

*Soyland Power Cooperative, Inc.*

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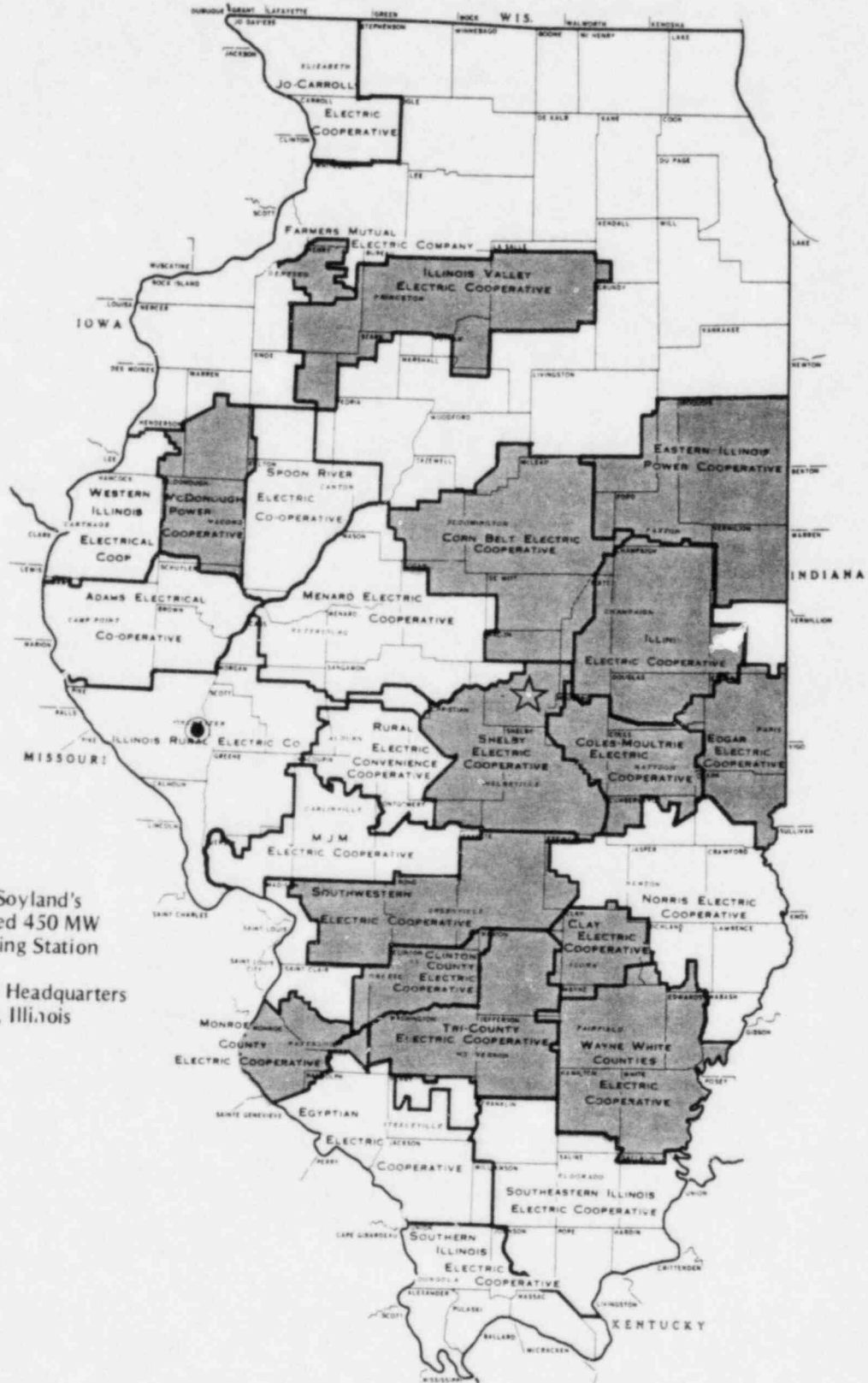
# 1981 Annual Report



**Power for Progress**

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# Service area



● Site of Soyland's Coal-fired 450 MW Generating Station

★ Soyland Headquarters Decatur, Illinois

# Soyland's beginning

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**S**oyland Power Cooperative, Inc., was organized in September 1963 when six distribution cooperatives joined together with the hopes of gaining energy independence through self-generation. At that time, studies were performed to determine the feasibility of Soyland constructing and operating its own power plant. The studies showed that with just six members generation was not economically feasible. Then, on April 23, 1975, nine additional cooperatives joined the original six and together they began to plan for a long-term power generation mix to meet all of their needs. The motivating force behind the incorporation of the new members was the possibility of purchasing a portion of the Clinton Power Station from Illinois Power Company. Subsequent actions resulted in Soyland's ownership of 10.5 percent (97 mw) of the Clinton Power Station located in DeWitt County, Illinois.

Further power supply studies indicated that with 15 member-cooperatives it was economically feasible for Soyland to construct and operate additional power generating facility. Soyland has proposed a 450-megawatt (net) coal-fired generating station to be built in Pike County, Illinois. The coal-fired generating station, scheduled to provide base

and intermediate load generation, will be commercially operable during the summer of 1987.

Just two years after the first general manager was hired to guide the cooperative, the Board of Directors took a major step toward providing a balanced energy supply for the 15 distribution cooperatives and ultimately their rural owner-consumers. On November 3, 1979, the Soyland Board of Directors expressed a commitment to the concept of compressed air energy storage (CAES) as a means of providing a greatly needed supply of peaking power. The CAES facility will be the third phase of Soyland's power supply plans to meet the electric power needs of the 15 member-cooperatives.

Soyland has made major strides toward its primary goal of securing reliable supplies of generating capacity for the 15 member-cooperatives. Soyland serves more than 100,000 rural households and approximately one-third of the land mass in the state of Illinois. In the beginning there were only six cooperatives; now there is an organization of people dedicated to the true spirit of working together and achieving economical and independent bulk power supplies.

