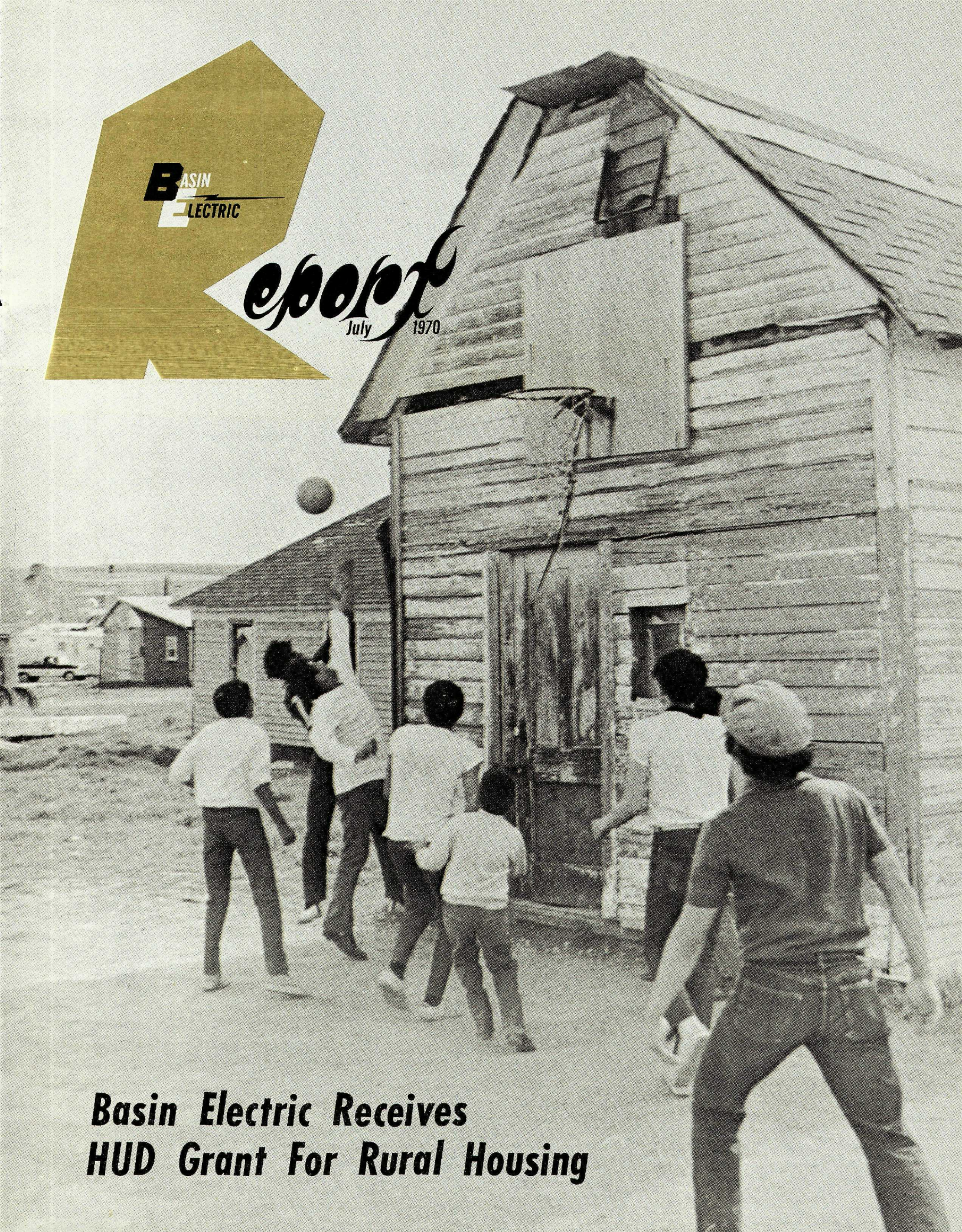


The logo for Basin Electric, featuring a stylized 'B' with 'ASIN' and 'LECTRIC' stacked to its right.

