Mexico PSC 2004; Public Service of New Mexico Nuclear Decommissioning Fund; New Mexico Attorney General; February 19 1987.
- **59.** MDPU 86-280; Western Massachusetts Electric Rate Case; Massachusetts Energy Office; March 9 1987.
- **60.** Massachusetts Division of Insurance 87-9; 1987 Workers' Compensation Rate Filing; State Rating Bureau; May 1987.
- 61. Texas PUC 6184; Economic Viability of South Texas Nuclear Plant #2; Committee for Consumer Rate Relief; August 17 1987.
- 62. Minnesota PUC ER-015/GR-87-223; Minnesota Power Rate Case; Minnesota Department of Public Service; August 17 1987.
- **63.** Massachusetts Division of Insurance 87-27; 1988 Automobile Insurance Rates; Massachusetts Attorney General and State Rating Bureau; September 2 1987. Rebuttal October 8 1987.
- 64. MDPU 88-19; Power Sales Contract from Riverside Steam and Electric to Western Massachusetts Electric; Riverside Steam and Electric; November 4 1987.

65. Massachusetts Division of Insurance 87-53; 1987 Workers' Compensation Rate Refiling; State Rating Bureau; December 14 1987.

e . . .

- 66. Massachusetts Division of Insurance; 1987 and 1988 Automobile Insurance Remand Rates; Massachusetts Attorney General and State Rating Bureau; February 5 1988.
- 67. MDPU 86-36; Investigation into the Pricing and Ratemaking Treatment to be Afforded New Electric Generating Facilities which are not Qualifying Facilities; Conservation Law Foundation; May 2 1988.
- 68. MDPU 88-123; Petition of Riverside Steam & Electric Company; Riverside Steam and Electric Company; May 18 1988, and November 8 1988.
- 69. MDPU 88-67; Boston Gas Company; Boston Housing Authority; June 17 1988.
- 70. Rhode Island PUC Docket 1900; Providence Water Supply Board Tariff Filing; Conservation Law Foundation, Audubon Society of Rhode Island, and League of Women Voters of Rhode Island; June 24 1988.
- 71. Massachusetts Division of Insurance 88-22; 1989 Automobile Insurance Rates; Massachusetts Attorney General and State Rating Bureau; Profit Issues, August 12 1988, supplemented August 19 1988; Losses and Expenses, September 16 1988.
- 72. Vermont PSB Docket No. 5270, Module 6; Investigation into Least-Cost Investments, Energy Efficiency, Conservation, and the Management of Demand for Energy; Conservation Law Foundation, Vermont Natural Resources Council, and Vermont Public Interest Research Group; September 26 1988.
- **73.** Vermont House of Representatives, Natural Resources Committee; House Act 130; "Economic Analysis of Vermont Yankee Retirement"; Vermont Public Interest Research Group; February 21 1989.
- 74. MDPU 88-67, Phase II; Boston Gas Company Conservation Program and Rate Design; Boston Gas Company; March 6 1989.
- 75. Vermont PSB Docket No. 5270; Status Conference on Conservation and Load Management Policy Settlement; Central Vermont Public Service, Conservation Law Foundation, Vermont Natural Resources Council, Vermont Public Interest Research Group, and Vermont Department of Public Service; May 1 1989.
- 76. Boston Housing Authority Court 05099; Gallivan Boulevard Task Force vs. Boston Housing Authority, et al.; Boston Housing Authority; June 16 1989.
- 77. MDPU 89-100; Boston Edison Rate Case; Massachusetts Energy Office; June 30 1989.

