

pends greatly on the import situation. Large quantities of ore are imported from South America.

On that point, Mr. Davis, ALCOA's chairman, testified to the Senate committee that his company could obtain all the ore it needs from South America if it could get the ships, but that difficulty was being experienced there. Later, he stated, "I wouldn't want you to think this country is entirely dependent upon South America," and then enlarged upon the Arkansas deposits.

When the interrogator mentioned that the situation wouldn't be hopeless even if no bauxite could be imported, Mr. Davis answered:

"No, but it would be an awful pity if we had to pull all the bauxite out of Arkansas."

Another source, speaking of the Arkansas deposits and increased demands upon them, put it this way: "It's like a first-string substitute that should be on the bench, but now has his sweater off and is warming up on the sidelines."

The more optimistic viewpoint, however, is that if the present emergency produces a profitable means of using low-grade ore, the "substitute" might oust the regular from the line-up, temporarily at least.

Bauxite production has been on a rather large scale in Arkansas since 1893. From that date through 1939, 9,345,044 tons, or approximately half the commercial grade ore, was mined. The 1940 production of 427,532 tons was valued at \$2,501,393.

Several independent operators are active in Arkansas, producing ore for sale for various purposes. Current prices range generally from \$3.44 to \$5.51 a ton.

Not all bauxite is reduced to aluminum, however. In 1940, domestic bauxite was used as follows: Aluminum, 48 per cent; abrasives, 29 per cent; chemical, 18 per cent; and oil refining, cement, refractory and other, 5 per cent.

Study Bauxite Production.

Bauxite production is being studied by a representative of the Office of Production Management, who will be in the state for several days. He said that his work does not concern the selection of a site for a 100,000,000-pound aluminum plant awarded to Arkansas.

Gazette 7-22-41

Site for Big Plant Offered By Malvern

Gazette 7-23-41

State Utilities Commissioner Joe Kimzey and citizens of Malvern conferred with Governor Adkins yesterday on the possibility of the location of the aluminum or alumina plants, to be built in Arkansas by the Office of Production Management, at Malvern. Governor Adkins did not announce what action he would take on the suggestion.

Mr. Kimzey said he and others had worked up data on the suitability of Malvern as a location of the plant. He said a desirable site had been selected on the Ouachita river at Old Rockport, the former head of navigation on the river, about one and one-half miles northwest of Malvern.

The tract, which contains between 1,500 and 2,000 acres, is almost wholly uninhabited and could be obtained for a reasonable amount of money, Mr. Kimzey said. The citizens of Malvern are prepared to absorb a part or all of the purchase price, he said.

Railroads, Natural Gas And Power Near By.

Extensive dredging operations would have to be done to make the location available to water transportation. The site is on the Rock Island and Missouri Pacific railroads, he said. All weather highways lead to the area from several directions.

The site is about five miles below Rammel dam. Power transmission lines from Rammel and Carpenter dams and from the Pine Bluff and Sterling, La., steam plants of the Arkansas Power and Light Company coverage in the area, he said. A 16-inch gas main from the Caddo field passes along one side of the site.

Nine miles from Malvern are large limestone deposits at Magnet Cove, Mr. Kimzey said. Limestone is an important chemical used in making the flux out of which aluminum is electrolyzed. Approximately 3,000,000 tons of high grade mineral are in sight at Magnet Cove, he said. Also nearby are titanium, barite, pyrite and other minerals used in various phases of chemical warfare.

Gazette 7-24-41 Arkansas and South America And Bauxite.

In an article written to tell readers of the New York Times Sunday magazine all about the vital defense metal aluminum, Frank S. Adams said of the mineral which is the exclusive source of commercial aluminum:

"The great bulk of the American supply of bauxite comes from South America, although deposits have been found in half a dozen of our Southern states, and it is mined commercially in Arkansas. For a birdseye view of the ingenious processes that turn this muddy substance into the stuff of which bombers are made, one must travel 2,500 miles across the Caribbean to the dense jungles of Surinam, Dutch Guiana."

A large tonnage of bauxite is imported from Dutch Guiana and other foreign countries. But in 1939, the latest year for which the official figures of the United States Bureau of Mines are available, imported bauxite accounted for 55 per cent of American consumption, and domestic bauxite for 45 per cent. Of the domestic bauxite, which constituted well up to half the total amount consumed by our aluminum, abrasive and chemical industries, 96 per cent, 361,690 tons, was mined in Saline and Pulaski counties, Arkansas.

And why travel 2,500 miles across the Caribbean to the dense jungles of Surinam, Dutch Guiana, to see bauxite mining, milling, washing and drying when these operations can be seen at Bauxite, Ark., only 20 miles from Little Rock? For that matter bauxite mining is carried on in the suburbs of Little Rock itself.

As a matter of fact one of the pictures used in the New York Times Magazine article, "Mining Aluminum Ore by the Open-Pit Method," was taken at Bauxite, Ark. The steam shovel that is shown is marked "Republic Mining and Manufacturing Company," the subsidiary of the Aluminum Company which operates the Arkansas mines.

Bauxite Survey to Be Ready In Two Weeks.

Gazette 7-25-41
A bauxite production survey conducted by the Office of Production Management will be completed in about two weeks, J. D. Tallant, OPM representative, said yesterday. P. D. Wilson will assist Mr. Tallant.

The check is being made in connection with the government's plans for constructing a 100,000,000-pound aluminum plant in the state, but Mr. Tallant said he has nothing to do with selection of a plant site.

No Action In Negro Park Bauxite Bid

Democrat 7-27-41

Work is progressing satisfactorily on development of Gillam Park for negroes on Granite Mountain southeast of Little Rock, WPA officials said yesterday.

No action has been taken by the City Council Parks and Realty Property Committees on a proposal of the Smith Mining Co., Russellville, to mine for bauxite on a part of the site.

The company offered a royalty on each ton of bauxite ore which might be removed. The proposal was referred to the committees by the City Council. Mayor Moyer furnished the committees with a form of the usual type of mining rights contract.

The city has made no plans for independent exploration for bauxite.

May Expand Proposed Alumina Plant.

Gazette 7-29-41

Washington sources have disclosed that the capacity of an alumina plant to be built in Arkansas will have a yearly capacity of 600,000,000 pounds instead of 400,000,000, as announced, Governor Adkins said yesterday. Plans for enlarging the alumina plant indicated that a proposed 100,000,000 pound aluminum plant would be expanded.

Camden, Malvern and Saline county interests want the plants. Malvern citizens have said that 3,000,000 tons of limestone, essential to alumina production, can be obtained within nine miles of their city.

The government is attempting to determine whether Arkansas, which contains 90 per cent of the nation's commercial grade bauxite, could supply virtually all of the metal for the nation's rapidly growing aluminum industry, Governor Adkins said. He said he hoped that a feasible method for using large quantities of lower grade ore can be developed.

Bauxite Ore Discovered On Tax Lands

Land Use Committee Act to Protect State's Interests.

Democrat 7-29-41

Acting to preserve newly discovered bauxite deposits from exploitation, the Land Use Committee of the State Planning Board this morning voted to permit only restricted leasing of minerals on state-owned land.

The committee, meeting to discuss a statement of policies, heard reports of recently-discovered bauxite deposits in areas where there are large sections of tax delinquent land.

In order that the state might realize full benefit from any mineral resources, Rep. Lee Baker, Lake Village, made the motion that the committee prohibit sale of any mineral rights and permit only development of such mineral deposits under restricted leases.

Aluminum Workers' Pay Demands Rejected

Gazette 8-1-41

Pittsburgh, Pa., July 31 (AP). — Demands of the C. I. O. Aluminum Workers of America for elimination of wage differentials between Northern and Southern plants of the Aluminum Company of America were rejected tonight. N. A. Zonarich, president of the union, said he had appealed to Sidney Hillman, associate director of the Office of Production Management, to intervene in the dispute and that Hillman had called him and the union committee to Washington.

The union presented its demands at a conference. Zonarich said men doing the same work at Badin, N. C., and Alcoa, Tenn., were being paid from two to 18 per cent less money than those at the new Kensington, Pa., plant of the company. M. M. Anderson, company personnel director, said the common labor hiring rate prevailing in the two Southern communities is 55 cents an hour and that the management "will continue to pay the prevailing wage rate or better in any community in which its plants are located."

BAUXITE TO GET NEW \$21,000,000 ALUMINA PLANT

Industry Likely To Continue After Emergency.

Gazette 8-9-41

A 500-acre site near Bauxite has been selected for a \$21,000,000 alumina plant which the Aluminum Company of America will operate for the government, Congressmen D. D. Terry of Little Rock and W. F. Norrell of Monticello, announced in Washington yesterday.

Observers speculated that the Office of Production Management's decision strongly indicates a proposed 100,000,000-pound alumina plant, costing \$60,000,000 to \$100,000,000, will be located close to the alumina plant, contending that the transportation problem, including that of freight rates, could be solved by such a "natural economy."