BASIN
LECTRIC

epoch
July 1970



**Basin Electric Receives
HUD Grant For Rural Housing**

Briefly Noted

BASIN ELECTRIC APPLICATION IN CFC

At the June 11-12 meeting of the Basin Electric Board of Directors, the Board approved by a vote of 6 to 4 to make application for membership in the Cooperative Finance Corporation, with the understanding that this does not commit the Board or Basin Electric to subscribe the capital investments required or actually become a member of CFC.

UPPER MISSOURI DEVELOPMENT COMMISSION

The Governors of five states—North and South Dakota, Montana, Wyoming, and Nebraska—have filed an application for establishment of an Upper Missouri River Regional Economic Development Commission. Approval of the proposal by the Secretary of Commerce is expected in the near future. As the sixth such regional organization in the nation to be established under provisions of the Public Works and Economic Development Act of 1965, the Commission is designed to foster long-term economic development and to coordinate and plan federal and state programs on a regional basis for the five states. The Upper Missouri Commission will be organized under the provisions of an amendment to the 1965 Act introduced by Senator George McGovern.

WATER RIGHTS TO PEABODY COAL

According to a June 3, 1970, news release of the U.S. Department of Interior, Peabody Coal Company headquartered in St. Louis, Missouri, has been granted the water rights to 40,000 acre-feet of water per year from Bighorn Lake of the Yellowtail Dam unit in south-central Montana.

The announcement by Commissioner of Reclamation Ellis L. Armstrong said that the contract with Peabody Coal Company is "another forward step" in a marketing program under which 110,000 acre-feet of water in Bighorn Lake was set aside for industrial use to encourage development of coal deposits on Indian reservations. Peabody had also acquired coal exploration permits on the Crow Indian Reservation in Big Horn County, Montana.

The Peabody contract has a 40 year term that will terminate automatically if no water deliveries are made within 10 years. Peabody will pay a stand-by charge of 50¢ per acre-foot, or \$20,000 per year. Water delivered during the initial 10-year period will be sold at \$9.00 per acre-foot if taken downstream from the Yellowtail Dam, and at \$11.00 per acre-foot if taken from the reservoir behind the dam.

The announcement stated that to date the U.S. Bureau of Reclamation has entered into contracts to supply 383,000 acre-feet of water per year from the Yellowtail reservoir for industrial use in Montana and Wyoming.

Mark Your Calendar!

September 28-29

Western States Water and Power Consumers Conference

SALT LAKE CITY, UTAH
UTAH MOTOR LODGE

MHD RESEARCH FUNDS BY HOUSE

An appropriation of \$600,000 for research on MDH (magneto hydrodynamics) was included in a \$1.8 billion appropriations bill for fiscal year 1971 for the Department of the Interior and related agencies. The House Appropriations Committee passed the bill in May. The research would be conducted by the Office of Coal Research of the Department of the Interior. The \$600,000 is \$200,000 more than the original budgeted request of \$400,000.

EROS PROJECT NEAR SIOUX FALLS

A major Federal installation expected to ultimately employ from 2,000 to 4,000 employees was announced June 11 for the Sioux Falls, S.D. area. Known as EROS (for Earth Resources Orbit Satellite), the new project will be a tracking station for earth satellites. The final selection of the site is expected by mid-July. Six sites are being considered, four north and east and two southwest of Sioux Falls.

COMMUNITY ACTION PROGRAMS MEETING

Wally Rustad, area development specialist of Basin Electric, addressed a meeting of Community Action Programs directors of North and South Dakota, June 18 in Pierre, S.D. Approximately 12 directors of Community Action Programs financed through the Office of Economic Opportunity participated in the meeting.

