Maybeck Place Elsah, IL 62028 Oct. 9, 1985

Director of Nuclear Reactor Regulation U.S.Nuclear Regulatory Commission Washington, D.C. 20555

50-461/462

Dear Sirs:

I request that your department reevaluate your decision re. Illinois Power Co. et al that was registered in the Federal Register on Sept. 13, 1985 to the effect that you found no significant antitrust changes which would necessitate a formal operating licence antitrust review of the Clinton Unit 1 Power Station.

I have been studying the Clinton situation for three years in various capacities; please see enclosures of my testimony before the ICC on Sept. 12, 1984 and the oral statement that I delivered on June 18, 1985. In addition, I have posted to your office a xeroxed copy of the complete study that I conducted—which is referred to in the aforementioned testimony. These documents summarize my understanding of the situation as of June.

Since June, evidence has come to my attention which indicates that the coops are in dire fiscal crises--I have no hard facts in my hands to that effect, but know that others do.

It is highly likely that one or more of the 22 distribution coops will go into a chapter 11 bankrupcy soon—and perhaps even WIPCO, since three of the seven coop boards now have a near majority of board members that were elected this summer of 1985 on an anti-rate/anti-Clinton slate.

In essence, the economic situation re. Clinton is in shambles. The October 1984 accord between the coops and IP will be vigorously challenged by myself and others in the ICC docket 84-0472 which is in process. We, the member-owners of the 22 distribution coops, are being constrained to participate in an-power purchase agreement with WIPCO and Soyland--who are locked into an illfated investment in the Clinton plant. The Oct. 1984 accord hurts both IP and coop customers; IP customers have to assume more of the capital costs for Clinton and the coop customers have to pay more for the fewer kw that we will get for Clinton electricity as our percentage of ownership decreases.

I urge you to investigate the financial records of all 22 distribution coops and WIPCO and Soyland before you rule that indeed the competitive climate has not changed in Illinois re. IP and Clinton. In a few months, some of the coops may sell out to investor-owned utilities, go into chapter 11, and/or reorganize themselves into new entities. All of these activities will effect IP's fiscal status re. Clinton.

I, therefore, urge that you review your decision in this case. I remain available to work further on this issue as seems appropriate.

Cordially, Manually, Roger Batz, Phd YEOB Add: NRR/DE/AEAB

Enclosures: Sept. 12, 1984 and June 18, 1985 ICC testimony of Batz. Illinois coop map.

STATE OF ILLINOIS

## ILLINOIS COMMERCE COMMISSION

ILLINOIS COMMERCE COMMISSION

On Its Own Motion

Docket No. 84-0055

An investigation to consider a

plan for moderating the initial

rate increase associated with

placing Illinois Power Company's

Clinton Unit No. 1 generating

station in service.

## ORAL HEARING STATEMENT OF DR. ROGER BATZ Ph.D.

Dr. Roger Batz, Ph.D. #2 S. Elsah Hills Rd. Elsah, IL 62028

June 18, 1985

I appreciate the opportunity to participate in this docket as an independent citizen and having this time to discuss the evidence with the commission. As a sociologist and MJM distribution cooperative member-owner, I have been studying the impact of Clinton Unit 1 mainly on WIPCO distribution cooperative member-owners, but also on other entities involved—which included a study of the energy use behavior (through interviews in the home) of 1019 systematically sampled WIPCO distribution cooperative member-owners. Such behavioral and attitudinal evidence can be more reliable than econometric modeling or an extrapolation of historical trends—particularly in unique situations. Since officially projected cooperative electric rates were unprecedented, this methodology and on—site data gathering technique seemed most appropriate for this study.