An aluminum plant in the Benton-Bauxite area, they said, would be in a strategic position with respect to proposed new hydro-electric plants in north Arkansas, new steam generating plants in the south Arkansas "sour gas" fields and the hydro-electric plants on the Ouachita river. Benton citizens were optimistic.

The alumina plant location is approximately 1-2 miles east of Bauxite, midway between Bauxite and Bryant, and approximately five miles east of Benton. It is on Hurricane creek at the junction of the Rock Island Lines and the Bauxite & Northern railroad. The latter road is owned by Aluminum Company of America interests, which own the Republic Mining and Manufacturing Company at Bauxite, largest bauxite concern in the state. Most of the plant site is on the old McAdams farm.

Eleven months will be required to construct the plant, the congressmen said. OPM representatives have been in central Arkansas for some time, but said they were checking bauxite reserves. Alcoa officials had little comment. At Benton, it was reported that preliminary work regarding the plant location has been under way "on the quiet."

The plant, which will employ 300 to 500 persons, will have a production capacity of 400,000,000 pounds of alumina annually. The annual bauxite production required for this plant alone would be 800,000,000 pounds. (One ton of alumina requires two tons of ore; one ton of alumina requires two tons of bauxite.)

Delegation Takes Bid Directly to Washington.

A Saline county delegation en route home from Washington last night had stressed the transportation advantages of the Benton-Bauxite area to the OPM. It said that the construction of the alumina and aluminum plants at the mine mouth would eliminate "freight" which would be paid on hundreds of thousands of tons of green ore.

The freight rate on a ton of bauxite for 100 miles is \$1.20, the delegation said. If such a haul could be eliminated, the annual saving on freight alone would be \$1,440,000, based on 1,200,000 tons of green ore. The area has an estimated supply sufficient for the production of 600,000,000 pounds of aluminum per year for at least an additional 30 years. This would be 2,400,000,000 pounds, or 1,200,000 tons, of green ore.

"In addition, locomotives, labor and fuel would enter into the picture," the Saline men said. "In the execution of the defense effort . . . it is evident at this time that a shortage of rolling stock for the railroads is now imminent and any measures that may be taken to relieve traffic congestion and release rolling stock for defense transportation is fully justified."

Benton Optimistic As Location Announced.

The delegation is composed of County Judge C. O. Smithers, George Troutt, Fred C. Bush and Jehu Crow. Mr. Bush, who lives in Little Rock, has extensive Saline county interests. Traveling by automobile, they sent a telegram announcing "good news" to Editor L. B. White of the Benton Courier from a Virginia town Thursday, shortly after having conferred with OPM officials. They did not elaborate.

"This is the biggest thing that has come to the state," Mr. White said.

The alumina plant might remain after the emergency ends, he explained. Benton and Bauxite probably will apply for designations as defense areas.

"Without starting this plant, we need 200 houses right now," Mr. White said.

An expansion of Republic's activities has created the housing problem, he said.

Chances are believed good for locating the aluminum plant "here at Benton," the editor said.

Governor Pleased When Plant Comes to State.

Supt. L. R. Branting of the Alcoa-operated Republic company indicated that little as known or could be announced at Bauxite regarding the OPM decision. Surveys have been made at more than one site in the Bauxite territory.

Governor Adkins, whose chief concern at this time is defense work, said:

"I'm very happy it is definitely settled that we will have an alumina plant, and feel sure the aluminum plant will 'come through later.'"

He was hopeful that the state, to

which the aluminum plant was awarded some time ago, will receive a second alumina plant and other plants depending upon bauxite, of which Saline and Pulaski counties have more than 90 per cent of the nation's known reserves.

The governor, who has refused to show a preference in intrastate contests for defense industries, made no comment on the selection of Bauxite. He has said that his primary interest is to have them located "in Arkansas."

Authorities said the alumina plant will require little power. Gas fuel and chemical processes will be involved. The Arkansas Louisiana Gas Company provides gas for Republic and other plants in the Bauxite area.

Ark-La Co-operative Obtains State Charter.

The Ark-La Electric Co-operative, Inc., which has an initial \$520,000 "defense" allocation from the Rural Electrification Administration, filed an entry notice at Secretary of State C. G. Hall's office. Ark-La is a potential power source for the new plants. Thomas Fitzhugh, Little Rock lawyer and state Utilities Commission chairman in 1937-41, was named agent for service. The company, a Louisiana corporation with its principal place of business at Homer, will have an office in the Pyramid building here.

The co-operative, composed of five south Arkansas and five north Louisiana co-operatives, plans to borrow money from the REA to serve defense industries and its members, and to handle industrial loads that continue after the emergency. A 15,000-kilowatt plant in north Louisiana will be the first generating unit. The 100,000,000-pound alumina plant will require a 120,000-kilowatt power plant, Mr. Fitzhugh said.

The state Mineral (WPA) Survey will immediately start drillings to determine quantity and quality of limestone in Saline, Pulaski and Hot Spring counties, in connection with the new aluminum industries. Deposits of limestone are at Magnet Cove, 40 miles from Benton; Gum Springs, Clark county, 50 miles from Benton; Washington, Hempstead county, 100 miles from Benton, and at White Cliffs and Foreman, Little Rock county.

New Aluminum Plant May Go To Benton Area May Follow Big Alumina Factory Nearby

Democrat 8-9-41

With a \$21,000,000 alumina plant already assured, residents of the Benton-Bauxite area in Saline County were confident today that the government also would build a proposed \$60,000,000 plant to process alumina into aluminum in that section.

The plant to reduce the bauxite ore into alumina, from which the finished product is made, will be located on a 500-acre site, approximately 1-2 miles east of Bauxite, midway between Bauxite and Bryant. The plant will be operated by the Aluminum Company of America, which owns the Republic Mining and Manufacturing Co., the largest bauxite mining company in the state.

Eleven months will be required to complete the project, Reps. D. D. Terry, Little Rock, and W. F. Norrell, Monticello, said in announcing the selection of the Saline County site.

Representatives of the Office of Production Management have been in the area for several weeks. The congressmen said the plant

would employ between 300 to 500 persons and would have an annual production of 400,000,000 pounds of aluminum. This production would require 800,000,000 pounds of bauxite, as one ton requires two tons of ore.

A delegation from Saline County, headed by County Judge C. O. Smithers, presented the bid of Saline County to the OPM, stressing the transportation advantages of the site to the OPM. Nearby are the largest producing bauxite mines in the country. Construction of the plant at the mouth of the mines would eliminate hauling the ore long distances for processing, as is now done.

En Route Home.

The delegation was en route home from Washington today. Other members were George Troutt, Fred C. Bush and Jehu Crow. Mr. Bush, who lives in Little Rock, has extensive holdings in Saline County.

Details of the construction program were not available.

Gov. Homer M. Adkins said of the new plant:

"I'm very happy that it is definitely settled that we will have an alumina plant and feel sure that the aluminum plant will come through later."

Arkansas is in a good strategic position to obtain the aluminum plant, it was pointed out, because 90 per cent of the nation's known reserves of bauxite are in Saline and Pulaski Counties.

\$21,000,000 Plant May Be Initial Unit

Government Plans Now for Expansion If Emergency Arises.

Democrat 8-10-41

By B. N. TIMMONS.
(Democrat Washington Bureau.)
Washington—The 400,000,000 pound capacity \$21,000,000 alumina plant to be built near Benton as a national defense project has been designed so that if necessary it can quickly be enlarged to supply the entire national demand, Rep. W. F. Norrell said Saturday.

The federal government and the Aluminum Company of America working together on the plant, are planning it so that if foreign supplies of bauxite are shut off, or if shipping is cut off, the Arkansas

plant can supply the entire American requirements. The present estimated requirement is 1,200,000,000 pounds of aluminum a year.

To supply that need, the Benton alumina plant would have to have a capacity of 2,400,000,000 pounds a year, the ratio of aluminum to alumina being two to one.

To Use Low Grade Bauxite.

The plant also is being designed to use both commercial grade and the lower grades of bauxite. Arkansas, in addition to having 90 per cent of the nation's commercial grade bauxite, or that containing 55 per cent or more of aluminum oxide, has large known deposits of ore from 45 to 55 per cent, and an unknown quantity of still lower grade ore.

In connection with the future possible needs of the nation for aluminum, OPM and the Bureau of Mines have been surveying the extent of bauxite deposits in Arkansas to determine exactly what is available there.

A large part of the nation's supply of bauxite is now imported from South America. If Arkansas deposits are sufficiently large, ships vitally needed elsewhere, will be removed from the bauxite transport service and greater dependence placed on the Arkansas reserves.

Fears of various public and private officials of the consequences of throwing the entire national aluminum load on Arkansas deposits and stripping the state of its rich ore, may be somewhat allayed by the fact that the new Benton alumina plant will make use of low as well as high grade ore.

New Process Developed.

Processes for employing the lower grade ores are new and it is not known to what extent the leaner ore will be used. The lower the aluminum oxide content of usable ore goes, the longer the life of the Arkansas deposits will be extended.

While designated with an eye to future needs, at first, however, the Benton alumina plant will be built to 400,000,000-pound annual capacity. Representative Norrell said that it will be laid out so that it can be readily enlarged to whatever capacity is needed. He said the government estimated the original plant will cost around \$21,000,000.