MONTANA LEGISLATORS RECLAMATION TOUR

Approximately 32 Montana legislators and officials will be in North Dakota July 16 for a Reclamation Tour which will include a visit to the Leland Olds plant and focus its attention on land reclamation programs in the lignite-mining areas of west-central North Dakota.

Mined-land restoration efforts and progress in North Dakota are of special interest to the Montanans, who will be considering land conservation legislation in the next session of the Montana Legislature.

The group will be hosted jointly by Basin Electric and Montana Dakota Utilities Company.

The one-day itinerary includes inspection of mine reclamation areas in the Beulah, Stanton and Wilton areas, including the Glenharold Mine of Basin Electric's coal supplier—Truax-Traer Coal Company.

Cover photo by Morning Pioneer of Bismarck-Mandan, N.D.

REPORT is published monthly by Basin Electric Power Cooperative, Provident Life Building, Bismarck, North Dakota, 58501. Editor—John F. Halloran



Basin Electric Receives HUD Grant of \$100,000 For Rural Housing Project

Approval of a \$100,000 grant to Basin Electric, announced July 7 by officials of the Department of Housing and Urban Development (HUD), signals the go-ahead on a regional program long in the planning stage to do something about the critical shortage of adequate rural housing in the Dakotas and the Upper Missouri Basin (including the region's Indian reservations).

The HUD grant, unique in that it is the first time money has been made available to attack the problems of substandard rural housing on a regional basis, will be supplemented by funds of \$57,000 by Basin Electric, bringing the total budget for the two-year pilot program to \$157,000.

Major features of the program include the addition of a full-time field director in rural housing to the Basin Electric area development department staff. Basin Electric General Manager James Grahl is the over-all project director, assisted by Lloyd Ernst and Wally Rustad of the area development department.

The program is a demonstration project—to demonstrate how the rural electric systems can provide the leadership and act as a catalyst in involving local public and private officials and groups in the rural community development process, specifically emphasizing housing for rural people.

(continued next page)

Plant Report

The areas of North and South Dakota where Basin Electric member systems serve (over 90% of the geographic area of the two states) will be the primary field of the program. Within this region, where 30% of all rural families are considered living in sub-standard housing, eight to ten or more specific pilot areas will receive concentrated efforts under the program. These pilot areas will be selected according to greatest needs and according to the interests and skills of the cooperatives serving these areas.

The program is expected to give a high priority to housing on the Indian reservations of the two Dakotas where it is estimated that 60% of the reservation population live in sub-standard housing. More than 6,000 new housing units are needed on the reservations, according to surveys. Nearly all Indian land in the Dakotas is included in the service areas of Basin Electric member cooperatives.

The program will rely heavily on the participation of the managers and staff of the Basin Electric member cooperatives in North and South Dakota. The work will be closely coordinated with state planning agencies and with communities that have already developed comprehensive county planning authorities. The Department of Architecture at the University of North Dakota has already contacted Basin Electric expressing interest in assisting in the over-all project.

The two-year program is divided into two phases. The first four months will focus on a housing survey, identification of areas of greatest need, and the establishment of communications with existing housing programs in the region and with community leaders, and exploration of the feasible legality of rural electrics in establishing associated non-profit organizations to serve as sponsors of HUD-financed housing programs.

The greater portion of the program (18-20 months) will be a work program on actual demonstration housing. Strong attention will focus on methodology, with the methods and information from the two-year project expected to form the foundation for a continued and expanded housing development program for the entire Basin Electric service area. A report on the project will be published when the two years of work are completed, a report that will be made available to the Basin Electric member cooperatives, the National Association of Rural Electric Cooperatives and other interested organizations.

Basin Electric's experience in rural housing aims at demonstrating how non-government agencies, such as the rural electrics, can bridge the gap between urgent, rural housing needs and rather limited access thus far to HUD and other government agencies programs by non-government entities. For example, between 1960-66 only 10% of new rural homes were constructed as a result of a direct or insured loan made by a Federal agency or a Federal land bank. And only about 6% of home repairs on rural homes were financed with help from a Federal agency.