The aggregate data gathered and interviews and observations conducted since the June 1984 publication of this study have generally validated the study results. MJM's 50% rate increase (from 8¢/KWH in 1983; to 12.5¢/KWH in 1985) and other similar coop rate hikes (up to 14.5c/KWH in another WIPCO coop in 1985) have caused customers to use less electricity through conservation and/or switching to more economical available alternatives like wood, propane, and active or passive solar. In addition realtors and trailor court owners are commenting about the difficulty of attracting new residents because of the high electric rates -- more that double the rates, in some cases, than the investor-owned utility (IOU) servicing the area; furthermore, people are citing high electric rates as reasons for moving out of coop territories. WIPCO's total sales decline .2% in 1984 over 1983; four distribution coops sold fewer KWH, two sold more (4% and 1%) and one sold the same. Large and small farmers comment about being forced one step closer to insolvency because of the high rates; their cash flow is already being threatened by the worst economic conditions in the rural Illinois farm economy since the great depression. Some large industries like ADM are finding it more economical to generate their own fuel in the future and other enterprises are opting for cogeneration. Coop member-owners are demanding rate relief from their coop boards either by directing their boards to conduct legal studies to determine the feasibility of breaking the all power supply contract the coop holds with WIPCO (MJM); signing a petition directing the board to actively explore the feasibility of selling the coop to adjacent IOUs (Illinois Valley Electric coop received such a petition signed by over 3000 of their 5,500 members) or by trying to direct the board to cancel the WIPCO all power supply contract (Menard member-owners motion to that effect rejected for procedural reasons but coop attorney offered a counter-motion to conduct a study of the feasibility of breaking the contract, which the member-owners approved). In addition, one coop board (Southwestern) has already conducted such a feasibility study concerning their contract with Soyland.

The evidence in the preceding paragraph tends to run counter to and call into question the testimony given by an Illinois Power employee (Tr.1001-02,1033-34, 1037) and Illinois Power (IP Reply Brief pp. 46-47) that electric sales are expected to grow in the coop territory with farmers contributing to much of this growth. Even one of the two coops that services an area described as experiencing "substantial growth" (IP Reply Brief p. 47) -- Corn Belt Electric -- sold fewer KWH in 1983 than it did in 1980. If indeed there was growth in this part of the coop's territory cited by IP, it was more than counterbalanced by decline in other parts of the coop territory. In fact, this pattern was identified in many enumeration districts and townships in various coops in the WIPCO area during our study; a coop gain in urban fringes was more than compensated for by loses in coop load and customers in the more outlying rural areas. In addition, most of the coop members lost in the rural areas lived in large relatively old farm houses -- observed in our studies as abandoned; whereas, most of the new coop members on urban fringes lived in newer, smaller homes with much more insulation and weatherization in them than the old farm houses -- many of which had no insulation in the walls and little, if any, in the ceiling. The farm residents very likely used much more electricity for their business and in the farmhouse than the new coop residents use in their smaller, better insulated homes. Furthermore, it is highly unlikely that newer farmhouses built on the farm site use more electricity than the old leaky farmhouse. In addition, less electricity rather than more electricity is being used in the farming areas, as larger farmers buy up the acreage of the departing farmers, abandon their old residences, and use their gasoline-driven machinery to till the soil and harvest the crops. Indeed, as we discovered in our study, these larger farmers were more likely to switch to energy alternatives more economical than electricity than many of the smaller farmers -- because they had more discretionary capital to invest in these alternatives. Furthermore, they simply could not afford the large economic loss caused by significantly higher electric rates; economies of scale in fact drive down electrical consumption in rural areas rather than the opposite. This evidence conflicts with the contentions of Illinois Power (IP Reply Brief p.47 and Tr. 1033-34, 1036) that electricity usage in farming areas increases with mechanization and replacement of farm houses with newer homes on site or in urban fringes. The energy use patterns of farmers are significantly different from non-farmers; net income can not be used as an indicator of electric usage -- and the same conservation factor should not be used for farmers and non-farmers as Illinois Power does (Tr. 1117). Electricity sales in coop territories -and likely in Illinois Power rural areas--will continue to decline because of shifting demographic trends significantly accelerated by the large electric rates which push

the twenty-two distribution coops—and WIPCO and Soyland—closer to insolvency since the coops are unable to sell enough electricity at these high prices that they need to charge because of Clinton—related costs passed on by WIPCO and Soyland in the cost of power. Then WIPCO and Soyland will be unable to meet their financial and contractual obligations—as distribution coops fall away and the remaining coops are unable to assume the large debts. Therefore, the ICC should consider any contractual agreement between the two G&Ts and IP void—including the Oct. '84 agreement—and any financial arrangements between these entities non—existent in their evaluation of the economics of cancelling or completing Clinton. As such, the cancellation case for Clinton is even more economically feasible that has heretofore been clearly demonstrated in this docket.