To Rush Construction.

Actual construction is to start just as soon as is possible and plans are to have the plant completed by next July, around 11 months being

required for construction. The project will supply alumina to the new aluminum plant to be built in Arkansas and probably to others elsewhere in the nation as well. Thus, this plant will have to be completed and ready to operate before the aluminum plants are built. That is one reason why the government and Alcoa are speeding it along as rapidly as possible.

While this alumina establishment will be a tremendous plant, even larger than the aluminum plants, the work it will do is not as highly technical as the latter. It removes just part of the impurities from the ore and what is left is alumina, which will be sent on to the aluminum plants. It will be big but will employ only 300 to 500 men, Representative Norrill said.

The congressman said that when experts of the Office of Production Management and Alcoa picked that site, they did so because it was convenient to the bauxite fields and to transportation, yet it was not actually right on bauxite. He said surveys showed there is no bauxite at the immediate site and thus the plant will not cover up any of the ore.

To Expand Mining Operations.

He also said that mining operations will have to be expanded to supply bauxite to the plant. He said that Alcoa will probably use the equipment now there but will have to add to it and increase the production. To keep the plant going, at least 800,000,000 pounds of the ore will have to be taken out annually.

In connection with the future possible needs of the nation for aluminum, OPM and the Bureau of Mines have been surveying the extent of bauxite deposits in Arkansas to determine exactly what is available there. This is being done so that in case foreign sources are cut off, the government will know what is available and how much can be produced in the state.

Alcoa will build and operate the plant under contract from the federal government.

Information Sought On Alumina Plant Site.

Definite information as to location of the aluminum plant to be constructed in Arkansas was still lacking yesterday. Governor Adkins contacted the Washington office of the Arkansas Agricultural and Industrial Commission, but its director, H. K. Thatcher, also was in the dark.

Mr. Thatcher did tell the chief executive, however, that a decision regarding the source of electric power for the plant probably would be reached within another week. Location of the aluminum plant, he said, in all probability, will be influenced by that decision.

Governor Adkins again expressed hope that the alumina plant would make extensive use of lower grade bauxite ore. He said he had information that two processes employing ore below what is now considered commercial grade, had been employed somewhat successfully in pilot plants.

Aside from the fact that it would prolong the life of Arkansas deposits to use the leaner ore, he pointed out that if it should become necessary to transfer ships now used to import bauxite, to other uses, successful employment of lower grade ore might be necessary to meet increased demands.

Arkansas and Its Bauxite And Industry

Out of a world convulsion new industrial development is born in Arkansas. Definite selection of a site near Bauxite for a \$21,000,000 alumina plant to be built by the government means that bauxite mined in Arkansas, which has in the past been shipped out as material for chemical and manufacturing industry in other states, will be processed here at home. And in addition to this great plant for the intermediate stage of aluminum production there is promise of a still huger plant, costing from \$60,000,000 to \$100,000,000, for the final stage of the process by which this invaluable metal is recovered from its ore and refined for commercial use.

For Governor Adkins, Representative D. D. Terry and other members of the state's delegation in Congress, and the many others who have labored so effectively to make Washington realize Arkansas's advantages as a site for defense industries, there must be special satisfaction in the government decision that assures the erection of the alumina plant.

For the present this will be a defense industry. But we must refuse to believe that a plant located in the chief bauxite field of the country, close to the greatest plant in the United States for crushing, cleaning and drying the green ore to prepare it for chemical processing, will not find its permanent place in the na-

tion's peace-time industry when the defense emergency ends.

This is the age of aluminum. As a metal of great strength and light weight, both pure and in a wide variety of alloys, aluminum is essential to aircraft construction, and almost as invaluable to the automobile industry. Railroads are using it in increasing amount. It is peculiarly suitable for moving parts of small mechanisms, typewriters, phonographs, radio sets, cameras and a host of others. It plays a large part in the present-day electrical industry because of its light weight and non-magnetic properties and the chemical industry in general makes extensive use of it. The world will always want aluminum.

Saline County Industrial Hopes Soar

Gazette 8-10-41

Benton and Bauxite residents believe the 100,000,000-pound alumina plant awarded to Arkansas will be located in Saline county "for the same reasons the Alumina plant was located here," H. W. Anderson said yesterday.

Mr. Anderson, one of the leaders whose efforts resulted in the Office of Production Management's decision to place a \$21,000,000 alumina plant near Bauxite, said no "political wires were pulled." The alumina plant, costing \$60,000,000 to \$100,000,000, might be located near Benton than the 400,000,000-pound alumina plant, which will be about five miles east of Benton. The Saline county seat is on the Saline river. An alumina plant requires considerably more water than an alumina plant.

The water question arose when it was suggested that the State hospital's branch be established at Benton, Mr. Anderson said. A little more than five per cent of the Saline's drainage area is supplying water for Little Rock, North Little Rock and Camp Robinson, he said. The river could accommodate the plants.

Residents of the county are grateful to Congressmen W. F. Norrell and D. D. Terry for their efforts in obtaining the plant, Mr. Anderson said.

Don't Expect Power Plant.

Saline county residents would like to have a power plant near the bauxite industries, but would not be surprised if power comes from the "sour gas" fields in south Arkansas, Mr. Anderson said.

Official sources had no information regarding locations for the aluminum and power plants. Because of a shortage in railroad rolling stock, it is believed that the alumina plant will be placed near the alumina plant.

At least a week may elapse before a location of the power plant is announced, H. K. Thatcher, director of the state Agricultural and Industrial Commission's Washington office, informed Governor Adkins by telephone.

A direct current is needed for reducing aluminum from alumina, it was said. A Federal Power Commission publication said that such a power supply can come from a direct current generator or can be converted from an alternating current.

Methods Compared.

The extraction of alumina from bauxite by the Bayer chemical method requires 25 to 300 kilowatt hours of power per ton of alumina, the F. P. C. reported. The electrolytic reduction of aluminum from alumina consumes 19,000 to 21,000 k. w. h. per ton.

Governor Adkins said he hopes the defense program will result in development of low-grade as well as high-grade bauxite ore. Arkansas has lime which would be used in the low-grade operations.

A qualified source said that Bauxite and Benton automatically will be entitled to defense housing ratings because of the plant or plants, since they are within 30 miles of the Little Rock defense center.

REA Power For Aluminum Plant Offered

Gazette 8-10-41

Washington, Aug. 9 (AP).—Representative Ellis (Dem., Ark.) said today the Rural Electrification Administration had agreed to develop and deliver 120,000 kilowatts of power at three mills per kilowatt hour for a proposed new aluminum plant in Arkansas.

Ellis said the site of the new aluminum plant has not been selected, but the REA agreed to deliver the power anywhere in the state. The plant recently was allocated to Arkansas by the Office of Production Management.

Ellis said Harry Slatery, REA administrator, informed the OPM today the REA was ready "to proceed at once" and would make an allotment of not less than \$3,500,000 immediately in order that contracts for generating machinery may be placed.

Ark-La Co-operative Offers To Build Power Plant.

The state's largest consumer of power, the Kraft paper mill near Camden, using 8,500 kilowatts per year, pays an average of 7 1-2 cents per k. w. h. to the Arkansas Power and Light Company. Kraft has a 2,500-kilowatt plant of its own.

The Ark-La. Electric Co-operative, Inc., which can obtain REA backing, has offered to build the proposed new power plant. The co-operative, incorporated in Louisiana, filed an entry notice at the Arkansas secretary of state's office Friday. It has an initial allocation of \$520,000 from the REA.

Reynolds Co., To Open New Bauxite Mines

Concern Planning To Use 'Low-Grade' Aluminum Ores

Utilizing ore substantially lower in grade than is ordinarily considered commercial, the Reynolds Metal Company will soon begin extensive bauxite mining operations in Saline and Pulaski counties, O. C. Schmedeman, manager of the Reynolds Mining Corporation, disclosed today.

The company, which has heretofore purchased the bauxite ore used in its aluminum production will go into mining operations through the subsidiary Reynolds Mining Corporation, which until today was known as the Bauxite Mining Corporation. Mr. Schmedeman emphasized that the ore to be mined is not drastically lower than that which is now considered commercial grade, but said the difference is appreciable. "No new reduction processes will be involved," he explained. "We have a new plant in Alabama and improvements in machines used and economies effected through plant designing make it possible to profitably use a lower grade ore."

The Reynolds Company's new plant at Sheffield, Ala., is equipped both for reduction of bauxite to alumina or aluminum oxide, and reduction of that product to a metallic aluminum, but a portion of the alumina is diverted to a Longview, Wash., plant of the concern for final processing.

Using Arkansas Bauxite.

Reynolds has been using Arkansas bauxite in its operations for some time, but has been purchasing the ore. The subsidiary maintained here until today as the Bauxite Mining Corporation, has been primarily a development concern, conducting explorations and tests of possible bauxite deposits.

Papers changing the name of the firm from the Bauxite to the Reynolds Mining Corporation were filed in the Secretary of State's office today.