Sub-standard housing in rural America has been an extremely neglected problem. Over half of the sub-standard housing in the nation is found in rural areas, which accounts for about 30% of the population. The demonstration program which Basin Electric is launching promises to explore new ways of attacking the problems, particularly an action program on a regional basis and involving the grass roots leadership of the rural electrics.

June Production

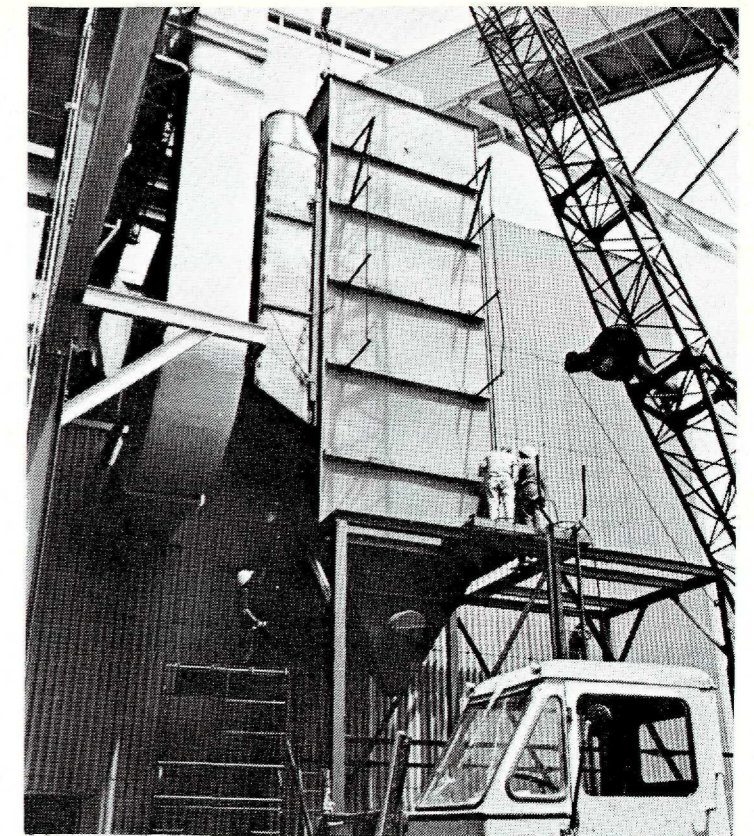
The normal production at the Leland Olds plant during June was between 200-205,000 kilowatts, with a total net generation of 128,954,000 kilowatt hours for the 30-day month.

During a one-hour load test on June 29, the unit produced a net generation of 221,000 kilowatts and a gross generation of 238,000 kilowatts. This gross generation capability for a one-hour period is the highest since last fall immediately following the annual inspection when the maximum capability of the plant reached 242,000 kilowatts.

Lignite burned during June was 107,984 tons. Operating hours in service for June was 685 hours, 37 minutes.



The job of installing the 40-foot high precipitator on the south wall of the plant began July 5. The unit will charge the fly ash particles in a 40,000 volt electrical field. The charged fly ash particles are then captured by collecting plates.



Pilot Precipitator Installed

The pilot electrostatic precipitator arrived at the plant by two rail cars on June 29, and work is now underway on the installation of the equipment specially manufactured by the Western Precipitation Division of Joy Manufacturing, Los Angeles. The pilot installation will test the effectiveness of an electrostatic precipitator when used to control air pollution

with low-sulfur lignite. The project will be the first time that pilot unit research to improve pollution control has been conducted with lignite. Information from the testing of this pilot unit is the first step in the selection of air pollution control equipment for the Basin Electric 400,000 kilowatt Unit No. 2, scheduled to go on the line in 1975.

The project was delayed for nearly a month due to the late arrival of the pilot unit. Following a three-week period required for installation of the unit, and an additional week for preliminary adjustment, the tests with the pilot precipitator are expected to begin the first week of August.

