



COALEX STATE INQUIRY REPORT - 207

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TOPIC: ENVIRONMENTAL EXTERNALITIES

INQUIRY: One of the environmental issues to be discussed at the upcoming American Mining Congress (AMC) convention is "Environmental Externalities: Indirect Taxes on Electricity". California may already have a law dealing with this on their books. Can you locate any existing information on this issue or people to contact for information?

SEARCH RESULTS: Using LEXIS, a number of relevant public utilities cases and articles from energy-related publications were identified. Some California Public Utility Commission documents and industry position papers were obtained from the AMC seminar organizers.

The materials attached cover the issue from a variety of perspectives, such as:

1. Origins and definition of the phrase "environmental externalities".
2. Articles reviewing recent studies and discussing trends among an increasing number of state public utility commissions to include "environmental externalities" in resource planning.
3. EPA and Congressional involvement with the issue.
4. Examples of state public utility commissions documents incorporating environmental externalities into their energy purchasing.

Some introductory information appears below. A list of all of the materials included with the report appears in the "ATTACHMENTS" section.

GENERAL INFORMATION

"Environmental externalities" or "environmental adders" are costs added to the calculation of power prices to account for pollution.

According to the AMC:



"Some state regulatory commissions, including the [California Public Utility Commission], are requiring electric utilities to consider certain environmental externalities in evaluating the need for new generating units or for operating existing units. Utilities are required to assign dollar values to selected environmental externalities and to add those values to the unit costs of each supply option responsible for the impact."

"The environmentalists are strong advocates of the internalization of environmental externalities, particularly regarding fossil fuel production and consumption, to the exclusion of other social and economic externalities. They argue that renewable energy sources such as wind and solar power do not have the same external environmental costs of coal, and that coal-fired electricity remains less expensive than renewables only because the true social costs of using coal are not reflected in its market price."

"The net result of the greater application of so-called environmental externality values could be significant rate increases and displacement of energy markets through the artificial inflation of the costs of certain fuels, particularly coal."

ORIGIN OF THE PHRASE "ENVIRONMENTAL EXTERNALITIES"

In a January 15, 1991 article in *PUBLIC UTILITIES FORTNIGHTLY*, entitled "A Lighthouse in the Desert", Bruce W. Radford described the origin of the phrase:

Nineteenth century economists spoke about the "lighthouse effect". They claimed that private investor capital would never come forward to construct a lighthouse because the benefits of a lighthouse were largely indirect ("external") and accrued only to the society at large. The builder would assume all the cost without receiving much in the way of compensation. And so lighthouse building, fraught with economic externalities, was consigned to government.

Environmental cleanup costs are the modern examples of an economic externality. "But we don't trust the government to fix the problem. Instead, we rely on private industry to clean up its act, with a push and a shove from our legislators and regulators."

ATTACHMENTS

A. American Mining Congress material on "Adverse Impacts of Increased State Adoption of Environmental Externalities" (1992) and other materials relating to California's 1992 Electricity Report (ER 92).

1. Memorandum from James E. Gilchrist to Coal Policy Council, "Adverse Impacts of Increased State Adoption of Environmental Externalities" (January 17, 1992).
2. Letter from Charles R. Imbrecht, Chairman, California Energy Commission to Bill Tucker, Chairman, Wyoming Public Service Commission (November 5, 1991).
3. ELCON publication, "Profiles in Electricity Issues: Externalities".
4. Testimony of James R. Rothwell, BHP-UTAH International Inc., before the California Energy Commission, "Comments of BHP-UTAH International Inc. on Resource and Planning Assumptions" (October 18, 1991) and related materials.



5. Letter from Peterson Zah, President, The Navajo Nation, to California Public Utilities Commission (November 19, 1991).
6. State of California, Energy Resources Conservation and Development Commission, Staff Testimony on "Air Quality Emission Values for Out-of-State Power" (November 19, 1991).
7. State of California, Energy Resources Conservation and Development Commission, Staff Testimony on "External Cost of Carbon Emission" (November 18, 1991).
8. State of New Mexico, House Joint Memorial re: California's decision to use environmental adders as part of its electricity bidding policy.
9. State of California, Energy Resources Conservation and Development Commission, Hearing Order, In the Matter of: Preparation of the 1992 Electricity Report (ER 92) (December 31, 1991).
10. California Energy Commission, Staff Workshop on Out-of-State Power Assumptions and Forecasts (January 7, 1992).
11. State of California, Energy Resources Conservation and Development Commission, Committee Order for Group 1 Resource Assumptions (January 10, 1992).
12. State of California, Energy Resources Conservation and Development Commission, Staff Testimony on: "Out-of-State Power Issues" (January 17, 1992).
13. State of California, Energy Resources Conservation and Development Commission, Staff Testimony on: "Out-of-State Power Issues (Supplemental Filing)" (January 24, 1992).
14. Testimony of Public Service Company of New Mexico re: ER 92 (January 17, 1992).
15. Testimony of Tucson Electric Power Company re: ER 92 (January 17, 1992).
16. Testimony of New Mexico Public Service Commission re: ER 92 (January 7, 1992) and related documents.