No mining operations have started yet, Mr. Schmedeman said, but added that "in the near future," the company plans to mine ore sufficient to make it self-sustaining.

The new reduction plant will not make exclusive use of leaner ores, he explained. The best product available will be obtained, but because of improvements, the plant is capable of profitably processing the lower grade.

"There is the question of demand, too, now," Mr. Schmedeman said, "and the higher grade is becoming

harder to obtain."

Ore now used is that with 55 per cent or higher in aluminum oxide and 7 per cent of less in silica. Reynolds will go below 55 on alumina and above seven in silica, Mr. Schmedeman said, but would not indicate what the differences would be.

Location Not Revealed.

He also declined to disclose exact location of proposed mining operations, but said they would be near the existing operations in Saline and Pulaski counties. The subsidiary he heads has been engaged in preliminary work since last October and at present, seven drilling crews and about 50 men are at work taking cuttings, which are being tested in a laboratory set up at Sweet Home.

The Sheffield, Ala., plant where most of the bauxite will be processed, is approximately the same size as the proposed new \$21,000,000 alumina plant to be constructed by the government in Arkansas near Benton.

Lower Grade Bauxite To Be Mined

Gazette 8-15-41

Bauxite mining will be started in Saline and Pulaski counties by the Reynolds Metals Company interests "soon," O. C. Schmedeman, manager of the Reynolds Mining Corporation, said yesterday.

A grade of ore lower than the commercial grade will be used, he said. No new reduction processes will be involved, he added, since the Reynolds alumina-aluminum plants at Sheffield, Ala., have made mechanical and economical improvements for the profitable use of the lower grade.

The ore will contain less than 55 per cent aluminum oxide and more than seven per cent silica, ratios generally used, but Mr. Schmedeman declined to disclose the exact percentages. Because of the heavy demand for defense needs, higher grade bauxite will become "scarce," he said.

50 Men at Work.

Most of the mining will be in Saline county. The Reynolds concern has been making drilling tests since last fall. Fifty men are employed, with headquarters at Sweet Home.

Changes Name.

The Reynolds Mining Corporation is the new name of the former Bauxite Mining Corporation. The firm, incorporated in Delaware, filed copies of amended articles at Secretary of State C. G. Hall's office yesterday.

President R. S. Reynolds, nationally recognized as the Aluminum Company of America's first challenger in many years, at one time considered Arkansas as a possible location for a processing plant.

Bauxite Boom Predicted For Little Rock

8-15-41

Use of Low Grade Ores to Open Vast New Fields.

By B. N. TIMMONS.

(Democrat Washington Bureau) Washington—Arkansas' low grade bauxite ore as well as the deposits of high grade ore, will be utilized by the new alumina plant to be built in Saline County for the defense program, it was learned here today. New processes have been devised and proved practical whereby the same plant can use both high grade and low grade ore. The new Arkansas plant will be equipped to use both and will use ore as low as 40 per cent aluminum oxide.

New Fields Possible.

Arkansas who have been working on the development of the state's bauxite resources for the defense program are pleased that the low grade ore will be used in the new plant for two reasons. One is that it will mean the opening up of vast new fields which hitherto could not be tapped.

The other is that it will make it possible for the Arkansas resources to go farther and last longer.

It was learned that since the decision was made to use the low grade bauxite, as low as 40 per cent aluminum oxide, the testing and drilling for new fields has spread rapidly in the state with the result that new fields, which up to now were unknown, have been discovered and will be tapped. Those who have been following this development say it

may reveal usable bauxite ore existing all the way to Little Rock.

Bauxite "Boom" Seen. Some of the Arkansians here are discussing the new aluminum and bauxite development in the terms of an oil boom, with prospects of farmers and small landowners in the new areas getting rich overnight from leasing or selling newly-discovered, low-grade bauxite. It may or may not turn out that way, but stories are reaching Washington of farmers being offered almost fabulous sums for leases plus royalties for newly-discovered bauxite deposits.

For several days, a delegation of business men from Malvern and Benton have been here working on the development of alumina and power in that section of Arkansas for the defense program. They have pooled their interests in the developments and have been here conferring with officials of the Federal Power Commission and the Office of Production Management.

Those here are Mayor Kelso Kight and Carroll Cuffman, Malvern, and Judge Charles O. Smothers, Mayor Henry J. Finkbeiner, Joseph Blakley and H. J. Jingles, Benton.

NO DATE FIXED FOR BEGINNING ALUMINA PLANT

Officials Speculate Over Delay.

Gazette 8-17-41

State officials and representatives of bauxite mining firms speculated yesterday over the delay in making commitments, leasing or purchasing property and awarding of a contract for construction of a proposed \$21,000,000 alumina plant near Bauxite.

L. R. Branting, superintendent of the Republic Mining and Manufacturing Company properties in Saline county, said he was advised yesterday that no construction contract had been awarded. An option on a plant site already had been obtained.

No official expressed doubt that the alumina plant will be built soon and operated as a permanent industry after the national emergency is ended. None could predict when the plant, which the Office of Production Management announced two weeks ago would be erected between Bauxite and Bryant, would be started.

Governor Adkins and delegations from Benton and Malvern were in Washington yesterday, attempting to obtain prompt action on the approved plant and to secure the selection of Arkansas as the site of a proposed \$75,000,000 aluminum plant.

Lower Grade Bauxite To Bring Smaller Royalties.

Officials of mining companies agreed recent activity in the bauxite fields has been important and substantial, but denied the activity has approached the proportions of a boom. They said that owners of property from which lower grade bauxite can be mined profitably for the first time may be required to accept lower royalties.

It was pointed out that increased cost of processing low grade bauxite will mean a higher price per pound of the finished metal, even though the mining cost per ton will remain stationary.

"Although there is a great demand for aluminum," a mining company official said, "there also is a ceiling on the price the public will pay."

"This new development will mean more production," Mr. Branting said. "But the industry desires to build on a solid basis that will survive after the emergency."

Processing of Low Grade Ores to Increase Cost.

An official of a company which plans to mine low grades of bauxite said ores of less than 40 per cent metal content could not be profitably shipped out of the state to its processing plant. He said the cost of processing some ores above 40 per cent would increase the cost markedly.

Ellis Predicts Power Rate Will Be Met.

Congressman Clyde T. Ellis, who was at home in Bentonville yester-

day, said the OPM edict that no aluminum plant will be placed in Arkansas until power can be bought for three mills per kilowatt hour has been met partly by the Rural Electrification Administration.

"I attended a meeting of OPM, REA and Federal Power Commission officials at Washington at which the three-mill demand was made," he said. "The REA agreed to furnish power at that rate if it can obtain funds at the 'government rate' instead of the Reconstruction Finance Corporation rate of 3 1-2 per cent. I think this can be done, but approval must be obtained from Secretary of Commerce Jesse Jones."

Adkins Seeks Bigger Plant For Alumina

Gazette 8-20-41

Governor Adkins has suggested that the capacity of a 400,000,000-pound alumina plant awarded to Bauxite, Saline county, be increased to 600,000,000 pounds, and that the capacity of a 100,000,000-pound alumina plant designated for Arkansas be increased accordingly, he said upon returning last night from a week's trip to Washington.

Prior to the announcement of a location for the alumina plant, half way between Bauxite and Byant, he had given assurance that Arkansas bauxite deposits would justify a capacity of 600,000,000 pounds.

Apparently encouraged by Washington indications on Arkansas defense developments, the governor said he learned of "no changes" in plans concerning the establishment of the aluminum plant and power facilities to operate it. "It's just like it always has been, and nothing has been announced about locations for the aluminum and power plants," he said.

Not Concerned With Power Supply Fight.

Mr. Adkins said he was not concerned with whether the Rural Electrification Administration or private companies furnish power, but wants power generation for the aluminum plant to be the "first" served by the south Arkansas sour gas field. He conferred with officials of the Standard Oil Company of New Jersey, which has large sour gas holdings in the McKemie field, through its Carter Oil Company, and with Arkansas Louisiana Gas Company officials.

Representatives of the Office of Production Management and other agencies were told that "we want to do everything we can to make their job easier for them," the governor said.

Information concerning manganese, limestone and other mineral deposits was given to the OPM, Bureau of Mines and others.

"I feel that the folks in Washington know about Arkansas," Governor Adkins said. "The congressional delegation is making a completely co-operative effort."

BIG ALUMINUM PLANT ASSURED STATE BY R.F.C.

Will Be Operated By Alcoa.

Gazette 8-21-41

Washington, Aug. 20 (AP).—Jesse Jones, federal loan administrator, announced today the government would build, at a cost of \$52,000,000, aluminum plants in Arkansas, New York, and the Bonneville dam area to produce metal for the manufacture of bombers. The projects were undertaken at the request of the OPM and the army as part of a plan designed to double the aluminum capacity of the country.

The \$52,000,000 is to be for plants to be built and operated by the Aluminum Company of America but actually owned by the government.