Basin Electric has hired seven boiler makers for installation of the unit, and Western Precipitation Division has furnished a man to supervise the installation and will furnish a supervisor to direct the tests. Basin Electric plant employees will assist in conducting the tests.

Spoil Bank Pilot Planting

Two test plots of one-half acre on a leveled spoil bank at the Truax-Traer coal mine are beginning to show some green. Six types of grass were planted in May by the Soil Conservation Service. Although it is too early to draw conclusions, the plots where top soil was replaced seem to be producing the best growth.

In the photo, left, five students from Sioux Valley Electric, Colman, S.D., inspect the plots. With them is Glenharold Mine Superintendent Amos Teague.

2,000 Tons Fly Ash Marketed

Approximately 2,000 tons of fly ash, a former waste product of lignite combustion, have been marketed since mid-May when the marketing program got underway. Industrial Minerals, Inc., through a contract with Basin Electric, is selling the fly ash for use as a mineral filler in asphalt highway construction.

The equipment for collecting, storing, weighing and loading the fly ash has been completely installed and is in operation. Industrial Mineral's 3,500-ton storage tank is now filled and ready for an expanded marketing program.

Forty-two members and guests from Kingsbury Electric, De Smet, S.D., toured the plant on June 27. This is the fourth year that Kingsbury has sponsored a tour to the Basin Electric plant.

Assistant Control Room Operator Jerry Ketterling explains how the lignite pulverizers work. The students from Sioux Valley Electric, Colman, S. D., won the trip to the plant in a written contest. They are, from the left, Susan Jensen, Donna Warner, Larry Kueter, Dale Nordlie, and Charles Carlson.

More Than 1,000 Visitors See Basin Electric

Fifteen tour groups with a total number of 418 persons, plus approximately 600 individuals not with a tour group have visited or are scheduled to tour the Basin Electric Leland Olds plant this spring and summer. This is more than 1,000 persons, and the number is expected to increase considerably during the high tourist season of July and August.

More than half of the tour groups are sponsored by cooperatives of the East River Electric G & T membership in eastern South Dakota and Minnesota.

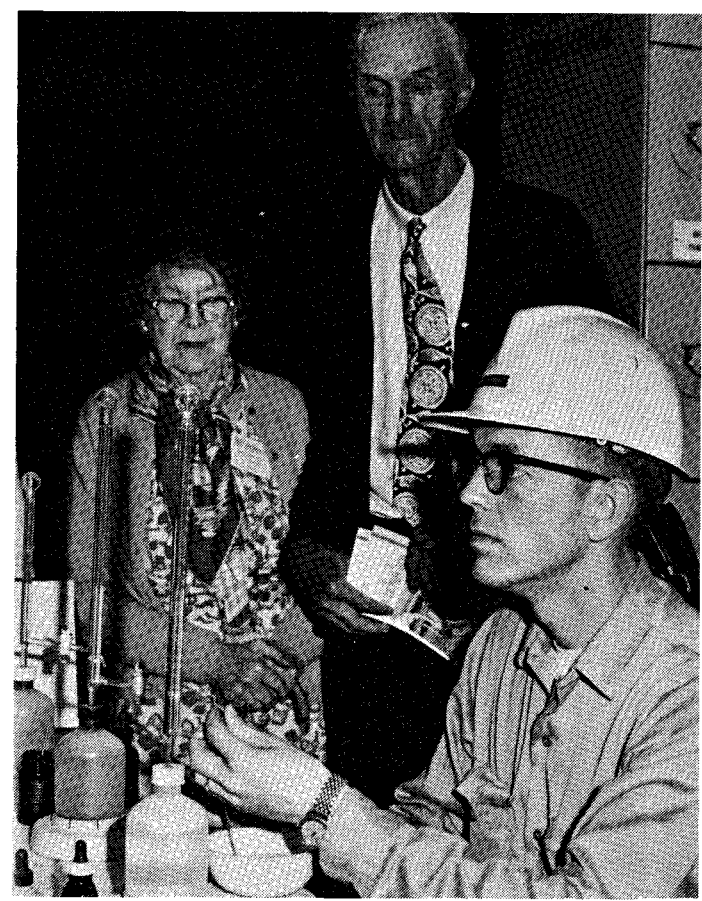
The majority of the tours include a visit to the Truax-Traer Coal Company mine, which is Basin Electric's coal supplier, and a noon luncheon at the Stanton Civic Center hosted by Basin Electric.