# Member-cooperatives

Clay Electric Co-operative, Inc. Flora, Illinois <i>Henry L. Gill, Manager</i>	Illini Electric Cooperative Champaign, Illinois <i>Walter R. Smith, Manager</i>
Clinton County Electric Cooperative, Inc. Breese, Illinois <i>Robert W. Vander Pluym, Manager</i>	Illinois Valley Electric Cooperative, Inc. Princeton, Illinois <i>Thomas R. McDonald, Manager</i>
Coles-Moultrie Electric Cooperative Mattoon, Illinois <i>C. E. Ferguson, Manager</i>	McDonough Power Cooperative Macomb, Illinois <i>Robert E. Pendell, Manager</i>
Corn Belt Electric Cooperative Inc. Bloomington, Illinois <i>Jeffrey D. Reeves, Manager</i>	Monroe County Electric Co-Operative, Inc. Waterloo, Illinois <i>Joseph J. Fellin, Manager</i>
Eastern Illinois Power Cooperative Paxton, Illinois <i>Dennis L. Tachick, Manager</i>	Shelby Electric Cooperative Shelbyville, Illinois <i>William E. LeCrone, Manager</i>
Edgar Electric Co-operative Association Paris, Illinois <i>Maurice C. Johnson, Manager</i>	Southwestern Electric Cooperative, Inc. Greenville, Illinois <i>Robert H. Neece, Manager</i>
Farmers Mutual Electric Company Geneseo, Illinois <i>Edgar G. Arnn, Manager</i>	Tri-County Electric Cooperative, Inc. Mt. Vernon, Illinois <i>Allen Sisk, Manager</i>
Wayne-White Counties Electric Cooperative Fairfield, Illinois <i>Bill Endicott, Manager</i>	

## Board of directors



Officers and directors standing from left, front row: Jack Ludwig, Donald F. Sanders, Walter R. Smith, William D. Champion, Richard R. Ruzich, manager; Allen Sisk and Dennis L. Tachick. Second row, from left: Jeffrey D. Reeves, Lyndall Pigg, Thomas R. McDonald, Albert Hagenbuch, C. E. Ferguson, Maurice Johnson, D. E. Hanes, Paul Mallinson and Preston A. Mosbacher. Back row, from left: Robert W. Vander Pluym, William L. Stanford, Joseph J. Fellin, Robert E. Pendell, L. Eugene Boldt, James F. Beatty, Larry L. Hosselton, Henry L. Gill, Bill Endicott, Byron G. McCoy, Eugene Dressler, Edgar G. Arnn and Irvin W. Wessel. Not shown: William E. LeCrone and Robert H. Neece.

# Officers and directors

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President  
Walter R. Smith  
1211 W. Healy  
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Vice President  
Allen Sisk  
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Mt. Vernon, Illinois 62864

Secretary-Treasurer  
Dennis L. Tachick  
4 Meridian Terrace  
Paxton, Illinois 60957

Assistant Secretary  
William D. Champion  
RFD 1, Box 66  
Gays, Illinois 61928

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Edgar G. Arn  
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Geneseo, Illinois 61254

D. E. Hanes  
RFD 6  
Mt. Vernon, Illinois 62864

Preston A. Mosbacher  
RFD 1  
Prairie du Rocher, Illinois 62277

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Paris, Illinois 61944

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Stewardson, Illinois 62463

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Shelbyville, Illinois 62565

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Macomb, Illinois 61455

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RFD 1  
El Paso, Illinois 61738

Jack Ludwig  
RFD 1  
Fithian, Illinois 61844

Lyndall Pigg  
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Bushnell, Illinois 61422

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Paul Mallinson  
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Geneseo, Illinois 61254

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Rick Moore  
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Fairfield, Illinois 62837

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Breese, Illinois 62230

Albert Hagenbuch  
RFD 1  
Utica, Illinois 61373

Irvin W. Wessel  
RFD 4  
Centralia, Illinois 62801

# President's report

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It is gratifying to be able to report that Soyland's projects, undertaken to fulfill our goal of becoming a full-service, bulk power supplier for its 15 member distribution cooperatives, are progressing basically on schedule. An exception is the Clinton Power Station whose target on-line date has been delayed to August 1984. The owners of the Clinton project, including Soyland, have been thwarted in their efforts to keep the project on schedule by constantly changing regulations promulgated as a result of over-zealous anti-nuclear segments of society who fear the unknown; I suspect their members would not board a jet propelled aircraft in the fear that it might go into orbit and never return. It is certainly the intent of all the owners of the Clinton Power Station to build the facility such that it can be operated safely and productively; however, undue refinement of many of the safety criteria appears to exceed reasonably acceptable safeguards to the operators and the general public. Thus, the costly delays.

The nuclear option for base load remains cost effective, although the savings in lesser fuel costs are gradually being offset by higher capital costs to the extent that coal-fired base generation will soon become the preferred option. In my opinion, our country is making a grave mistake in rendering the nuclear option for base power generation too difficult and expensive to put on line.

Soyland's coal-fired plant project is progressing on schedule. Contracts for almost all the major equipment items have been consummated and our architect-engineers are more than 40% complete with the balance of plant design. All the land necessary for the plant site, including sludge storage, has been optioned and those options are being exercised as they become due. Local support and enthusiasm for the project remains high and, although REA has insisted that Soyland approach the Power Supply Analysis with a load-growth projection much lower than the Power Requirement Study indicates and with a higher plant cost than our estimates indicate, the project remains Soyland's best economic choice as an all-requirements power and energy supplier to its member distribution cooperatives.

High degrees of attention (both nationally and internationally) are being given Soyland's commitment to install a 220 MW compressed air energy storage (CAES) plant to satisfy Soyland's peaking and spinning-reserve requirements. Although the capital investment for the CAES project far exceeds the cost of conventional gas turbines, the CAES concept stores low-cost, off-peak electric energy in the form of high-pressure compressed air, which is later withdrawn from the cavern during peak-load periods to produce electric energy with only one-third the oil or gas required by the conventional gas turbine. I participated with other electric industry people in a congressional seminar on the CAES concept in Washington on June 7, 1982, and have a request from Senator Charles H. Percy to arrange a briefing on the CAES concept for the staff of the Subcommittee on Energy, Nuclear Proliferation and Government Processes which he chairs. Soyland's board of directors is to be commended for its foresight in selecting this innovative concept for the above-mentioned purposes and is justifiably proud to have received APPA's coveted "Energy Innovator Award."

It is obvious to all thinking people who have awareness in electric utility matters that Soyland Power Cooperative, Inc., has studied its responsibilities and options very carefully and has developed the optimum mix of nuclear, coal-fired and peaking and reserve facilities to function successfully as an all-requirements bulk power supplier for its 15 distribution cooperative members. All member-cooperatives will benefit by lower bulk power costs than would otherwise be, but just as important is the fact that they will exer-

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cise control over their bulk power supply as an operating utility. It is gratifying that Soyland became operational as of June 1, 1982, by taking responsibility for the wholesale power purchase contracts now in effect and has consummated inter-tie and interchange agreements with other operating utilities.

I am especially pleased with the progress that Soyland has made since its first staff member was employed in mid-May 1977. Soyland's staff is small in number of persons aboard, compared to other G&T's and investor-owned utilities involved in programs of equal magnitude. This progress is primarily due to the high degree of expertise and the total dedication of each of the 21 employees on the present staff. Their high production record is commendable, but just as important is the high degree of respect they have acquired for Soyland throughout the electric utility industry and with public officials. Additional persons will be needed on the staff as Soyland's projects progress further toward completion.