The announcement provided for the construction in Arkansas of a plant to make 400,000,000 pounds of alumina (an intermediate product in the conversion of bauxite into aluminum); and the construction of aluminum smelting plants of 150,000,000 pounds capacity near Massena, N. Y., 90,000,000 pounds capacity near Bonneville dam, and 100,000,000 pounds capacity in Arkansas.

Exact sites of plants have not been decided on, and the cost of land, Jones estimated, may bring their total cost to \$60,000,000.

Contracts With Other Companies Under Negotiation.

Jones said he was negotiating to finance the construction of facilities with 100,000,000 pounds capacity for Reynolds Metals Company and 160,000,000 pounds capacity for other aluminum manufacturers. The new Reynolds plants would be in Alabama and the Bonneville dam area.

Alcoa Agrees to Reduce Price Two Cents Per Pound.

Jones also announced that as a result of negotiations with Arthur V. Davis, chairman of the Board of Directors of the Aluminum Company of America, "that company will reduce the price of ingot aluminum from 17 cents to 15 cents per pound on all shipments made after September 30 and prices for other types of aluminum will be reduced at least two cents per pound."

Aides estimated this would save the government about \$15,000,000 a year on Alcoa aluminum. Jones indicated other aluminum companies would follow the price change and increase the saving.

Transaction Not to Affect Anti-Trust Proceedings.

In answer to a question about anti-trust proceedings against Alcoa, he said the Justice Department had approved the deal, and the transaction would affect in no way anti-trust litigation.

The new Alcoa plants will be built and operated by Alcoa under a five-year lease, under which the Defense Plant Corporation, a government agency, will get 85 per cent of the net profits. Alcoa will retain 15 per cent as a fee for operating the plants.

"I am sure this is a low fee," Jones said.

Norrell Says Plant Capacity To Be Increased.

Representative Norrell (Dem., Ark.) said the Office of Production Management recommended today expansion of the proposed capacity of an alumina plant in Saline county, and construction of an aluminum plant in the area of bauxite deposits.

Instead of the proposed capacity of 400,000,000 pounds of alumina annually at the Saline county plant, Norrell said, OPM proposed 500,000,000 pounds. If the OPM recommendations were adopted, he said, the Saline county plant also would contain a tailings treatment plant using a process developed by the aluminum company, and the second plant a custom smelter plant.

The OPM recommended that the alumina plant be located at a site easily accessible to independent producers of bauxite, he said.

Benton-Bauxite Area Expected To Get New Plant.

It would be "good business and common sense" to enlarge the alumina and alumina plants, Governor Adkins said. "I feel reasonably sure there will be no unnecessary delay in getting the plants started," he said.

Indications that the Bauxite-Benton area in Saline county might have the "inside track" for the alumina plant are:

The Aluminum Company of America, which will operate the alumina plant near Bauxite and the alumina plant, controls the Republic Mining and Manufacturing Company at Bauxite, the state's largest bauxite mining concern.

Washington dispatches' references to the fact that the plant would be near the bauxite deposits.

A freight rate advantage which, Saline residents say, is offered by a Benton-Bauxite location. Bauxite and alumina would have to be transported only a few miles at the most.

Camden, Malvern and Calion have been considered as possible locations. The power plant or plants probably will be in south Arkansas, where "sour gas" fields have large reserves. The 100,000,000 pound aluminum plant would require a 120,000-kilowatt power plant. The alumina plant will need little power.

ANOTHER PLANT FOR PRODUCING ALUMINA LIKELY

Arkansas May Get Four Units.

Gazette 8-22-41

Washington, Aug. 21 (A.). — The Office of Production Management recommended to the War Department today a further increase of 600,000,000 pounds in the annual capacity to produce alumina, an intermediate stage in production of aluminum.

William S. Knudsen, director of the OPM, recommended that a plant with a capacity to produce 500,000,000 pounds annually of alumina be built in Arkansas and that another plant previously recommended for the same state should have a capacity of 500,000,000 pounds instead of the 400,000,000 pounds first proposed.

The exact site of the additional plant has not been selected but the one previously recommended is to be built near Bauxite, Ark.

Both plants would be financed by the Defense Plant Corporation and be owned by the government.

Knudsen recommended that the Aluminum Company of America construct and operate both plants but that the government retain ownership of the alumina produced at the second plant just initiated and sell it to aluminum making companies. He proposed that the RFC establish an agency to buy ores and set prices for the sale of alumina.

Experiments With Alunite Recommended.

The OPM also recommended to the War Department that the extraction of alumina from alunite be started on a small scale at Marysvale, Ut. The operation would be carried on by Kalunite, Inc., of Salt Lake City with a plant having a capacity of 100 tons of ores a day. Production of alumina from alunite has not been accomplished before on a commercial scale although small operations have been conducted by Kalunite, Inc., for some time, officials said.

These officials estimated that construction of the new plants would give the United States capacity for 2,720,000,000 pounds of alumina annually.

This would be within 300,000,000 to 400,000,000 of the amount now considered necessary to produce 1,400,000,000 pounds of aluminum metal each year.

Officials said alumina also is used in the chemical industry for water treatment, filtration and other purposes. To meet these requirements, another recommendation will be made soon. It has not been decided whether to recommend construction of an additional plant or additions to existing ones.

Four Plants Embraced In Arkansas Program.

Representative Norrell (Dem., Ark.) said the program in Arkansas recommended by OPM involved construction of four separate plants as well as expansion of mining facilities in the bauxite area.

First of the four plants, he said, would be that in Saline county, already approved by the War Department, and included in a \$52,000,000 contract signed by the Reconstruction Finance Corporation and the Aluminum Company of America yesterday for new plant facilities in Arkansas, New York and near Bonneville Dam, Ore. Present plans call for annual production of 400,000,000 pounds of alumina at this plant, Mr. Norrell said, but OPM's new recommendations would up this to 500,000,000 pounds. Alumina is an intermediate product in the conversion of bauxite ore to aluminum.

In addition, Mr. Norrell said, OPM recommended:

Another alumina plant, also of 500,000,000 pounds annual capacity, at an undetermined site in the Arkansas bauxite fields, accessible to independent bauxite producers.

Construction, at this second alumina plant, of a third plant for "tailings treatment" utilizing a process for washing low grade ores, containing a small percentage of silica, to salvage the metallic residue.

A smelter plant, already approved by the War Department, to produce 100,000,000 pounds of aluminum annually. The site of this fourth plant has not been announced, but Mr. Norrell said it probably would be in the vicinity of the first of the two alumina plants.

Mr. Norrell said the proposed expansion of mining facilities would bring production of the Arkansas fields up to approximately 2,000,000,000 pounds of bauxite annually.

Two Plants Would Require 'Lot of Bauxite.'

A "lot of bauxite" would be required by two proposed alumina plants with a capacity of 500,000,000 pounds annually each, Supt. L. R. Branting of the Republic Mining and Manufacturing Company, Alcoa subsidiary at Bauxite, said yesterday.

Two representatives of the Office of Production Management were at Bauxite Wednesday, he said, but the decision to build two alumina plants instead of one had not been announced then. Mr. Branting said the OPM officials discussed plans for washing low-grade ores.

Governor Adkins disclosed he proposed the construction of two alumina plants at last week's conferences with OPM officials at Washington, and expressed satisfaction when notified his proposal had been approved.

Aluminum Co. to Build, Operate 3 New Plants Under RFC Agreement

Would Lift Annual Capacity 340 Million Pounds — "Unreasonable Profits" Prohibited — Price Cut 8-21-41

From THE WALL STREET JOURNAL Washington Bureau

WASHINGTON—A long step toward providing additional aluminum for defense was taken yesterday when the Reconstruction Finance Corp. and the Aluminum Co. of America concluded arrangements for construction of three new aluminum plants with total capacity of 340,000,000 pounds annually.

The plants will be designed and constructed by Alcoa, without profit. They will be owned by the Defense Plant Corp., an RFC subsidiary, and operated by Alcoa under a five-year lease.

Federal Loan Administrator Jones announced that the contracts provide that if Alcoa makes "unreasonable profits" in selling aluminum produced in the leased plants, the Government may break the lease and take over operation. The Defense Plant Corp. reserves to itself "final determination" as to what constitutes "unreasonable profits."

At the same time, Mr. Jones revealed that as a result of these negotiations, Alcoa has agreed to reduce the price of ingot aluminum from 17 cents to 15 cents a pound, on all shipments made after September 30. Prices for fabricated aluminum, he added, will also be reduced "at least" 2 cents per pound, and in some cases, more.

The contract between the RFC and ALCOA provides that either the company or the Defense Plant Corp. may build as many new plants as they wish or expand existing plants. Should the demand for aluminum fall below 40% of the rated capacity of all the plants owned by both, it is provided that either party may cancel the lease.

Under the contract, ALCOA will pay the Defense Plant Corp. 85% of its net profits from operation as rental. The new plants are to be operated at the same relative capacity as plants owned by ALCOA.

Other Contracts Near Conclusion

Contracts now near conclusion with the Reynolds Metal Co., the Bohn Aluminum Corp., Union Carbide Co. and the Olin Corp., it was understood, are closely patterned along the lines of the Alcoa contract. Plants to be built by these companies call for a total capacity of 260,000,000 pounds of aluminum.