B. Articles from recent publications retrieved from NEXIS:

1. Public Utilities FORTNIGHTLY, "A Lighthouse in the Desert" by Bruce W. Radford, Vol. 27, No. 2 (January 15, 1991).
2. Public Utilities FORTNIGHTLY, "1991 - Year in Review" by Phillip S. Cross, Vol. 129, No. 1 (January 1, 1992).
3. Public Utilities FORTNIGHTLY, "Independent Energy Contracts and Competitive Bidding" by Leonard S. Greenberger, Vol. 128, No. 12 (December 15, 1991).
4. Public Utilities FORTNIGHTLY, "Survival Strategies For the 90's" by Randall W. Hardy, Vol 128, No. 5 (September 1, 1991).
5. Public Utilities FORTNIGHTLY, "How Environmental Costs Impact DSM" by Steven R. Sim, Vol. 128, No. 1 (July 1, 1991).



6. Public Utilities FORTNIGHTLY, "Correctly Accounting For Externalities" by Ernest H. Manuel, Jr., Vol. 127, No. 12 (June 12, 1991).
7. Public Utilities FORTNIGHTLY, "An Industry Criticism: Have We Been Too Pliable?" by Robert S. Briggs, Vol. 127, No. 10 (May 15, 1991).
8. Public Utilities FORTNIGHTLY, "Beyond the Fossil Age: Part II" by Chris Ortloff, Vol. 127, No. 7 (April 1, 1991).
9. Public Utilities FORTNIGHTLY, "Conservation Program Cost-Benefit Analysis: Choosing Among Options" by Lori A. Burkhart, Vol. 125, No. 7 (March 29, 1990).
10. The BNA Environment Reporter, "Congress May Consider 'Green' Taxes in 1992, But Prospects Slim For Passage Before Election", Vol. 22, No. 21 (September 20, 1991).
11. The BNA Environment Reporter, "Alcoa Head Calls For Tax On Energy To Help Clean Up Environment, Cut Deficit", Vol. 21, No. 9 (June 29, 1990).
12. The BNA Environment Reporter, "Pollution Can Be Cut Through Tax Policies, Economic Disruption A Threat, Economist Says", Vol. 21, No. 7 (June 15, 1990).
13. The BNA Environment Reporter, "Tax On SO₂ Emissions From Power Plants Considered by House Ways and Means Members", Vol. 20, No. 43 (February 23, 1990).
14. The BNA Environment Reporter, "Bipartisan Group Agrees To Develop Acid Rain Amendment To Clean Air Bill", Vol. 19, No. 11 (July 15, 1988).
15. Electric Utility Week, "Solar Industry Proposes 'User Fee' On Utility Bills To Fund Renewables" (October 14, 1991).
16. Electric Utility Week, "Cooper CO₂ Offsets Bill Highlights Utility Division On Global Warming" (June 24, 1991).
17. Electric Utility Week, "Proposal To Boose Utility Profits From Conservation Broadly Supported" (June 3, 1991).
18. Electric Utility Week, "Senate Energy Blocks Effort To Tie Least-Cost Planning, Externalities" (May 13, 1991).
19. Electric Utility Week, "NARUC Survey: 17 States Incorporate 'Environmental Externalities' In Rules" (July 16, 1990).
20. Industrial Energy Bulletin, "ELCON Fails To Block DSM Provisions As House Panel Marks Up Energy Bill" (August 2, 1991).
21. Industrial Energy Bulletin, "ELCON To Fight House Energy Panel Amendment On DSM, Externalities"(July 19, 1991).
22. Industrial Energy Bulletin, "Acid Rain Committee Defers To EPA On Least-Cost Definition Challenge" (May 10, 1991).
23. Industrial Energy Bulletin, "ELCON Seeks Regulator Authority to Disapprove Imprudent DSM Buys" (December 21, 1990).
24. Electric Light & Power, "Contracts, programs, policy: Utilities work beyond initial challenges" (September, 1991).
25. Electric Light & Power, "DSM market expands; some voice concern" (March, 1991).
26. Electric Light & Power, "Panelists debate externalities; regulators support EPRI" (January, 1991).