In view of the inadequacy of the present headquarters facility for the present staff, and in view of future increased staff, Soyland is in the process of starting construction on a

new headquarters facility as soon as acceptable financing can be arranged. In addition to adequately housing the staff, space is needed for conferences, board and committee meetings, dispatching center, etc., including corporate image.

In summary, the Soyland organization is working diligently to provide its members with reliable, low-cost bulk power to meet their immediate and future needs. An ambitious program has been laid out and remarkable progress made so far. In order to realize our goals and succeed we must have the continued support of the member-cooperatives and our dedicated staff.

*Walter R. Smith*



# General manager's report

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It is with great personal pleasure that I make my first report to the membership of Soyland Power Cooperative, Inc. On February 17, 1982, Soyland's first general manager, Royal B. Newman, officially retired and the board entrusted to me the management challenge of our generation and transmission cooperative. It is no understatement to say that the success of Soyland will have the most significant impact to the consumer-owners of Soyland's 15 member distribution cooperatives since those cooperatives were originally established.

The past five years have been utilized to formulate a program to provide economical and reliable self-generation to

meet our members' electrical requirements and to hire a core of qualified staff personnel to carry out that program. Under the guidance of Mr. Newman, the Soyland board and the general membership have adopted a diverse generation mix that is appropriate for our needs while still being conservative. The main three parts of the program are: (1) 100 MW of nuclear energy from joint ownership of the Clinton Power Station scheduled to be operational in 1984, (2) 450 MW of coal generation located in Pike County, Illinois, to produce power in 1987, and (3) 220 MW of peaking power from a compressed air energy storage system to be on line in the late 1980's. Even with all three systems producing power, they are not expected to exceed the need of the Soyland group; any deficiency in generation output is planned to be met through purchase agreements with neighboring utilities.

While the program is conservative in light of the need of our members, it still is very ambitious. Our efforts now must be directed toward implementing the program and establishing a total organization capable of ensuring that the projects are built on schedule and within budget.

At this time, the most important single item for achieving our goals is securing long-term financing for the coal-fired plant. Through the effort of the staff and our consulting engineer, and more important, the commitment of the board of directors and our many friends who offer support, I believe we are close to securing an REA-guaranteed commitment for the coal-fired plant. Success in securing the long-term financing commitment will allow work to begin this fall at the Pike site.

The compressed air energy storage system (CAES) continues to receive recognition and support both nationally and internationally. It is true that the eyes of the utility industry are on Soyland. As we investigate the system on a more detailed basis, we are convinced that the unique qualities of CAES offer economic benefits far beyond those included in the initial economic analysis. Our present efforts are being directed to finding the proper rock structure for location of the underground cavern. It is appropriate that special recognition should be given to the Electric Power Research Institute and, in particular, to Dr. Robert Schainker for continued support of CAES and the wealth of technical knowledge that they have shared with Soyland.

In addition to the specific mentioned projects, there are innumerable support efforts that must be accomplished in order that Soyland can effectively serve its member-cooperatives. Such items as effectively communicating with the directors and membership, management of financial resources of the cooperative and accurate accounting of all transactions, becoming an equal partner in the total transmission delivery system within Illinois, establishing inter-

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connections with other utilities, especially Southern Illinois Power Co-operative and Western Illinois Power Cooperative, Inc. — the list could go on and on. In order to achieve the successful completion of these specific projects along with accomplishing the necessary support items, it is imperative that we commit our efforts to staff the Soyland organization with highly qualified people and that the organization has the proper number of people to effectively carry out the business of Soyland. I am proud to say that the staff Soyland has been able to attract is composed of highly qualified, industrious people who are completely dedicated to the goals of Soyland. It must be recognized that the limited number of personnel will not be able to continue the high degree of excellent work without additional staff personnel as we move into this second phase of implementation of the generation projects. Recently the board of directors, in recognition of the need for more staff members and the cost effectiveness of properly housing the existing staff, has initiated action for a new headquarters building for Soyland. We all are anxiously anticipating moving into the new facilities by next spring.

Even with all of the good efforts Soyland has made in

the past and will make in the future, we all must recognize that electric rates will continue to rise significantly in the next 10 years and that it is only through long-term programs such as we are embarking on that the Soyland group will be able to play a part in stabilizing the cost of bulk power supply.

*Richard R. Ryzick*



# 1981 Soyland progress

## Administrative Department

Soyland became an operational generation and transmission cooperative in June 1982 when the cooperative assumed its member distribution cooperatives' wholesale power contracts with the investor-owned utilities. This improves Soyland's ability to secure financing and is a major step in Soyland's efforts to provide its members with a reliable and economical bulk power supply system.

The Soyland staff has grown to a total of more than 20 employees and is expected to total approximately 30 by January 1983 and 50 by January 1984. The increase in staff has necessitated enlarging the current office facilities. Additional space has been leased at the current headquarters. This space is rapidly becoming too small and the Board of Directors has announced plans to build a permanent headquarters building of approximately 11,500 square feet in the nearby community of Mt. Zion. The new building will be energy-efficient, employing a passive solar design, and is expected to be ready for occupancy in the spring of 1983.

## Engineering and Purchasing

During the past year, extensive progress has been made in engineering, design and procurement for both the coal-fired generating facility and the compressed air energy storage system. Reynolds, Smith and Hills, Gibbs & Hill, Inc.; and the Soyland staff have devoted many long hours designing, reviewing and approving the various specifications for each piece of equipment needed to build the two plants. Through very arduous negotiation, nearly all of the major equipment items have been purchased.

### Coal-Fired Plant

Since the purchase of the turbine-generator and boiler in 1981, 19 additional equipment contracts have been awarded. One of these, the binary control and automation system, was incorporated as an amendment to the existing Brown Boveri contract for the turbine-generator in 1981.

During the June 9, 1982, Board meeting, several major contracts were awarded. The air quality control system contract, consisting of the electrostatic precipitator and SO<sub>2</sub> removal system, was awarded to Research-Cottrell, Inc. This furnish-and-erect package is the single largest contract for the coal-fired plant and represents a major accomplishment for Soyland. Two other major furnish-and-erect packages were also signed: the cooling tower, with Marley Cooling Tower Company, and the concrete chimney, with Rust Chimney, Inc. The general services contract, which consists of the indirect field labor and such services as site security, medical facilities and fire protection systems, was awarded to Gibbs & Hill, Inc. with a major portion of the work to be

performed by Dravo Constructors, Inc., an affiliate of Gibbs & Hill, Inc. A contract was signed with Frank B. Hall & Company for the acquisition of wrap-up construction insurance to cover the coal-fired generating facility, the CAES plant and the transmission line. The site preparation (Phase I) specification has been issued for bids and is scheduled to be awarded in September 1982 with ground breaking to begin in October. Due to all of the progress made in the past year, more than 50 percent of the total dollar value for all the contracts has been procured.