In the face of this fiscal crisis, WIPCO and Soyland on May 16, 1985 refused to authorize Illinois Power to release WIPCO and Soyland's load forecasts for consideration in this docket. Therefore, we need to rely on two documents to estimate the future load forecasts and electricity prices for WIPCO—the WIPCO commissioned March 1984 "1984 Power Requirement Study", which projects a 24c/KWH retail rate for WIPCO distribution customers if Clinton is completed by 1986 and the 1984 WIPCO Annual Report which contains a table labeled "Demand and Energy:Actual and Estimated Future". This table shows WIPCO demand and energy sales slightly declining from 1985 to 1988 and for some reason, significantly increasing in a unilinear fashion to the end of the scale in 1996 when energy demand reachs about 190 Megawatts and energy sales reach about 780,000 Megawatt Hours—up from 135.7 Megawatts of demand and 583,600 Megawatts in energy sales in 1984. No reason is given in this document for these dramatic increases. Indeed, evidence seems to indicate that such a trend is very speculative and quite optimistic; any projections that far into the future, given changing energy use patterns are very questionable.

It is more significant that the WIPCO projection concurs with the "1984 Power Requirement Study" in its projection that "... price increases in future years will also cause negative growth in energy sales during the 1984-88 period. It is anticipated that many customers will convert electric heating systems and electric water heaters to oil or gas systems as a result of the price increases." (p. 1).

Given this declining trend in electric use, one wonders why electric use will accelerate towards 1990 while rates are increasing to 24¢ KWH? It should be noted that the Oct. 1984 agreement will moderate rates for coop customers an officially estimated 4¢ KWH--an amount that seemed large to Illinois Power's Mladiner (Tr. 1013) and is being contested by some coop member-owners. However, even given this moderation, coop rates are projected to be 20¢/KWH by 1990--which is precisely the price at which today active solar photovoltaics are expected to be cost effective, according to general knowledge and corroborated by Mladiner (Tr. 1035). In essence, WIPCO's

projections beyond 1988 are very speculative and given the large retail rates their distribution customers will pay then -- even more dubious. It is more likely that sales will continue to decline as rate shock, price elasticity and insolvency set in then if not before. Indeed, the size of the total Clinton debt in relation to the net assets of both WIPCO and Soyland will accelerate their economic demissant For example, WIPCO's net assets in 1984 were \$386,129,092 (1984 WIPCO Annual Report) and they are faced with a capitalized debt of at least \$455,000,000 when and if Clinton comes on line--in addition to the \$38,000,000 paid by WIPCO customers from 1984-86 in a surcharge now 2.4¢/KWH and projected to rise to 3.6¢/KWH in 1986 to cover interest on interest to carry the debt to the point of capitalization. This is a capitalized debt of over \$10,000/WIPCO distribution coop member-owner. Interest payments alone on this debt are projected to cost 9¢/KWH. Finally, the coops' Clinton share declines as the total Clinton capital costs rise; the coops share is now 17% --or 162 MW at \$5800 KW. When the Clinton costs rise to \$3.148 Billion, the coops share of Clinton will be 14.3% -- or 136 MW at \$7,000 KW. If Clinton costs rise to \$3.5 Billion as VOB contends, the coops'share of Clinton will shrink to 12.9%--or 124 MW at \$7,700 KW or if Clinton costs go up to \$4 billion as VOB contends and seems likely, the coops'share of Clinton will be 11.3%--or 107 MW at \$8,900 KW.