- **78. MDPU** 88-123; Petition of Riverside Steam and Electric Company; Riverside Steam and Electric; July 24 1989. Rebuttal, October 3 1989.
- 79. MDPU 89-72; Statewide Towing Association, Police-Ordered Towing Rates; Massachusetts Automobile Rating Bureau; September 13 1989.
- 80. Vermont PSB 5330; Application of Vermont Utilities for Approval of a Firm Power and Energy Contract with Hydro-Quebec; Conservation Law Foundation, Vermont Natural Resources Council, Vermont Public Interest Research Group; December 19 1989. Surrebuttal February 6 1990.
- 81. MDPU 89-239; Inclusion of Externalities in Energy Supply Planning, Acquisition and Dispatch for Massachusetts Utilities; December 1989; April 1990; May 1990.
- 82. California PUC; Incorporation of Environmental Externalities in Utility Planning and Pricing; Coalition of Energy Efficient and Renewable Technologies; February 21 1990.
- 83. Illinois Commerce Commission Docket 90-0038; Proceeding to Adopt a Least Cost Electric Energy Plan for Commonwealth Edison Company; City of Chicago; May 25 1990. Joint rebuttal testimony with David Birr, August 14 1990.
- 84. Maryland PSC Case No. 8278; Adequacy of Baltimore Gas & Electric's Integrated Resource Plan; Maryland Office of People's Counsel; September 18 1990.
- 85. Indiana Utility Regulatory Commission; Integrated Resource Planning Docket; Indiana Office of Utility Consumer Counselor; November 1 1990.
- **86. MDPU** Dockets 89-141, 90-73, 90-141, 90-194, and 90-270; Preliminary Review of Utility Treatment of Environmental Externalities in October QF Filings; Boston Gas Company; November 5 1990.
- 87. MEFSC 90-12/90-12A; Adequacy of Boston Edison Proposal to Build Combined-Cycle Plant; Conservation Law Foundation; December 14 1990.
- **88.** Maine PUC Docket No. 90-286; Adequacy of Conservation Program of Bangor Hydro Electric; Penobscot River Coalition; February 19 1991.
- 89. Virginia State Corporation Commission Case No. PUE900070; Order Establishing Commission Investigation; Southern Environmental Law Center; March 6 1991.
- **90. MDPU** Docket No. 90-261-A; Economics and Role of Fuel-Switching in the DSM Program of the Massachusetts Electric Company; Boston Gas Company; April 17 1991.
- **91.** Private arbitration; Massachusetts Refusetech Contractual Request for Adjustment to Service Fee; Massachusetts Refusetech; May 13 1991.

92. Vermont PSB Docket No. 5491; Cost-Effectiveness of Central Vermont's Commitment to Hydro Quebec Purchases; Conservation Law Foundation; July 19 1991.

. مر ا

- **93.** South Carolina PSC Docket No. 91-216-E; Cost Recovery of Duke Power's DSM Expenditures; South Carolina Department of Consumer Affairs; September 13 1991. Surrebuttal October 2 1991.
- 94. Maryland PSC Case No. 8241, Phase II; Review of Baltimore Gas & Electric's Avoided Costs; Maryland Office of People's Counsel; September 19 1991.
- **95.** Bucksport Planning Board; AES/Harriman Cove Shoreland Zoning Application; Conservation Law Foundation and Natural Resources Council of Maine; October 1 1991.
- **96. MDPU** Docket No. 91-131; Update of Externalities Values Adopted in Docket 89-239; Boston Gas Company; October 4 1991. Rebuttal, December 13 1991.
- **97.** Florida PSC Docket No. 910759; Petition of Florida Power Corporation for Determination of Need for Proposed Electrical Power Plant and Related Facilities; Floridians for Responsible Utility Growth; October 21 1991.
- **98.** Florida PSC Docket No. 910833-EI; Petition of Tampa Electric Company for a Determination of Need for Proposed Electrical Power Plant and Related Facilities; Floridians for Responsible Utility Growth; October 31 1991.
- **99.** Pennsylvania PUC Dockets I-900005, R-901880; Investigation into Demand Side Management by Electric Utilities; Pennsylvania Energy Office; January 10 1992.
- **100.** South Carolina PSC Docket No. 91-606-E; Petition of South Carolina Electric and Gas for a Certificate of Public Convenience and Necessity for a Coal-Fired Plant; South Carolina Department of Consumer Affairs; January 20 1992.
- MDPU Docket No. 92-92; Adequacy of Boston Edison's Street-Lighting Options; Town of Lexington; June 22 1992.
- 102. South Carolina PSC Docket No. 92-208-E; Integrated Resource Plan of Duke Power Company; South Carolina Department of Consumer Affairs; August 4 1992.
- 103. North Carolina Utilities Commission Docket No. E-100, Sub 64; Integrated Resource Planning Docket; Southern Environmental Law Center; September 29 1992.
- 104. Ontario Environmental Assessment Board Ontario Hydro Demand/Supply Plan Hearings; Environmental Externalities Valuation and Ontario Hydro's Resource Planning (3 vols.); October 1992.