27. Clean-Coal/Synfuels Letter, "DOE outlines study proposals at National Coal Council Meeting" (November 25, 1991).
28. Clean-Coal/Synfuels Letter, "Study urges use of full costs in assessing fossil fuel emission charges" (September 17, 1990).
29. Inside F.E.R.C., "Utility Bidding Programs Emphasize Price Too Much, Say Developers" (July 29, 1991).

C. Congressional (Bills) and Federal (Federal Register) Material

1. Bill: National Energy Resources Act of 1991, H.R. 3265, 102nd Cong., 1st Sess. (August 7, 1991 - Version: 1).
2. Bill Tracking Report: Federal Energy Management Amendments Act of 1991, S. 417, 102nd Cong., 1st Sess. (June 26, 1991).
3. Bill: Federal Energy Management Amendments Act of 1991, 102nd Cong., 1st Sess. (February 11, 1991 - Version: 1).
4. 54 FR 50427 (December 6, 1989). Financial Assistance Award - Intent to renew grant with the National Association of Regulatory Utility Commissioners (NARUC).

D. State-Related Material: CALIFORNIA*

1. Cal. Pub. Resources Code [Div. 15, Chap. 1] Sec. 25000.1 (Deering 1991).
2. Cal. Pub. Resources Code [Div. 15, Chap. 7.8] Sec. 25681 (Deering 1991).
3. Cal. Pub. Util. Code [Div. 1, Part 1, Chap. 4, Art. 1] Sec. 701.1 (Deering, 1991).
4. 1991 Cal. ALS [Advance Legislative Service] 900; 1991 Cal. SB 1214; Stats 1991 ch 900.
5. 1991 Cal. ALS 1023; 1991 Cal. AB 1090; Stats 1991 ch 1023.
6. "Order Instituting Investigation on the Commission's own motion to implement the Biennial Resource Plan Update following the California Energy Commission's Seventh Electricity Report", Cal. Pub. Util. Comm., Decision No. 9106022, Investigation No. 89-07-004, 1991 Cal. PUC LEXIS 313, 124 P.U.R. 4th 181 (June 5, 1991).
7. "Order Instituting Rulemaking on the Commission's own motion to establish rules and procedures governing utility demand-side management; Order Instituting Investigation on the Commission's own motion to establish procedures governing demand-side management and the competitive procurement thereof", Cal. Pub. Util. Comm., Rulemaking No. 91-08-003, Investigation No. 91-08-002, 1991 Cal. PUC LEXIS 407 (August 7, 1991).
8. Independent Power Report, "San Diego G&E Plans To Issue 800-MW Solicitation In Second Quarter 1992" (September 13, 1991).



E. State-Related Material: ILLINOIS*

1. "Illinois Commerce Commission On Its Own Motion: Proceeding to adopt an electric energy plan for Commonwealth Edison Company", Ill. Commerce Comm., No. 90-0038, 1990 Ill. PUC LEXIS 640 (December 12, 1990). [Excerpt]
2. "Illinois Commerce Commission On Its Own Motion: Proceeding to adopt an electric energy plan for Illinois Power Company", Ill. Commerce Comm., No. 90-0040, 1990 Ill. PUC LEXIS 641 (December 12, 1990). [Excerpt]
3. "Illinois Commerce Commission On Its Own Motion: Proceeding to adopt an electric energy plan for The Peoples Gas Light and Coke Company", Ill. Commerce Comm., No. 91-0028, 1991 Ill. PUC LEXIS 716 (December 9, 1991). [Excerpt]
4. "Central Illinois Light Company: Application pursuant to Section 8-406 of The Public Utilities Act for a certificate of public convenience and necessity to construct, operate and maintain an electric generation station in Hallock Township, Peoria County, Illinois. and Illinois Commerce Commission On Its Own Motion: Proceeding to adopt an Electric Energy Plan for Central Illinois Light Company", Ill. Commerce Comm., Nos. 90-0004 & 90-0041, 1990 Ill. PUC LEXIS 639 (December 12, 1990).

F. State Related Material: NEW YORK*

1. "Proceeding on Motion of the Commission (established in Opinion No. 88-15) as to the guidelines for bidding to meet future electric capacity needs of New York State Electric & Gas Corporation", N.Y. Pub. Serv. Comm., Case 88-E-244, Opin. No. 89-26, 1989 N.Y. PUC LEXIS 44 (August 16, 1989).
2. Industrial Energy Bulletin, "New York Says On-Site Cogeneration Cannot Be Considered A DSM Measure" (July 5, 1991).
3. Industrial Energy Bulletin, "War Of Words Rages Between ELCON and Ottinger Over DSM Programs" (April 26, 1991).
4. Independent Power Report, "N.Y. Energy Plan Calls For 300-MW Auction For Renewables Only in 1994" (August 16, 1991).