The state of Ohio cancelled the Zimmer plant when it was 97% complete because it was uneconomical, Michigan cancelled the Midland plant and Indiana cancelled the Marble Hill plant for similar reasons. Illinois must follow suit and cancel Clinton Unit I because it is not economical to complete. It is simply too expensive; no-one can pay the bills now and especially in the future. We have two options: 1) The plant will cancel itself in the future over the wreckage of insolvent coops and many bankrupt farmers -- and lawsuits, or 2) I hope that Illinois Power Company and the Illinois Commerce Commission will have the courage to cancel Clinton now and avoid at least some of the future costs and litigation and I hope that they will have the the vision to implement cancellation in the most humane and equitable way possible. The time has come for everyone to stop fighting everyone and for us all to come together with the realization that Clinton Unit 1 is simply an imprudent investment -- cancel it, divide up the debts equitably and expediously and be on with the business of meeting Illinois's future energy needs. IP can survive; the bills can be paid -- shareholders, customers, the coops, REA and IP can divide up the debt. We don't need sacrificial lambs or scapegoats; we need prudent, honest, forthright, open, visionary, courageous, humane and cooperative action. Only then can the future debacle be avoided.

Submitted as part of request filed in ICC docket # 84-0055.
Sept. 12, 1984

- 1, Roger Batz, having been sworn and upon oath do state the following:
- 1. I am an Associate Professor of Sociology at Principia College in Elsah, Illinois. I earned a B.A. in Psychology from Oberlin College in 1962, an M.A. in History from Central Michigan University in 1967, and a PhD in Sociology from Louisiana State University in 1974.
- 2. In June 1984, I completed a study entitled Socio-Economic Impact Analysis of

  Electric Rate Increases in Rural West Central Illinois. This research project,

  which involved interviewing a random sample of 1019 WIPCO customers, was authorized by Principia College. The study has been selected for presentation at the

  1984 meetings of the Society for Applied Sociology and the Illinois Sociological

  Association.
- 3. The purpose of the study was to assess the impact on WIPCO's 44,000 customers of large electric rate increases because of WIPCO's ownership of 9.5% of the Clinton Nuclear Power Plant. Upon completion of the Clinton Nuclear Power Plant, Western Illinois Power Cooperative (WIPCO) officials state that rate payers in west central Illinois rural electric cooperatives will face a doubling of rates—from the present 8 cents/KWH to at least 15 cents/KWH. WIPCO has invested about \$300 million in the plant and expects to spend a total of about \$440 million—\$10,000 per customer/owner.

Most coop rate payers are farmers, many of whom are already at the margin of failure.

Double or more electric rates will increase the severity of their economic conditions. It is not known how many rate payers will start investing more heavily in conservation measures, shift to wood or gas as fuels, and/or install alternatives such as solar cells or wind machines to generate residential electricity. Costs of

solar and wind alternatives are decreasing and are expected to cross below the costs of nuclear electricity in a few years. By studying the energy use behavior of WIPCO customers, we will forecast the size of the coming market for conservation techniques and alternative energy methods. The Reral Electrification Administration (REA) has encouraged further research on the impact of Clinton--including this project; the total study is designed to give needed information to REA, WIPCO and its customers.

4. The results indicate that there is an excess of electricity throughout the Midwest area, the population is declining in the WIPCO region (because of poor economic conditions and farm foreclosures), and WIPCO is selling less electricity than it did two years ago, Furthermore, individual customers have gradually used less electricity over the past few years as rates have gradually risen. If rates double or more, 80% of the customers will use less electricity and/or switch to combinations of available energy sources, usually because they are cheaper (wood or gas) or will be cheaper (wind or solar) than the projected coop electricity cost.

Rural farmers and non-farmers were very aware of energy costs and were determined to select the most cost effective energy sources; many already relied on two or more energy sources on the farm and/or in the home. 25% already use wood as their main home heating source—usually supplemented by gas or electricity; another 9% use wood as a secondary source. Retail electric rates have increased gradually over the years. Such gradual increases in electric costs were correlated directly with customer shifts to alternative fuels, increased insulation and weatherization of homes, and decreased use of electricity; rate shock was not needed to initiate changes in energy use. Many people felt alienated from community and organizational power structures and were angry that decisions were made without their advice or consent.

More people would like to see Clinton cancelled than wanted it completed--mainly because of its cost.

Rural electric cooperative members told us that they would, quietly or noisily, cut back or shift their energy base from electricity to alternatives, because of the cost of electricity, a desire to be independent of others, an unwillingness to pay for the economic mistakes of others, and/or general anti-nuclear reasons.