Of the private individuals visiting the plant, the majority are from North Dakota, followed by South Dakota, Montana and Minnesota. However, many of those who sign the guest book register are from more distant points, particularly California and Canada. Two visitors listed addresses in Columbia and Peru, South America.

The tour groups this season are:

May 7	25 Bismarck 4th grade students
May 9, 16, and 23	61 East River Electric employees and guests, Madison, S.D.
June 5	46 students from the N.D. Statewide Youth Tour
June 16	56 Traverse Electric members, Wheaton, Minn., who won the trip at the cooperative's annual meeting.
June 18	22 Codington-Clark Electric minutemen and guests from Watertown, S.D.
June 23	6 Sioux Valley Empire Electric, Coleman, S.D., with the cooperative's annual youth tour.
June 26	13 students and chaperones from the Madison, S.D., Garden Club. The students were winners of an essay contest on environmental protection.

Several of the tour groups included Fort Lincoln State Park near Bismarck on their itineraries. In the photo, left, members of Traverse Electric, Wheaton, Minn., see a reconstructed block house at the historic fort where Gen. George A. Custer was the commanding officer in the 1870's.



Mr. and Mrs. Charles Leerhauff, Nashua, Minn., observe Richard Jensen run water tests at the plant. The Leerhauffs are from Traverse Electric.

Plant This Summer

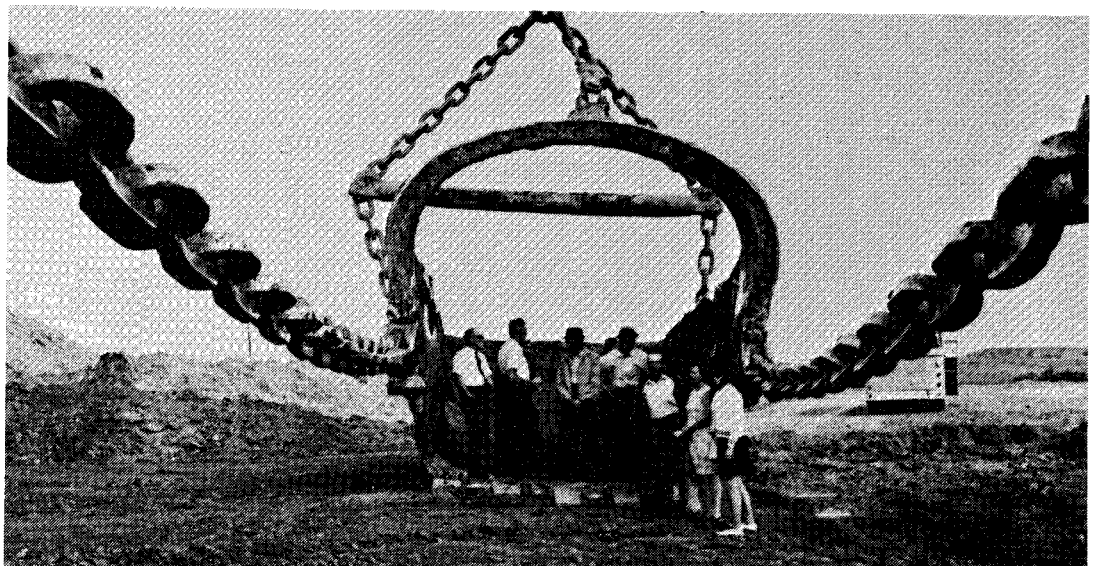
June 27 42 members and guests from Kingsbury Electric, De Smet, S.D.