G. Other State Related Material

1. **ARKANSAS:** Public Utilities FORTNIGHTLY, "Environmental Externalities", Vol. 129, No. 2 (January 15, 1992).
2. **COLORADO:**
 - a. Electric Utility Week, "Coal Supplier Participating In Colo. Integrated Resource Planning Case" (December 2, 1991).
 - b. Public Utilities FORTNIGHTLY, "Colorado Plan Broadens Least-cost Planning" (September 15, 1991).



3. **DELAWARE:** "In The Matter Of The Application Of Delmarva Power & Light Company For Approval of A 48 MW Power Purchase Agreement With Star Enterprise (Filed May 14, 1990)", Del. Pub. Serv. Comm., PSC Docket No. 90-16, 1991 Del. PSC LEXIS 2 (April 29, 1991).
4. **FLORIDA:** "IN RE: Amendment of Rule 25-17.008, F.A.C., pertaining to Conservation and Self-Service Wheeling Cost Effectiveness Data Reporting Format", Fla. Pub. Serv. Comm., Docket No. 891234-EU, Order No. 24745, 1991 Fla. PUC LEXIS 1234, 91-7 FPSC 153 (July 2, 1991). [Excerpt]
5. **MAINE:** Industrial Energy Bulletin, "Maine Industrials Win Amendment To Pending Environmental Legislation" (March 16, 1990).
6. **MASSACHUSETTS:**
 - a. Inside F.E.R.C.'s Gas Market Report, "Boston Gas Urges State Regulators To Favor Gas For Power Generation" (March 16, 1990).
 - b. Independent Power Report, "Boston Ed RFP Seeks Between 132 MW and 306 MW; Bids Due Jan. 10, 1992" (October 25, 1991).

7. **MICHIGAN:** "In the matter of the proceeding, on the Commission's own motion, to examine the electric rates of CONSUMERS POWER COMPANY; In the matter of the complaint of the ASSOCIATION OF BUSINESSES ADVOCATING TARIFF EQUITY against Consumers Power Company with respect to its electric rates", Mich. Pub. Serv. Comm., Case No. U-9346, 1991 Mich. PSC LEXIS 125, 122 P.U.R. 4th 486 (May 7, 1991).
8. **OHIO:**
 - a. Clean-Coal/Synfuels Letter, "AEP parries fuel with critics; utility pressed to scrub, use CCTs" (August 12, 1991).
 - b. "In the Matter of the Regulation of the Electric Fuel Component Contained Within the Rate Schedules of Monongahela Power Company and Related Matters; In the Matter of the Inquiry Into the 1990 Long-Term Forecast Report of Monongahela Power Company", Pub. Util. Comm. of Ohio, No. 90-106-EL-EFC, 1991 Ohio PUC LEXIS 73 (January 17, 1991).

9. **UTAH:** Public Utilities FORTNIGHTLY, "Comments Sought on PacifiCorp Resource Plan", Vol. 128, No. 11 (December 1, 1991).
10. **VERMONT:** Public Utilities FORTNIGHTLY, "Vermont Adopts Comprehensive Conservation Program Planning", Vol. 125, No. 12 (June 7, 1990).
11. **WASHINGTON:**
 - a. "In the Matter of the Request for Approval of the Draft Request for Proposal of WASHINGTON WATER POWER COMPANY", Wash. Util.



& Trans. Comm., Docket No. UE-910452, 1991 Wash. UTC LEXIS 77 (August 21, 1991).

- b. "In the Matter of the Request for Approval of the Draft Request for Proposal of PUGET SOUND POWER & LIGHT COMPANY", Wash. Util. & Trans. Comm., Docket No. UE-910573, 1991 Wash. UTC LEXIS 78 (August 21, 1991).
- c. Electric Week, "Northwest Power Council's Inverted-Rate Proposal Strikes Some Sparks" (November 1, 1982).

12. **WISCONSIN:** "Advance Plans for Construction of Facilities as Filed With the Commission for Review and Approval Pursuant to Section 196.491, Wisconsin Statutes", Pub. Serv. Comm. of Wisc., No. 05-EP-5, 1989 Wisc. PUC LEXIS 23, 102 P.U.R. 4th 245 (April 6, 1989).

*NOTE: At the time of this research, Public Utility Commission Opinions are available in LEXIS for the following states only:

1. California
2. Connecticut
3. Delaware
4. Florida
5. Illinois
6. Indiana
7. Louisiana
8. Maryland
9. Michigan
10. Minnesota
11. Missouri
12. New York
13. Ohio
14. Pennsylvania
15. Texas
16. Washington
17. Wisconsin