Since last year, the subsurface investigations at the Pike County site have been completed. Canonic Construction Company performed soil borings at the site to enable Gibbs & Hill to adequately design the foundations. The preliminary results showed that either of two types of foundations could be used: a drilled-pier foundation or an over-excavation and backfill with a mat foundation. Gibbs & Hill is performing an economic analysis to determine which type of foundation will be used. The final report on the subsurface investigation is expected to be submitted to Soyland by Gibbs & Hill by the fall of 1982.

In the past year, much progress has been made in engineering and design. Many drawings, such as general arrangement and process flow diagrams, have been submitted to Soyland by Gibbs & Hill and approved by Soyland's staff of engineers. As of June 11, 1982, the engineering and design phase of the project is 37.6 percent complete, which is ahead of schedule. With the tremendous effort expended in the past year by both Gibbs & Hill and the Soyland staff, this excellent progress is expected to continue in years to come.

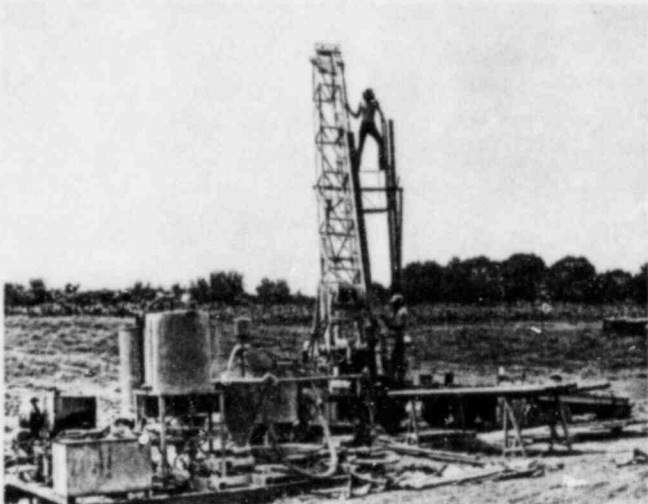
### Compressed Air Energy Storage System

Soyland's pioneering in the field of compressed air energy storage (CAES) has been recognized for "outstanding advancement in the development and application of highly creative energy-efficient technology" in the form of the "Energy Innovator Award" received from the American Public Power Association at its national conference in New Orleans in May 1982. The first of its kind in the United States, Soyland's CAES plant will provide peaking power from base-load power by pumping compressed air into a large underground cavern at night during periods of low electrical demand. During periods of peak demand, the compressed air is drawn from the cavern, combined with fuel oil to fire a combustion turbine which spins a generator to produce electricity. This will result in a savings of approximately two-thirds on the cost of fuel oil and reduce maintenance costs on base-load units by allowing them to operate more efficiently at a more consistent rate.

In 1981, a contract was signed with Reynolds, Smith and Hills (RS&H) to provide consulting engineering services for the CAES plant. Brown Boveri Corp. (BBC) also signed a contract in 1981 for the design and installation of the

above-ground portion of the plant, to include all systems, equipment and buildings. In 1982, procurement was completed for the CAES plant when Cementation West, Inc., was awarded a contract for design and construction of the subsurface portion of the plant consisting of the huge underground storage cavern.

On March 22, 1982, Cementation West began test drillings at the Pike County site in order to determine a suitable location for the underground cavern. Since then, they have reached a depth of 2,400 feet in their first test hole. The test drilling is still in process at this time.



As of May 16, 1982, the engineering and design phase of this project was 16 percent complete. Design drawings from BBC, including the general arrangement, the turbine-generator foundation load, and the preliminary foundation plan have been submitted to Soyland. Soyland is looking forward with great anticipation to being a part of this exciting new concept in utility technology.

## Environmental Department

Reynolds, Smith and Hills and its subsidiaries, Plantec and Environmental Science and Engineering (ESE), are continuing their efforts on the environmental analysis and licensing phase of their contract on the coal-fired generating station. Previously, the site selection and fuel selection studies were completed by these firms.

The environmental analysis and licensing efforts have included the preparation of draft and final Environmental Analysis Reports for the coal-fired generating station that were submitted to REA in July and November 1981, respectively. These reports provided detailed descriptions of the project, the site, the transmission system, regulatory requirements, alternative analysis evaluations, existing environmental and socioeconomic resources, and temporary and long-term impacts associated with construction of the plant.

These documents serve as an appendix to the draft Environmental Impact Statement (EIS) prepared by the Rural Electrification Administration entitled "Proposed Pike County Coal-Fired Generating Facility, 138 KV and 345 KV Transmission Lines and Associated Facilities." The

draft EIS discusses the project, project alternatives, need for the project, environmental consequences, unavoidable and adverse impacts, irreversible commitment of resources, major issues and concerns, and conclusions.

Under provisions in the National Environmental Policy Act (NEPA), REA must solicit comments from the public as well as federal, state and local agencies to ensure that environmental impacts associated with the project are adequately assessed and mitigated if necessary. Agency and public comments on the draft EIS were submitted through March 29, 1982. While numerous letters were received, many of them contained comments on how well Soyland, the consultants, and REA had prepared the required documentation, assessed the existing environment, and anticipated and mitigated impacts as a result of the construction and operation of this coal-fired generating station.

The REA will now prepare the final EIS and again solicit agency and public comments as part of their requirements before a record of decision can be made on the project and the loan guarantee issued.

The collection of baseline data on air and water quality, ecology, geology, socioeconomic, land use, and the preparation of all permits required for the construction and operation of the generating facility are also included in the scope of work for the environmental analysis and licensing of the plant.

A permit to develop a solid-waste management site was granted by the Illinois Environmental Protection Agency on May 27, 1982. Soyland has submitted 10 other construction-related permits to federal and state agencies for their review and response. These permits include approval for construction of new air pollution sources, structures in waterways, dredging for riverfront facilities, sewage and wastewater treatment facilities, water treatment facility, national pollutant discharge elimination system (NPDES), prevention of significant deterioration (PSD) and site preparation activity.

Soyland anticipates that all permits required prior to initiation of construction will be approved by October 1, 1982. Other permits needed for operation of the plant will be submitted as design engineering information becomes available for permit documents.

## Compressed Air Energy Storage System

Soyland submitted a "Site Selection Study For A Compressed Air Energy Storage System" to the REA in December 1981. This siting study used the same interdisciplinary methodology that was used in the siting study for the coal-fired generating station. The first stage, or preliminary geotechnical, and the second stage, or regional screening, identified the highest ranked siting areas in Illinois. A fatal flaw analysis was conducted on these candidate areas to determine their environmental suitability and relative licensibility.

Siting areas in Pike, Adams and Menard counties were recommended as the final three sites. The REA conducted both public and interagency scoping meetings in the vicinity of these three siting areas in January 1982. Based on the anticipated environmental acceptability, public support, economics, and proximity to the coal-fired plant,

the Pike County site was chosen as the preferred location of Soyland's CAES facility and, thus, detailed geological drilling was initiated to evaluate the site's geotechnical suitability.