July 15 and 17 42 members and employees of Slope Electric, New England, N.D.

July 16 32 legislators and state officials from Montana will tour the plant and mines and reclamation areas of the region. (See separate story on p. 2).

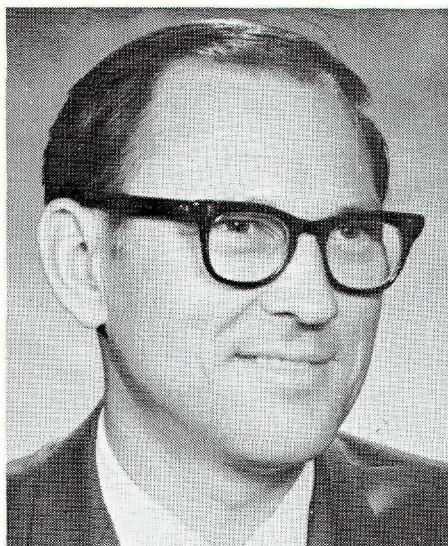
August 25 members of the North Dakotans for Environmental Action, which includes business men, professional people, and students from Bismarck and Mandan.

August 11 48 annual meeting prize-winners from Lake Region Electric, Watertown, S.D.



Photos right: Above, members of Traverse Electric, Wheaton, Minn., view the giant dragline at the Glenharold Mine, which removes the 60-70 feet of overburden above the lignite seams. Below, Kingsbury members get an inside view of the 34 cu. yd. bucket of the dragline.

Verendrye Manager Appointed To State Development Commission



Wally Beyer

Wally Beyer, manager of Verendrye Electric, Velva, N.D., has been appointed to the North Dakota Business and Industrial Development Commission. Governor William L. Guy made the announcement July 1.

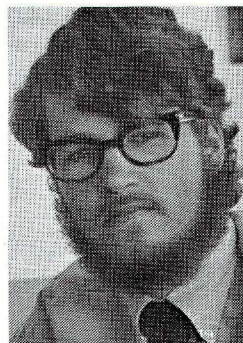
Beyer's appointment as a commissioner is for two years beginning July 1 to complete the term of Lloyd Everson of Bismarck who recently resigned. The normal appointment of commissioners is for four years.

Beyer has served as manager of Verendrye Electric since 1968. Prior to his present position, he was employed by the cooperative as staff engineer since 1963. A native of Makoti, N.D., he a graduate of the North Dakota School of Science. He was employed for five years by K. B. MacKichan and Associates, consulting engineers of Grand Forks, N.D.

Student Engineer Hired For Summer

A University of North Dakota student in electrical engineering, Scott Blanc, is working this summer in Basin Electric's Engineering Department. His chief assignment is the development of load projections to 1980 for the Cooperative's member systems.

A 1969 graduate of Bismarck High School, where he was an honor student, Blanc will be a second-semester sophomore at UND this fall.



Scott Blanc

Basin Electric Float Hits Parade Circuit

A float featuring Basin Electric as a wholesale supplier of low-cost power for rural people is being put to good use this summer at four community celebrations—Old Settlers Day at Stanton, June 16; Old Settlers Day at Center, July 11; and the Hazen Fall Festival, September 5.

Constructed by employees at the plant, the float's main feature is a handsome transmission

tower unlike anything seen before. In the photo below, Mel Fischer, plant electrical supervisor, brings the float down Stanton's main street during one of two parades celebrating Old Settlers Day.

It should be noted that in some of these parades the float gets double exposure; after the parade passes it turns around and comes back for an immediate return engagement.



ADDRESS CORRECTION REQUESTED

Bulk Rate
U.S. Postage
PAID
Permit 224
Bismarck, N.D.