In short, the coop electric sales in rural areas served by WIPCO will decrease regardless of whether there is an immediate rate shock or a gradual rate increase associated with Clinton expenses. Farmers and non-farmers will cut back and/or switch in direct response to the amount of electric rate increase. To gradually increase electric rates in order to pay for Clinton construction and/or interest costs will only magnify the problem--particularly given the distrust and alienation towards REA and others felt already by WIPCO customers.

Since the population is declining in the WIPCO area, electricity usage is decreasing among WIPCO customers, and since people say that higher electric rates will further cut their electricity use, it is unclear if WIPCO will be able to sell enough electricity to cover their Clinton debts. One of the largest (if not the largest) WIPCO electric rate hikes occurred on May 1, 1984; in an unprecented move, REA allowed an immediate 1.2 cents/KWH "CWIP" (about 15% rate increase) for all WIPCO customers—with another 1.2 cents/KWH planned for 1985 and 1986 for a total projected rate increase of about 45%—in order to recover in the next three years \$38 million in interest related to Clinton costs. Rate shock, price elasticity and eventual insolvency are still future possibilities—which would have serious repercussions on Soyland and Illinois Power Company.

On month after this study was completed, a merger between WIPCO and Soyland was proposed by the Soyland and WIPCO boards of directors which-before it is effective--

must be approved by 2/3 of the distribution cooperatives of each of the two generation and transmission cooperatives. WIPCO officials state that they do not know if WIPCO can survive without a merger.

The impact of Clinton's costs on electric rates of Soyland and Illinois Power and on the electricity demands of Soyland and Illinois Power customers needs to be carefully considered—particularly given the additional WIPCO costs that may have to be assumed by Soyland's customers if the proposed merger is approved. It is questionable whether the two generation and transmission cooperatives will need—or be able to pay for—all of their Clinton power, plus the 400,000 KWH that they will receive from Illinois Power because of their recent agreement with Illinois Power Company.

In addition, officially estimated KWH costs for Clinton don't include unexpected operation and maintenance costs for the nuclear power plant during its 20-30 year lifetime. Other GE boiling water nuclear power plants have had problems with cracking pipes which have resulted in costly shutdowns; perhaps, new NRC regulations will lessen such difficulties, but nuclear technology is very complex and still developing. Finally, the nuclear industry is now in the midst of its most severe crisis with various utilities discussing bankrupcy because of cost overruns on nuclear power plants; other plants such as the Zimmer plant, the River Bend plant, the Marble Hill plant and the Midland plant have been recently cancelled. Rural electric cooperatives associated with some of these nuclear power plants face fiscal crises similar to WIPCO's and Soyland's.

Many of the results of this study can probably be generalized to Soyland customers since they are also mostly farmers and live in roughly similar geographical areas in the same state; they also have a share of Clinton. As such, Soyland customers will also experience rate increases because of Clinton costs—even though they can distribute

their 10.5% investment costs over twice as many members as WIPCO can. However, more research needs to be done to determine the degree of similarity of socio-economic, ecological and energy-use factors in the two generation and transmission cooperatives before WIPCO results can be fully extrapolated to Soyland. Furthermore, many of these WIPCO results can reasonably be applied to Illinois Power customers who live in rural areas; although their rate structure is different because they have a larger share of CWIP in their rate base, they will experience gradual, yet significant, rate hikes over the next few years because of Clinton construction costs. These rate hikes could very well trigger a gradual decrease in their electricity consumption—particularly as they see their coop neighbors switching to alternative energy sources.

Further affiant sayeth not.

Roger Batte

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MOTARY FUBLIC, STATE OF ILLINOIS
MY COMMITSION EXPIRES OCT 30, 1985

Maybeck Place Elsah, IL 62028 Oct. 9, 1985

Director of Nuclear Reactor Regulation U.S.Nuclear Regulatory Commission Washington, D.C. 20555

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Cordially, Roger Batz, Phd

Enclosures: Sept. 12, 1984 and June 18, 1985 ICC testimony of Batz.
Illinois coop map.

## Electric Cooperatives of Illinois