### Transmission Line Siting and Licensing

Soyland has been conducting a siting and licensing study on the transmission lines that will tie its generation facilities into the existing transmission grid network.

In compliance with REA guidelines, Soyland evaluated a 10-mile-wide transmission candidate corridor area for its environmental acceptability from the generating plants to the respective substations. Within this candidate corridor area, three one-mile-wide corridors were identified, evaluated and ranked for their environmental acceptability.

Soyland chose a preferred and two alternate corridors based on regulatory agency input and a detailed computer analysis of the existing ecology and socioeconomic conditions. Determining factors for choice of the preferred corridor included routing around urban areas, airports, government or restricted areas, and environmentally sensitive areas such as state parks, natural areas, wetlands, and critical habitat areas for threatened or endangered species.

Soyland is currently evaluating the preferred one-mile-wide transmission corridor to determine the best location for the right-of-way and ultimately the transmission lines to ensure timely right-of-way acquisition, line design, and construction.

## Demand metering

As long as four years ago, planning began for Soyland's demand metering system to manage the flow of energy throughout the Soyland service area. This system will greatly reduce the time delay in the receipt of energy demand information from member-cooperatives and will lead to considerable savings in the purchase of power from wholesalers.

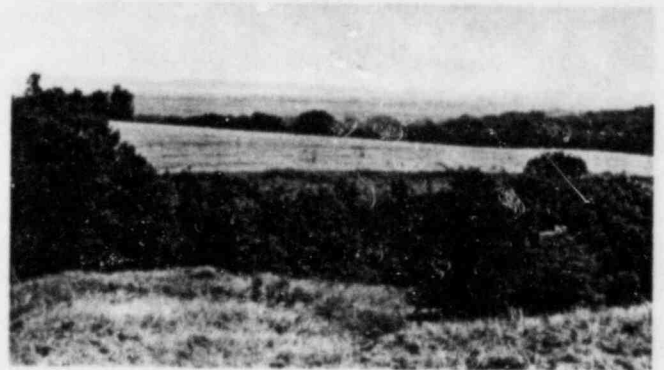
The system can be described as having three interlocking functions. At the Soyland level, a master system provides video displays and a printed record of all member energy demands and each wholesaler's supply by periods. The system monitors system failures and automatically estimates demand data during failures. At the member-cooperative level, sub-master systems provide video displays and a printed record of individual substation energy demands and wholesaler supply by periods. These systems provide alarms and displays for system substation failures and will support future supervisory control. A communications system between Soyland and member-cooperatives provides a level of single, coordinated control for effective load management through voice dispatch. Provisions have been made in the design of this system to support possible future member needs.

This highly efficient energy management program involves all of Soyland's 15 member-cooperatives, which currently purchase power from one or more wholesalers. A total of 165 points located throughout the state of Illinois will be involved in the system. The demand meter-

ing system provides coincident, real-time data for all of these points.

In early 1981, Harza Engineering Company completed the design of the demand metering system and application was made to the Federal Communication Commission for 165 individual radio licenses needed to operate the system. While the entire statewide system utilizes a single frequency, much time and effort was required to resolve conflicts with existing radio license holders before the Federal Communication Commission licenses were finally granted in late 1981. A contract was signed with Edison Controls, Inc. for the supply of the system in early 1982.

Equipment for the initial demand metering system is being manufactured, and installation for the pilot program in the Illini Electric Cooperative system is underway. After testing is complete, equipment will be installed in the remaining cooperatives.



## Land acquisition

From April 1980 to February 1982, Soyland and LEMCO Engineers, Inc. negotiated with 11 landowners in Pike County until all 1,135 acres in 14 parcels were optioned. Soyland negotiated in good faith with these landowners to ensure that Soyland's land requirements for the coal-fired site would be met and that the land would be acquired for a price reasonable to both Soyland and the landowner.

Soyland was able to obtain each parcel that was needed in a relatively short time through sound negotiating practices and by treating each landowner honestly and fairly. This fact is especially evident in the unanimous support and appreciation that these Pike County landowners have shown toward our project.

Soyland optioned these parcels without the threat or use of condemnation by the power of eminent domain. Soyland staff felt that this threat of legal action would not be necessary as long as a good negotiating relationship could be established with all landowners.

The choice and acquisition of our Pike County site has been heralded by local Pike County citizens, local agencies and groups such as the Farm Bureau as well as state and federal agencies. Many agencies have complimented Soyland's choice of this environmentally and socioeconomically sound site. One reason is that use of the site removes minimal amounts of prime farmland from production.

Beginning in July 1982, Soyland will begin exercising

the two-year option to purchase real estate agreements on each parcel as they approach the expiration date or when they will be required for construction. Currently, we are doing a complete title search, abstracting the titles, obtaining title insurance policy commitments, determining property taxes, mortgages and other liens, receiving legal review, and making closing arrangements to ensure the transfer of a general warranty deed on each parcel.

In our negotiations with some landowners, Soyland agreed to lease back a portion of some parcels for homes, improvements, or agricultural practices. These "lease backs" were granted when possible to allow the landowner to reside on his property and continue farming operations as long as possible without conflicts to construction priorities.

Soyland continues to maintain its outstanding public relations with landowners as it prepares the title of transfer of these parcels. Soyland's fair and consistent treatment of landowners, lease back agreements, and informative negotiations have helped to make easier the often difficult decisions landowners must face when selling their farmsteads. Soyland appreciates the courtesy, patience and cooperation of all landowners throughout the entire process.

Soyland staff feels that the cordial treatment of landowners helped to foster the unanimous public support for Soyland's projects in Pike County.

Soyland also optioned the 210-acre compressed air energy storage site in Pike County which is adjacent to the coal-fired plant site.

LEMCO Engineers was awarded a contract to acquire 89 miles of right-of-way by means of easement for Soyland's

transmission network. Soyland intends to approach and treat landowners in Adams, Pike, Scott, Morgan and Sangamon counties, Illinois, and Marion County, Missouri, in a similar, successful manner as was done in Pike County when obtaining easements for the transmission line rights-of-way.

Selection of a final right-of-way route is in process with title search, negotiations and easement agreements to be obtained in the future.