Mr. Jones said that when all of these plants are operating, total aluminum capacity in the United States will be around 1.5 billion pounds a year, which is "substantially more than that produced by all the rest of the world put together."

The Federal Loan Administrator yesterday also confirmed reports that a contract has been completed with the Aluminum Co. for a new 400 million pound alumina plant in Arkansas.

Mr. Jones was asked at his press conference if the result of the Alcoa contract would be to "break the monopoly of the Aluminum Co." He told his questioner: "You understand English, don't you?"

It was pointed out, however, that under existing plans, Alcoa would still control more than

half of the available alumina, the raw metal of which aluminum is made. Mr. Jones was asked if that would not permit the Aluminum Co. to "continue its monopoly." If aluminum couldn't be produced without alumina, and half of the alumina was controlled by Alcoa, wouldn't "the monopoly be maintained?" the questioner persisted.

Does Not See Much Difference

Not replying directly, Mr. Jones said he didn't see much difference between alumina and aluminum, that they were both part of the same thing. He added in response to a query that the new arrangement would have no effect on the government's anti-trust action against Alcoa.

The new aluminum plants to be built by Alcoa under the RFC contract will be at Massena, N. Y., with an annual capacity of 150 million pounds; in the Bonneville Dam area, probably at Troutdale, Ore., with a 90 million pound capacity; and around Camden, Ark., with 100 million pound capacity.

The over-all cost of these plants, exclusive of sites, Mr. Jones said, will approximate \$52 million. The total cost of all the plants, including those to be put up by the other aluminum companies, he estimated, will "not be much over \$100 million."

Negotiations with these other companies are nearly complete, it was understood. The Olin plant, with 50-million-pound capacity, will be at Tacoma, Wash.; the Union Carbide plant, with 40-million-pound capacity, at Spokane; the Bohn plant, with 70-million-pound capacity, at Los Angeles. Reynolds Metal Co., which will get a contract for production of 100-million-pounds, was to build a plant at Listerhill, Ala. Mr. Jones said, however, a part of the new Reynolds facilities may be constructed in the Bonneville area.

Adkins Urges Tests For Bauxite

Gazette 8-30-41

In an effort to expedite operation of a proposed aluminum plant to be constructed in Arkansas, Governor Adkins recommended to the Office of Production Management yesterday that a "liberal sum" be set aside to drill test holes in search of bauxite deposits on property of individuals in Pulaski and Saline counties.

He also suggested that a government agency be formed to buy bauxite from individuals in any quantity. In addition, he proposed it would be "expedient to 'stock pile' the ore" for emergency use.

"Stock piling" is a term applied to the mining of ore which is then permitted to accumulate in large quantities until needed.

"If the OPM wants to speed the aluminum plant along it could provide a liberal sum to drill individual places in the bauxite area," the governor said. "Most farmers and other landowners cannot afford to drill test holes."

Conference Tuesday.

The governor announced that State Geologist George C. Branner has been called to Washington by A. H. Bunker, chief of the Aluminum Section of OPM, for a conference on the proposed aluminum plant Tuesday morning.

He believed an announcement concerning the sites of the aluminum plant and a second alumina plant will be made soon after the Labor Day holiday, simultaneously with the award of contracts for construction and operation of power facilities.

Mr. Adkins said J. A. Krug, head of the OPM Power Division, left Washington yesterday for a three-day holiday and probably will make no announcement until his return.

Agency To Buy Bauxite Discussed

Gazette 9-5-41

Washington, Sept. 4 (A.).—Dr. George C. Branner, Arkansas state geologist, said tonight national defense officials were holding conferences here aimed at expediting aluminum production at a contemplated new plant in Arkansas.

"These conferences do not deal with selection of a site for either the aluminum plant or the alumina plants," he said, "but with setting up a necessary independent agency to contract for the purchase of

bauxite.

"Officials of the Office of Production Management invited me to attend their conferences this week with representatives of the Republic Mining and Manufacturing Company to discuss setting up of a contracting agency to acquire bauxite, as well as the question of price schedules."

He said Republic was a mining subsidiary of the Aluminum Company of America which will use the bauxite in processing aluminum.

"There will be further conferences next week with independent companies having bauxite holdings in Arkansas," Dr. Branner said.

Mr. Norrell On Inspection Of Bauxite Area

Special to the Gazette. 9-12-41

Hot Springs, Sept. 10.—As evidence of appreciation of his successful effort to have the government locate a \$23,000,000 alumina plant near Bauxite, citizens of that town and Benton headed by Chamber of Commerce and Rotary Club members banqueted Congressman W. F. Norrell, Monticello, at Bauxite tonight.

John L. Hughes, Benton, past district governor of Rotary, was toastmaster. County Judge Charles O. Smithers, Benton, introduced Congressman Norrell. Judge Smithers referred to the work that had been done in gathering data, and detailed the effort Congressman Norrell had made to bring a defense industry to Saline county. He said the alumina plant was obtained only "because of his untiring efforts."

Speaker Draws Applause.

Congressman Norrell was applauded when he said, "Saline county will probably make the most outstanding contribution toward winning this war—aluminum."

He said that after his election to Congress three years ago he determined to try to interest the government in building plants in the Sixth District to process bauxite. The war, and the shortage of aluminum, he said, provided the opportunity to impress on government officials the facts about Arkansas bauxite.

Mr. Norrell said that in a few days a government engineer will be in Bauxite to determine the exact location of the aluminum plant which, he added, will have a capacity of 500,000,000 pounds annually. More than 400 acres have been bought by the government as a location.

"That is 100,000,000 pounds increase over the first announced capacity," Congressman Norrell said.

Second Plant Planned.

He said also that there would be a second alumina plant in the vicinity of the first, which would have an additional unit known as "the tailings treatment" plant. The latter will process bauxite discarded by the first plant. Cost of the second enterprise, with its additional unit, Mr. Norrell said, will exceed that of the first alumina plant.

He promised that an aluminum plant will be built in Arkansas. He said he expected to receive information about sites soon.

Congressman Norrell closed his address with a review of the present national defense picture and prediction of defeat for Germany and its allies.

Confers at Benton.

Before going to Bauxite Congressman Norrell met a committee at Benton, consisting of Mayor H. J. Finkbeiner, C. F. Elza, postmaster; Joe Blakley, H. J. Gingles and H. W. Anderson, representing the Benton Chamber of Commerce and the Benton-Bauxite Rotary clubs, and Robert Dorris.

He was accompanied to Benton by Mrs. Norrell, his secretary, Representative Ernest Maner, and Walter M. Ebel, Hot Springs newspaper man.

Inspects Bauxite Property.

The party was taken for an inspection of the property of the Republic Mining and Manufacturing Company, by Supt. L. R. Branting. They also visited the mines of the American Cyanamid Co.

They saw what is said to be the largest "strip job" in connection with the bauxite industry in the United States.

The McGeorge Construction Company, Pine Bluff, has the contract

to remove earth from where geologists of the bauxite interests have located a rich bed of ore. The "hole," which covers scores of acres from which more than 1,000,000 yards of dirt have been removed is 160 feet deep.

Rouge Deposit at Bauxite.
Congressman Norrell's attention was called to a deposit of what Mr. Branting said was "rouge rock."

"There is enough rouge on deposit here" a member of the party said, "to provide red cheeks for every woman in the United States." Congressman Norrell asked what Mr. Branting's company intended to do with the rouge stone deposit. "We are too busy with the bauxite to do anything with it, he replied. "Persons identified with the manufacture of rouge have been here, examined the deposit and wondered whether we had a supply sufficient to make processing profitable. Up to now, however, we have had to throw it aside."

Mr. Norrell said he intended to ascertain if the rouge industry would be interested.

OPM May Open Office To Purchase Bauxite.

Gazette 9-12-41
The Office of Production Management is considering a plan to establish and supervise an agency to purchase bauxite, especially low-grade ores, for the alumina and aluminum plants to be built in Arkansas. Dr. George C. Branner, state geologist, told Governor Adkins yesterday.

His suggestion for expediting the start of production at the proposed plants by immediate test-hole drillings is being studied by the OPM, the governor learned. Dr. Branner said the OPM also is studying the advisability of establishing price scales.

The geologist returned from a 10-day trip to Washington.

Low-Grade Bauxite To Be Used

Gazette 9-12-41

Owners of low-grade bauxite deposits will find a bonanza when the new aluminum industry allotted to Arkansas by the Office of Production Management is placed in operation, Dr. George C. Branner indicated yesterday.

The state geologist said low-grade ore will be used exclusively during the period of emergency, providing a "golden opportunity for the boys with this type of bauxite to sell."

Dr. Branner, who returned this week from Washington where he conferred with government officials on plans for the new plants, explained that most mines now operating in Arkansas produce high-grade ore.

"After the emergency is over, these facilities will have to use high-grade ore in order to compete with other aluminum production," Dr. Branner said. "One ton of alumina requires 1.65 long tons of imported ore, two tons of high-grade Arkansas ore or 2.87 tons of low-grade Arkansas ore. Imported bauxite cuts the amount of ore about a ton."