105. Texas PUC Docket No. 110000; Application of Houston Lighting and Power Company for a Certificate of Convenience and Necessity for the DuPont Project; Destec Energy, Inc.; September 28 1992.

an in in

- **106.** Maine Board of Environmental Protection; In the Matter of the Basin Mills Hydroelectric Project Application; Conservation Intervenors; November 16 1992.
- 107. Maryland PSC Case No. 8473; Review of the Power Sales Agreement of Baltimore Gas and Electric with AES Northside; Maryland Office of People's Counsel; November 16 1992.
- **108.** North Carolina Utilities Commission Docket No. E-100, Sub 64; Analysis and Investigation of Least Cost Integrated Resource Planning in North Carolina; Southern Environmental Law Center; November 18 1992.
- **109.** South Carolina PSC Docket No. 92-209-E; In Re Carolina Power & Light Company; South Carolina Department of Consumer Affairs; November 24 1992.
- **110 Florida Department of Environmental Regulation** hearings on the Power Plant Siting Act; Legal Environmental Assistance Foundation, December 1992.
- 111. Maryland PSC Case No. 8487; Baltimore Gas and Electric Company, Electric Rate Case; January 13 1993. Rebuttal Testimony: February 4 1993.
- 112. Maryland PSC Case No. 8179; for Approval of Amendment No. 2 to Potomac Edison Purchase Agreement with AES Warrior Run; Maryland Office of People's Counsel; January 29 1993.
- 112. Michigan PSC Case No. U-10102; Detroit Edison Rate Case; Michigan UnitedA Conservation Clubs; February 17 1993.
- 113. Ohio PUC Dockets No. 91-635-EL-FOR, 92-312-EL-FOR, 92-1172-EL-ECP; Cincinnati, City of Cincinnati, April 1993.
- 114. Michigan PSC Case No. U-10335; Consumers Power Rate Case; Michigan United Conservation Clubs; October 1993.
- 115. Illinois Commerce Commission 92-0268, Electric-Energy Plan for Commonwealth Edison; City of Chicago. Direct testimony, February 1 1994; rebuttal, September 1994.
- 116. FERC Projects Nos. 2422 et al., Application of James River-New Hampshire Electric, Public Service of New Hampshire, for Licensing of Hydro Power; Conservation Law Foundation; 1993.
- 117. Vermont PSB Dockets No. 5270-CV-1,-3, and 5686; Central Vermont Public Service Fuel-Switching and DSM Program Design, on behalf of the Vermont Department of Public Service. Direct, April 1994; rebuttal, June 1994.
- **118.** Florida PSC Dockets 930548-EG–930551–EG, Conservation goals for Florida electric utilities; Legal Environmental Assistance Foundation, Inc. April 1994.

119. Vermont PSB Docket No. 5724, Central Vermont Public Service Corporation rate request; Vermont Department of Public Service. Joint surrebuttal testimony with John Plunkett. August 1994.

- 120. MDPU 94-49, Boston Edison integrated resource-management plan; Massachusetts Attorney General. August 1994.
- 121. Michigan PSC Case No. U-10554, Consumers Power Company DSM Program and Incentive; Michigan Conservation Clubs. November 1994.
- 122. Michigan PSC Case No. U-10702, Detroit Edison Company Cost Recovery, on behalf of the Residential Ratepayers Consortium. December 1994.
- 123. New Jersey Board of Regulatory Commissioners Docket No. EM92030359, Environmental costs of proposed cogeneration; Freehold Cogeneration Associates. November 1994.
- 124. Michigan PSC Case No. U-10671, Detroit Edison Company DSM Programs; Michigan United Conservation Clubs. January 1995.
- 125. Michigan PSC Case No. U-10710, Power-supply-cost-recovery plan of Consumers Power Company; Residential Ratepayers Consortium. January 1995.
- 126. FERC Projects Nos. 2458 and 2572, Bowater–Great Northern Paper hydropower licensing; Conservation Law Foundation. February 1995.
- 127. North Carolina Utilities Commission Docket No. E-100, Sub 74, Duke Power and Carolina Power & Light avoided costs; Hydro-Electric-Power Producer's Group. February 1995.
- 128. New Orleans City Council Docket No. UD-92-2A and -2B, Least-cost IRP for New Orleans Public Service and Louisiana Power & Light; Alliance for Affordable Energy. Direct, February 1995; rebuttal, April 1995.
- 129. DCPSC Formal Case No. 917, II, Prudence of DSM expenditures of Potomac Electric Power Company; Potomac Electric Power Company. Rebuttal testimony, February 1995.
- 130. Ontario Energy Board EBRO 490, DSM cost recovery and lost-revenueadjustment mechanism for Consumers Gas Company; Green Energy Coalition. April 1995.
- 131. New Orleans City Council Docket No. CD-85-1, New Orleans Public Service rate increase; Alliance for Affordable Energy. Rebuttal, May 1995.
- 132. MDPU Docket DPU-95-40, Mass. Electric cost-allocation; Massachusetts Attorney General. June 1995.
- 133. Maryland PSC Case No. 8697, Baltimore Gas & Electric gas rate increase; Maryland Office of People's Counsel. July 1995