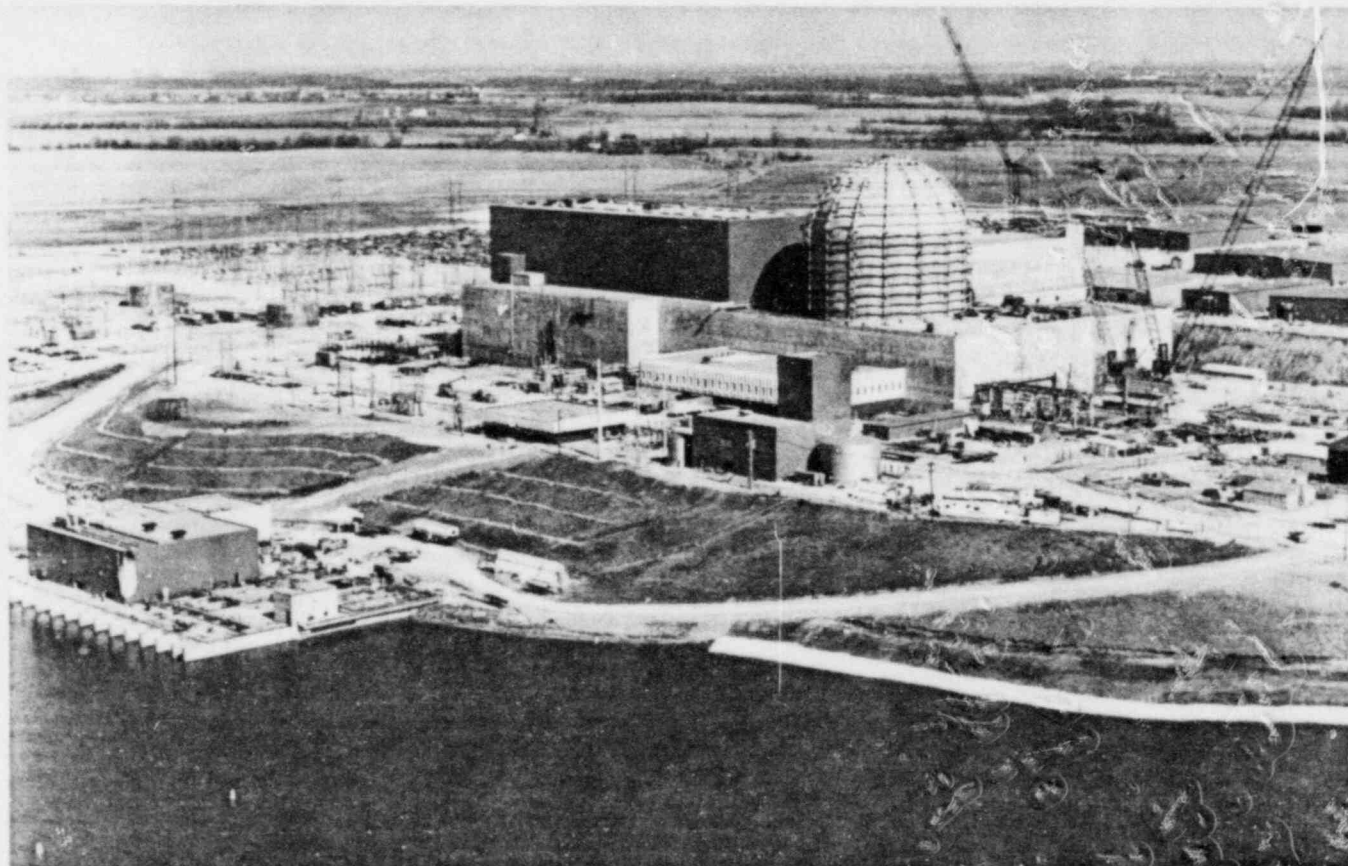
## Clinton Power Station

During 1981, major emphasis at the Clinton Power Station was quality assurance and the turnover of plant systems in order that start-up and preoperational testing may begin.

May 1982 marked the accomplishment of yet another major milestone for the project when the long-awaited diesel generator was received, inspected, and set into position.

With construction 83 percent complete, fuel load is now scheduled for January 1984 with a commercial operational date of August 1984. The project's manpower team of 3,305 continues hard at work to ensure that this schedule will be met.

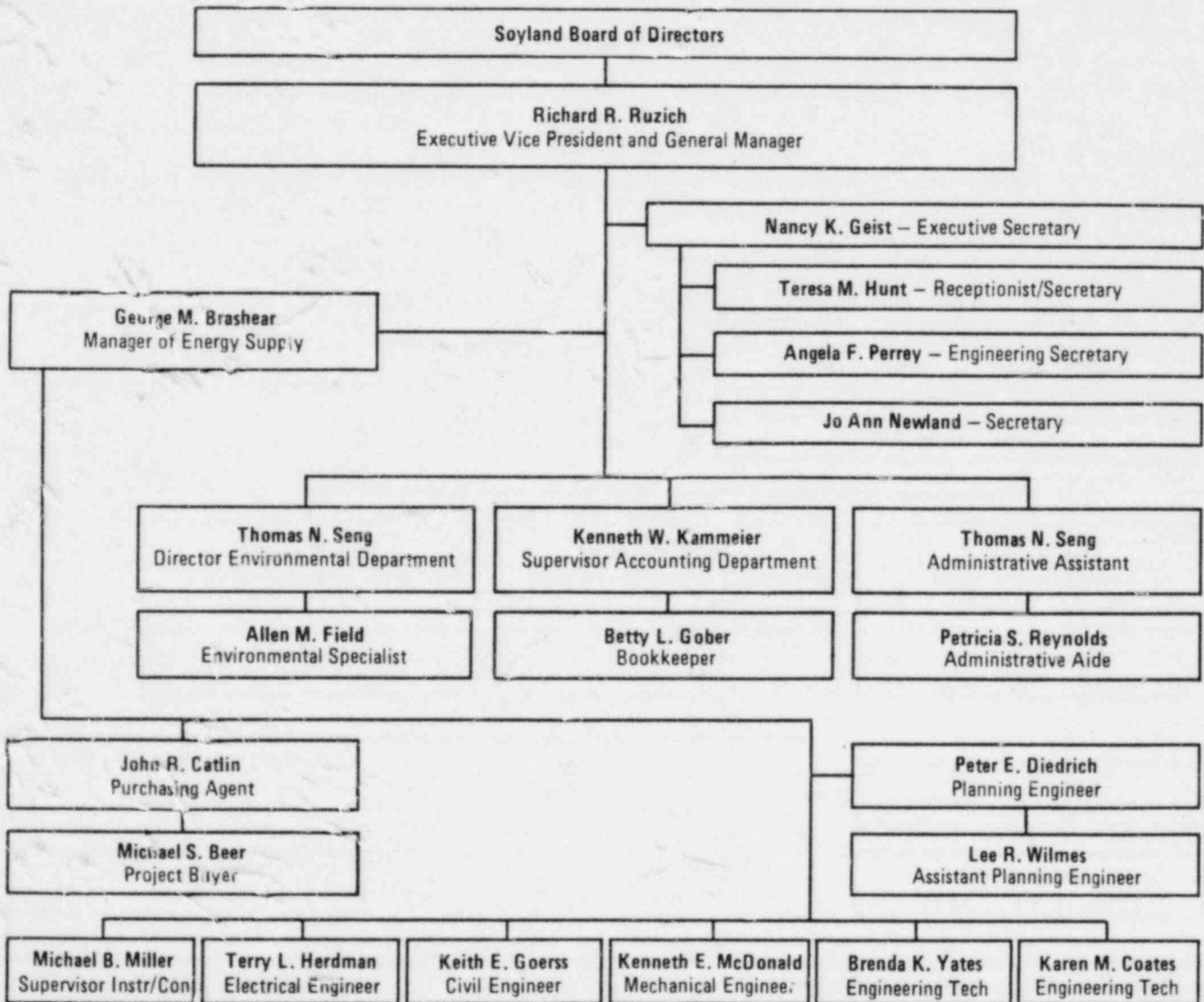
The Clinton Power Station Visitor Center, located six miles east of Clinton on Route 54, is staffed seven days a week to answer questions concerning the Clinton project. Brochures and maps of the recreational development are available to the public. Arrangements for group tours may be made through Soyland's office.