Dr. Branner said he heard nothing in Washington which would indicate Arkansas may not get the proposed plants.

"In fact," he said, "I wouldn't be surprised if the announcement of location is made any day now."

Reynolds' Aluminum Plant

In Northwest Starts Operating

WELL ST. JOURNAL 9-13-41
PORTLAND—Reynolds Metals Co. this week began operation of its new aluminum plant at Longview, Wash. Taking its first Bonneville power under the contracts executed in February and March for 60,000 kws. The plant is designed to produce about 30,000 tons of aluminum a year. Taking of power was coincidental with completion and bringing into operation of the fifth generator at Bonneville dam.

Normal Royalty on Bauxite One-Eighth of Value.

Gazette 9-13-41

The normal royalty of \$1 a ton has reached an average of one-eighth the present market value of washed and dried bauxite, or the equivalent of oil royalties, Dr. George C. Branner said yesterday.

The market price of 56-59 per cent alumina ore with five to eight per cent silica was \$7.50 to \$8.50 a ton. This quality ore, the state geologist said, might be termed the average of Arkansas bauxite now being mined.

His statement was made in re-

ply to questions concerning the probable return to owners of bauxite deposits when two alumina plants authorized by the Office of Production Management are placed in operation. One 500,000,000-pound alumina plant already has been assigned to Saline county for operation by the Aluminum Company of America.

Dr. Branner did not attempt to place a value on low-grade bauxite.

Aluminum Plant In TVA Area Considered.

Gazette 9-14-41

Decatur, Ala., Sept. 13 (AP).—Marion Caskie, vice president of the Reynolds Metal Company, Richmond, Va., told the Decatur Daily today his company was considering construction of a new aluminum plant in the Tennessee Valley region.

"We are negotiating regarding another aluminum plant," he said, and added he was hopeful the negotiations would be completed shortly.

"If we do go into it, it will be down in the Tennessee Valley region," Caskie declared.

The company has a \$35,000,000 aluminum plant at Muscle Shoals, Ala.

Jesse Jones Defends Alcoa Contract

Gazette 9-16-41

Washington, Sept. 15 (AP).—A \$52,000,000 government contract with the Aluminum Corporation of America was assailed as "entirely one-sided" today before the Senate defense investigating committee after Secretary of Commerce Jones had described the agreement as "good and safe." Hugh A. Fulton, committee lawyer, said "It's difficult to find any obligation on the part of Alcoa." He contended the contract would prevent the government from operating its own plants "unless Alcoa agrees."

Jones, as head of the Defense Plants Corporation, an R. F. C. subsidiary, signed the contract August 19 over the objections of Secretary of Interior Ickes, who termed it "contrary to the policies of this administration."

The agreement provided that the government furnish funds for constructing aluminum plants, which are to be leased to Alcoa for five years. Alcoa will receive 15 per cent of the profits as a fee for operating the factories.

Depending On Good Faith.

Senator Mead (Dem., N. Y.), acting chairman of the committee, objected to the lack of a time clause in the construction contract, saying Alcoa could take five years to build the plants and still not be subject to penalties. Jones reported that the "purpose and spirit" of the contract was for Alcoa to build the plants "as rapidly as possible."

Fulton questioned Jones regarding a provision whereby Alcoa could refuse to accept bauxite, basic material for aluminum, if the company considered the price was not "reasonable." The contract provides for arbitration in such an instance.

"Then, if Alcoa doesn't want us to, we can't even deliver materials to our own plants," Fulton commented.

Jones was asked what would happen if Alcoa refused to arbitrate on bauxite prices. He replied that the government and the company would have no difficulty.

"I haven't any fear in the world that the government is going to be hurt by this contract," he testified.

Jones estimated Alcoa would not make a net profit exceeding one-fourth cent per pound on the aluminum produced, and added, "it's cheap for the government because they're the only people qualified by experience to make aluminum."

Senator Ball (Rep., Minn.) said the committee was "worried that we've used Alcoa so much they'll come out of this emergency with their monopoly position strengthened."

Jones said he didn't believe that was true and cited the Reynolds Metals Company as a competitor which had been strengthened.

OPM Processes Discussed.

Earlier, Senator Wallgren (Dem., Wash.) had declared management was "unwilling" to consider processes for aluminum manufacture other than that used by Alcoa.

He said "the Western hills are full of alunite," an ore which he asserted had been used in Japan

successfully for aluminum manufacture.

Arthur H. Bunker, head of the aluminum and magnesium production division of OPM, said Wallgren was "wholly incorrect" in declaring OPM had not studied aluminum production methods other than that employed by Alcoa. He said OPM aimed at an aluminum production peak of 167 tons a day and planned for manufacture of 475 million pounds annually on the west coast alone.

Increased Aluminum Production Planned.

Gazette 9-17-41

Washington, Sept. 16 (AP).—The Supply Priorities and Allocations Board today announced a policy calling for "extended production of every critical material to meet the needs of the all-out defense program."

Immediate efforts will be concentrated on aluminum, magnesium and copper. Magnesium plans call for an additional 364,000,000 pounds a year.

Aluminum expansion contemplates an increase of 600,000,000 pounds a year. Emphasis will be placed on getting new aluminum plants built and into operation as quickly as possible.

Expansion of copper production was called for through a campaign designed to increase the available supply and to reduce the demand. The board directed Donald M. Nelson, executive director, to seek to cut domestic consumption of copper between 250,000 and 350,000 tons annually. It also ordered a study to increase production in existing American mines.

More, Larger Aluminum Plants Sought

Gazette 9-18-41

Washington, Sept. 17 (AP).—Plans to speed and expand construction of aluminum and magnesium plants to produce airplane metals were announced today after a meeting of Loan Administrator Jones and the Supply Priorities and Allocations Board.

Jones said the group decided to speed the program to expand aluminum capacity to 1,500,000,000 pounds a year and plan further plants for aluminum, and take similar action on magnesium for which the present goal is 400,000,000 pounds a year.

"We haven't settled the details and I can't tell you how much money or additional capacity will be involved," Jones reported.

Earlier, Jones said negotiations were nearly complete to finance an addition to the aluminum plants of the Reynolds Metal Company, near Sheffield, Ala., to increase their capacity from 40,000,000 to 100,000,000 pounds a year.

OPM Chiefs Say Plans Unchanged.

Gazette 9-21-41

Washington, Sept. 20 (AP).—Office of Production Management officials asserted today there was no prospect of Arkansas losing the two aluminum plants allotted to it under the national defense program.

Congressman Clyde T. Ellis of Bentonville, in a statement issued Thursday, declared there was a definite possibility the state might lose a 100,000,000-pound aluminum plant because of the power situation.

Beyond denying the possibility of the state losing the 1,000,000,000 alumina plant and the smaller aluminum plant, the OPM officials declined comment.

Ellis said government officials had expressed concern over the state's ability to supply an adequate amount of power and at a low rate.

Aluminum Plant May Go To Helena

Gazette 9-23-41

Statehouse circles heard yesterday that the aluminum plant allocated to Arkansas by the Office of Production Management may be constructed at Helena.

The 100,000,000-pound plant, to cost about \$60,000,000, was announced several months ago. Al-

though the Defense Plant Corporation of the Reconstruction Finance Corporation signed a contract August 20 with the Aluminum Company of America to build the plant somewhere in Arkansas, the site has not been made public.

While the choice of Helena remained only a speculation, Governor Adkins said he heard reports that the Phillips county city was under consideration. Dr. George C. Branner, state geologist, declared he had heard the same thing but had received no definite information.

Location Favorable.

Some state officials said that if Helena is selected its water transportation facilities and proximity to metal-producing and fabricating plants at Alcoa, Tenn., may be the deciding factors. It was pointed out that, after the emergency, permanent aluminum and alumina plant would require water transportation direct from Moengo and Paranam, Suriname (Dutch Guiana), where high grade bauxite ore can be obtained to compete with other producers of aluminum. During the emergency, the Arkansas plant would utilize alumina produced from low-grade ores.

The Aluminum company has obtained options on land for construction of an alumina plant near its bauxite mines in Saline county.

Even Greater Aluminum Need Seen

Gazette 9-25-41

Washington, Sept. 24 (AP).—Jesse Jones, federal loan administrator, said today he expected the country would have to expand manufacturing capacity for steel, aluminum and other defense materials even beyond the huge programs now contemplated.

Jones announced signing of a contract for new aluminum plants with 60,000,000 pounds annual capacity to be built by the Reynolds Metals Company near Sheffield, Ala., and to be financed by an \$8,000,000 R. F. C. loan. Jones said negotiations were continuing for another Reynolds aluminum plant in the Bonneville dam area and several contracts for new steel capacity were nearing completion.

Jones described the Reynolds loan terms as more liberal than any granted to the Aluminum Company of America. He said criticisms from some unidentified quarters that the Aluminum Company received better terms than Reynolds were "100 per cent inaccurate."