134. North Carolina Utilities Commission Docket No. E-2, Sub 669. December 1995.

d • * • -

- **135.** Arizona Commerce Commission Docket No. U-1933-95-317, Tucson Electric Power rate increase; Residential Utility Consumer Office. January 1996.
- Ohio PSC Case No. 95-203-EL-FOR; Campaign for an Energy-Efficient Ohio. February 1996
- 137 Vermont PSB Docket No. 5835; Vermont Department of Public Service. February 1996.
- 138. Maryland PSC Case No. 8720, Washington Gas Light DSM; Maryland Office of People's Counsel. May 1996.
- 139. MDPU in Docket No. DPU 96-70; Massachusetts Attorney General. July 1996.
- 140. MDPU Docket No. DPU 96-60; Massachusetts Attorney General. Direct testimony, July 1996; surrebuttal, August 1996.
- 141. Maryland PSC Case No. 8725; Maryland Office of People's Counsel. July 1996.
- 142. New Hampshire PUC Case No. DR 96-150, Public Service Company of New Hampshire stranded costs; New Hampshire Office of Consumer Advocate. December 1996.
- 143. Ontario Energy Board EBRO 495, LRAM and shared-savings incentive for DSM performance of Consumers Gas; Green Energy Coalition. March 1997.
- New York PSC Case 96-E-0897, Consolidated Edison restructuring plan; City of New York. April 1997.
- 145. Vermont PSB Docket No. 5980, proposed statewide energy plan; Vermont Department of Public Service. Direct, August 1997; rebuttal, December 1997.
- 146. MDPU Docket No. 96-23, Boston Edison restructuring settlement; Utility Workers Union of America. September 1997.
- 147. Vermont PSB Docket No. 5983, Green Mountain Power rate increase; Vermont Department of Public Service. Direct, October 1997; rebuttal, December 1997.
- 148. MDPU Docket No. 97-63, Boston Edison proposed reorganization; Utility Workers Union of America. October 1997.
- 149. MDTE Docket No. 97-111, Commonwealth Energy proposed restructuring; Cape Cod Light Compact. Joint testimony with Jonathan Wallach, January 1998.
- **150.** NH PUC Docket DR 97-241, Connecticut Valley Electric fuel and purchasedpower adjustments; City of Claremont, N.H. February 1998.
- 151. Maryland PSC Case No. 8774; APS-DQE merger; Maryland Office of People's Counsel. February, 1998.

152. Vermont PSB Docket No. 6018, Central Vermont Public Service Co. rate increase; Vermont Department of Public Service. February 1998.

14 + 1.

- **153.** Maine PUC Docket No. 97-580, Central Maine Power restructuring and rates; Maine Office of Public Advocate. May 1998; Surrebuttal, August 1998.
- **154. MDTE** Docket No. 98-89, purchase of Boston Edison municipal streetlighting, Towns of Lexington and Acton. Affidavit, August 1998
- **155.** Vermont PSB Docket No. 6107, Green Mountain Power rate increase, Vermont Department of Public Service. September 1998.
- **156. MDTE** Docket No. 97-120, Western Massachusetts Electric Company proposed restructuring; Massachusetts Attorney General. Joint testimony with Jonathan Wallach, October, 1998. Joint surrebuttal with Jonathan Wallach, January, 1999.
- 157. Maryland PSC Case No. 8794 and 8804; BG&E restructuring and rates; Maryland Office of People's Counsel. Direct, December, 1998; rebuttal, March, 1999.
- **158.** Maryland PSC Case No. 8795; Delmarva Power & Light restructuring and rates; Maryland Office of People's Counsel. December, 1998.
- 159. Maryland PSC Case No. 8797; Potomac Edison Company restructuring and rates; Maryland Office of People's Counsel. Direct, January, 1999; rebuttal, March, 1999.