# The staff of Soyland Power Cooperative, Inc.



Front row, from left: Allen Field, Brenda Yates, Angela Perrey, Jo Ann Newland, Betty Gober and Petricia Reynolds. Back row, from left: Ken McDonald, Michael Miller, Terry Herdman, Michael Beer, Peter Diedrich, George Brashear, Keith Goerss, Teresa Hunt, Nancy Geist, Thomas Seng and John Catlin. Not pictured: Ken Kammeier, Karen Coates and Lee Wilmes.



# BENNETT & MIDDENDORF, LTD.

901 York Street  
Quincy, Illinois 62301

217 / 222-1142

The Board of Trustees  
Soyland Power Cooperative, Inc.  
Decatur, Illinois

We have examined the balance sheet of the Soyland Power Cooperative, Inc. as of December 31, 1981, and the related statements of operations and changes in financial position for the period from June 1, 1963 to December 31, 1981. Our examination was made in accordance with generally accepted auditing standards for a development stage enterprise, and included such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying balance sheet and related statements of operations and changes in financial position, present fairly the financial position of the Soyland Power Cooperative, Inc. at December 31, 1981, in conformity with generally accepted accounting principles.

Quincy, Illinois  
February 11, 1982

*Bennett & Middendorf, Ltd.*  
Certified Public Accountants

# Balance Sheet

AS OF DECEMBER 31, 1981

## ASSETS

### UTILITY PLANT

Construction work in progress . . . . .		\$193,018,809.30
General plant . . . . .	\$ 72,509.29	
Less — Accumulated depreciation . . . . .	<u>16,888.84</u>	55,620.45

### INVESTMENTS

Patronage capital from associated organization . . . . .	\$ 525,624.00	
Other investment in associated organization . . . . .	<u>1,000.00</u>	526,624.00

### CURRENT ASSETS

Cash — general . . . . .	\$ 10,098.19	
Cash — construction funds — trustee . . . . .	53,212.67	
Temporary cash investments CFC — Commercial Paper . . . . .	658,200.00	
Accounts receivable — employees . . . . .	283.59	
Prepayments . . . . .	<u>409.90</u>	<u>722,204.35</u>

Total Assets . . . . .		<u>\$194,323,258.10</u>
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## LIABILITIES AND EQUITIES

### EQUITIES

Membership Fees . . . . .	\$ 1,500.00
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### LONG-TERM DEBT

Mortgage notes payable — FFB . . . . .	182,719,000.00
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### CURRENT LIABILITIES

Notes payable — CFC . . . . .	\$8,505,017.78	
Note payable . . . . .	3,254.00	
Accounts payable . . . . .	1,095,533.76	
Advances from Associated Cooperatives . . . . .	1,976,105.00	
Accrued payroll taxes . . . . .	7,040.65	
Accrued interest . . . . .	<u>15,806.91</u>	<u>11,602,758.10</u>

Total Liabilities and Equities . . . . .		<u>\$194,323,258.10</u>
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The accompanying Notes to Financial Statements are an integral part of this statement



# Statement of operations

FOR THE PERIOD FROM JUNE 1, 1963 TO DECEMBER 31, 1981

## REVENUE

Proceeds from assessments to Member Cooperative. . . . . \$32,583.83

## OPERATING EXPENSES

Directors' fees . . . . . \$ 1,065.00  
 Dues and subscriptions . . . . . 4,200.00  
 Legal services. . . . . 749.61  
 Office supplies and expense. . . . . 658.51  
 Power supply studies. . . . . 26,168.21

Total Operating Expenses . . . . . 32,841.33

NET LOSS FROM OPERATIONS . . . . . (\$ 257.50)

## NON-OPERATING INCOME

Interest income . . . . . 257.50

NET INCOME. . . . . -0-

Note: The Cooperative is capitalizing all expenditures during this development and construction stage. The accompanying Notes to Financial Statements are an integral part of this statement.

## NOTES TO FINANCIAL STATEMENTS DECEMBER 31, 1981

### 1. SUMMARY OF ACCOUNTING POLICIES

The Cooperative maintains its accounting records in accordance with the Uniform System of Accounts prescribed by the Rural Electrification Administration. As a result, the application of generally accepted accounting principles by the Cooperative differs in certain respects from the application of nonregulated enterprises and also differs due to being a development stage enterprise. The more significant policies of the Cooperative are described below.

#### Property and Plant

The Cooperative has entered into a purchase agreement with Illinois Power Company for the purchase of 10.5% of the Clinton Nuclear Power Plant for a cost estimated at \$275,000,000. This plant is currently under construction and the Cooperative has contributed \$1,370,578.28 to Illinois Power Company for its 10.5% of the construction cost through December 31, 1981. The Cooperative is capitalizing all expenditures during this development and construction stage.

### 2. LONG-TERM DEBT - FFB

The Federal Financing Bank (FFB) has committed itself to a loan in the amount of \$197,470,000 to Soyland Power Cooperative, Inc. with such loan being guaranteed by the Rural Electrification Administration (REA) for the purchase of 10.5% of the Clinton Nuclear Power Plant. During the current year, advances on this note

have been received in the amount of \$50,429,000. The interest rate for each advance is established at the time of such advance and varied from 8.965% to 16.725% on the advances that have been received. These advances are secured by all the assets of the Cooperative and mature in 34 years from the end of the year in which the advances are made. Quarterly payments to service the debt within the next twelve months will aggregate approximately \$23,925,564.00, all of which will apply to interest.

### 3. PENSION PLAN

Pension benefits for substantially all employees are provided through plans with the Massachusetts Mutual Life Insurance Co. Additional disclosure information required by Financial Accounting Standards Board Statement No. 36 relating to Soyland Power Cooperative's individual position within the plan is not available.

### 4. LITIGATION

The Cooperative's attorney stated that there are no pending lawsuits, unsatisfied judgements or outstanding claims against the Cooperative of which he is aware.

### 5. CONTINGENT LIABILITIES

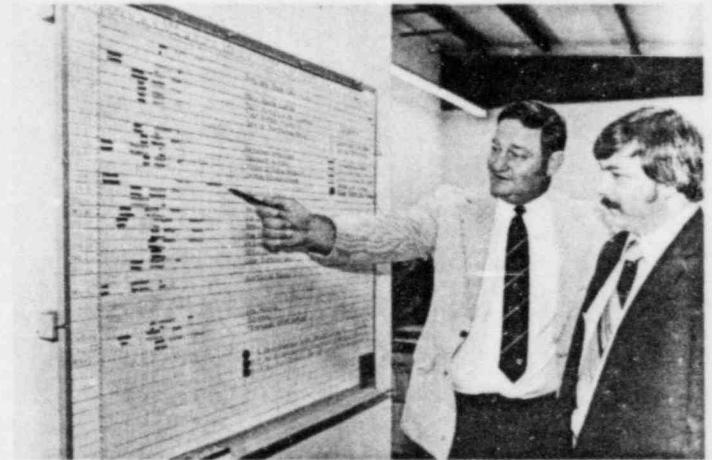
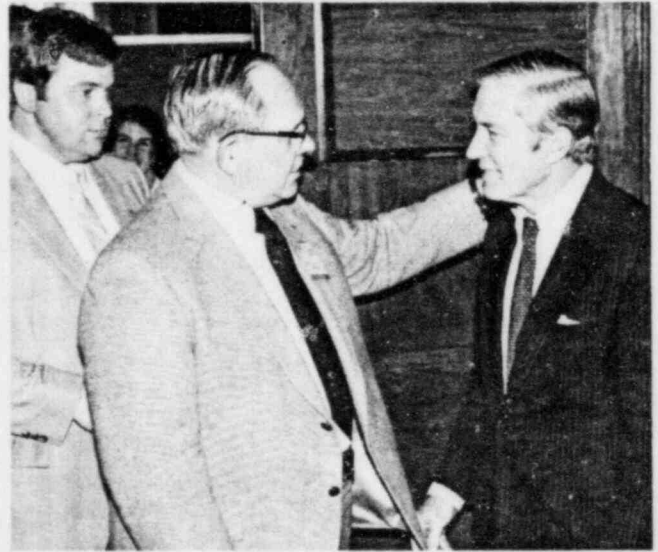
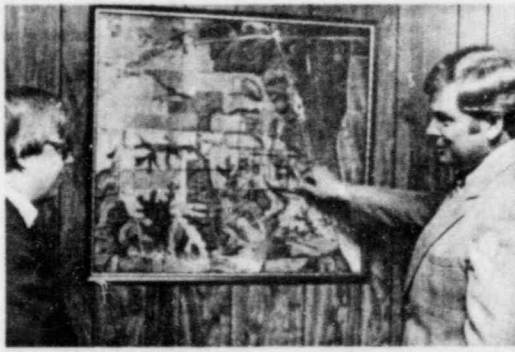
The Cooperative has entered into a number of contracts with various suppliers and manufacturers for engineering, design, and production of a proposed new generation facility. At December 31, 1981, the contract cancellation charges were estimated at \$977,619 on contracts that have been signed by the Cooperative.

# Statement of changes in financial position

FOR THE YEAR ENDED DECEMBER 31, 1981 AND  
FOR THE PERIOD FROM JUNE 1, 1963 TO DECEMBER 31, 1981

	Year Ended December 31, 1981	June 1, 1963 to December 31, 1981
<b>FUNDS PROVIDED</b>		
Depreciation provision .....	\$ 4,914.36	\$ 16,888.84
Loan advance from CFC .....	-0-	64,504,883.38
Loan advance from FFB .....	50,429,000.00	182,719,000.00
Memberships .....	-0-	1,500.00
Decrease in working capital .....	5,658,608.04	10,880,553.75
	<u>\$56,092,522.40</u>	<u>\$258,122,825.97</u>
<b>FUNDS APPLIED</b>		
Plant construction .....	\$55,540,674.41	-\$193,018,809.30
General plant .....	26,223.99	72,509.29
Principal payments on CFC debt .....	-0-	64,504,883.38
Investment in associated organization .....	525,624.00	526,624.00
	<u>\$56,092,522.40</u>	<u>\$258,122,825.97</u>
<b>CHANGES IN WORKING CAPITAL</b>		
<b>Current Assets</b>		
Cash — general .....	(\$ 8,876.28)	\$ 10,098.19
Cash — construction funds — trustees .....	33,212.67	53,212.67
Temporary cash investments .....	223,025.02	658,200.00
Accounts receivable .....	283.59	283.59
Prepayments .....	( 3,184.36)	409.90
	<u>\$ 244,460.64</u>	<u>\$ 722,204.35</u>
<b>Current Liabilities</b>		
Notes payable — CFC .....	\$ 4,390,423.14	\$ 8,505,017.78
Note payable .....	( 1,561.92)	3,254.00
Accounts payable .....	784,766.32	1,095,533.76
Advances from Associated Cooperatives .....	891,935.00	1,976,105.00
Accrued payroll taxes .....	( 2,327.79)	7,040.65
Accrued interest .....	( 160,041.93)	15,806.91
Accrued expenses .....	( 124.14)	-0-
	<u>\$ 5,903,068.68</u>	<u>\$ 11,602,758.10</u>
(Decrease) in Working Capital .....	<u>(\$ 5,658,608.04)</u>	<u>(\$ 10,880,553.75)</u>

The accompanying Notes to Financial Statements are an integral part of this statement.



Clockwise from upper left: Thomas Seng, director of Soyland's Environmental Department, discusses with Environmental Specialist Allen Field the site of Soyland's proposed coal-fired generating station in Pike County. Soyland President Walter Smith, center, talks to Sen. Charles Percy about REA financing during the NRECA-sponsored Legislative Conference in May. At left is Thomas Seng. George Brashear, left, manager of energy supply, goes over a flow chart with Terry Herdman, electrical engineer. Kenneth Kammeier, supervisor of the Accounting Department, examines a report. Karen Coates enters data into the computer. Patricia Reynolds, left, Soyland administrative aide, accepts the American Public Power Association's Energy Innovator Award presented to Soyland for its work on the compressed air energy storage project. Receptionist Teresa Hunt cheerfully greets a caller. Congressman Paul Findley of Pittsfield, left, talks with Soyland Executive Vice President and General Manager Richard Ruzich during the 1982 Legislative Conference in Washington, D.C.

## Employee energy behind 'Power for Progress'



Soylent Power Corporation, Inc. • P.O. Box A1006 • Decatur, Illinois 62525 • (217) 423-8000

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