Jones said the R. F. C. has agreed to finance the construction of three or four shipyards to build the new Sea Otter type of merchant ship, but no details or amounts were available. The first ship of this type, built at Orange, Tex., is being tested.

No Change in Plans For Aluminum Units.

Gazette 9-24-41

Washington, Sept. 23 (AP).—Senator Caraway (Dem., Ark.) said today she knew no reason why Arkansas might lose a promised aluminum plant because of the lack of power or for any other reason.

In a statement she said that she and other Arkansas members of Congress had been assured that the state would also receive two alumina plants as well as the aluminum plant.

She added that "there has been a disposition of late as I see it to perhaps consolidate the two alumina plants into one, in other words to double the capacity of the already located plant instead of one in another location."

Delay in locating the aluminum plant, she said she understood, was caused partially by the desire of officials, because of climatic and other reasons, first to determine the location of a plant in the northwestern part of the country.

"I may be in error, but I see no reason why Arkansas should not receive the aluminum plant which has been promised us," she said.

Expanded Bauxite Mining Proposed

Gazette 9-28-41

Cincinnati, Sept. 27 (AP).—The Executive Board of the C. I. O. Aluminum Workers of America endorsed today a proposal to end the nation-wide aluminum shortage by expanding mining operations, rationing power, and training labor for annual production of 3,000,000,000 pounds.

Other points in the proposal included full priorities on materials necessary to construct new alumi-

num plants, construction of steam power generating facilities, creation of an aluminum industry council composed of representatives of industry and labor under government chairmanship, and extension of collective bargaining.

N. A. Zonarich, president of the A. W. A., quoted the Bureau of Mines as estimating Arkansas bauxite mining operations could be stepped up 500 per cent in four months.

Nothing Done as Yet About Alumina Plant.

Gazette 9-28-41

Options obtained by the Aluminum Company of America on Saline county land, expected to become the site of a \$21,000,000 alumina plant authorized by the Office of Production Management, will expire October 1 unless exercised.

State administration officials, who have been awaiting an announcement that construction will begin soon, were told that the options have been extended.

Continued delay in the construction of the alumina plant and in selection of a site for a \$60,000,000 aluminum plant evidently is puzzling to state officials as to the public.

Aluminum Plant Plans Unchanged

Democrat 9-28-41

Washington (AP).—Senator Caraway (D., Ark.) said today she knew of no reason why Arkansas might lose a promised aluminum plant because of the lack of power or for any other reason.

In a statement she said that she and other Arkansas members of Congress had been assured that the state would also receive two alumina plants as well as the aluminum plant.

She added that "there has been a disposition of late as I see it, to perhaps consolidate the two alumina plants into one; in other words, to double the capacity of the already located plant instead of one in another location."

Delay in locating the aluminum plant, she said she understood, was caused partially by the desire of officials, because of climatic and other reasons, first to determine the location of a plant in the northwestern part of the country.

First Part Of Decision Favors Alcoa

Gazette 10-1-41

(By the Associated Press.)

New York, Sept. 30.—The Aluminum Company of America won an initial point today in the opinion which Federal Judge Francis G. Caffey started reading from the bench on the government's action to dissolve the giant business organization.

Judge Caffey was expected to take about three days to read his opinion on the anti-trust proceedings which started April 23, 1937, from which developed the longest trial in history before a judge. The trial started June 1, 1938.

There was no jury in the case in which the government charged conspiracy on the part of the aluminum company and 60 corporate and individual co-defendants to monopolize, and sought to appoint receivers and trustees to effect dissolution.

Judge Caffey said today the government had not established through two key witnesses that Alcoa had monopolized bauxite fields in Arkansas or anywhere else in the United States. He said that prior to February 2, 1909, when the so-called Bradley patents for the production of aluminum from bauxite expired, it appeared from the evidence that "Alcoa had enjoyed no more rights than were guaranteed to it under the provisions of the patent act."

The two witnesses mentioned by Judge Caffey were George D. Haskell, president of the Bausch Machine Tool Company, and Joseph Uihlein, Milwaukee banker and part-owner of the Schlitz Brewing Company.

He commented that Haskell told of investigations which led him to believe, as he told the late James B. Duke, that the Aluminum Company of America controlled the bauxite field and that Uihlein, who was desirous to enter the aluminum production field, has testified to the same effect.

The court said neither of the witnesses had been shown qualified to express an opinion as to the amount

of aluminum ore, or bauxite, much less the amount of such ore of "aluminum grade" in the United States.

Judge Recalls Testimony Of Dr. Branner.

Pointing out that the defendants were not required to put in testimony to offset government allegations not sustained by the evidence, Judge Caffey said that, as to the bauxite monopolization charge, "Alcoa prevailed without putting in any testimony whatsoever."

Judge Caffey said that Dr. G. C. Branner, Arkansas state geologist, a defense witness, testified that 4,898,703 tons of bauxite in Arkansas were controlled by Alcoa and 5,398,293 tons by other owners on or about May 1, 1940. The judge recalled that Dr. Branner testified there was approximately 20,000,000 tons of potential alumina producing ore in sight in Arkansas.

Lawrence Litchfield, bauxite expert for Alcoa, Judge Caffey said, testified the aluminum company owned about 6,000,000 tons of bauxite and that other companies controlled 5,500,000 tons in Arkansas.

"As far as I can see," Judge Caffey said, "the testimony of the government witnesses with regard to the ownership of aluminum grade bauxite yield completely fails to sustain the government's allegation."

The crux of the case, as outlined by special assistant Attorney General Walter L. Rice in his opening argument was that the defendants had a "100 per cent monopoly in the virgin aluminum and bauxite industry throughout the Western hemisphere."

The two principal issues, as Rice stated them were:

"First, whether or not there is a combination or conspiracy in interstate commerce in violation of Section One of the Sherman anti-trust act, and second, whether or not there is a monopolization or attempt to monopolize interstate or foreign commerce in aluminum in violation of Section Two of the act."

Monopolization of Water Power Denied.

Judge Caffey turned from the question of bauxite to that of water power in connection with aluminum manufacture and said "the charge against Alcoa of the monopolization of water power is entirely without foundation."

He noted that a report of the Federal Power Commission showed that in 1940 there were, within the United States, 117,000,000,000 kilowatt hours of potential electrical development from water power of which only 360,000,000 had been developed and employed by Alcoa and its affiliates.

Ten more monopolization charges by the government remained to be disposed of by Judge Caffey's opinion when court was adjourned.

Monopoly Issue Settled In Alcoa Case

Gazette 10-2-41

New York, Oct. 1 (AP).—Federal Judge Francis G. Caffey, reading for the second day his voluminous opinion in the government's anti-trust suit against the Aluminum Company of America, said "the issue of monopolization in this case is at an end." He reached that conclusion, he said, on the basis that he had been correct in his ruling yesterday that there had been no monopolization of bauxite [aluminum ore] or water power for aluminum manufacture by the company and its subsidiaries.

"In order to produce aluminum," said Judge Caffey, "it is necessary only to have bauxite and water power," adding that it was obvious, in view of this, that articles made from aluminum could be produced by the same elements.

The court said that in his opinion there was no evidence warranting a conclusion that Alcoa "ever acquired water-power sites in excess of its reasonable needs either in the United States or Canada." This was in line with his conclusions yesterday that Alcoa and the 60 co-defendants had not monopolized bauxite fields in Arkansas or elsewhere and had not monopolized water power.

Agreements Canceled. Judge Caffey mentioned agreements made by Alcoa with power companies which bound them not to sell power to other corporations. One of these, he said, expired in 1920, and would have been canceled before that, the defense contended, but for an oversight. The others, the court said, were cancel-

ed by mutual consent in 1901.

"At the time they were entered into," the court commented, "there was doubt whether the Sherman act prohibited such agreements."

Judge Caffey said there was no ground to complain of use by aluminum companies of certain patent rights for the production of aluminum, adding that "the purpose of a patent is to exclude all but the owners thereof and licensees from the use of an invention."

Judge Caffey said no evidence had been offered that Alcoa had refused to sell aluminum to other concerns when it had a supply available and added that the government had failed to prove its charge of monopolization of aluminum.

Thatcher Has Hope of Site Decision Soon

Gazette 10-2-41

Announcements regarding the location of aluminum and power plants recommended for Arkansas may be made in a week or 10 days, H. K. Thatcher, director of the state Agricultural and Industrial Commission's Washington office, said upon arriving from the capital by plane last night.

Mr. Thatcher, who indicated his estimate was unofficial, said: "Without question, they are getting to the point where a decision must be made." A settlement of the site question has been delayed several weeks.

To Remain Several Days.

Mr. Thatcher, who will attend the new commission's first meeting tomorrow, expects to be in the state several days. He will assist in checking the possibility of building steam generating plants near western Arkansas coal mines and in preliminary plans for making plastics from south Arkansas gas. The engineering firm of E. V. Foran, Houston, Tex., will submit a report to Governor Adkins regarding the latter.

Long-Time Program.

Benton and Saline county citizens have informed the Office of Production Management that if aluminum production is curtailed after the emergency, a proposed Saline river steam electric plant could become a necessary stabilization unit in the government's power production program for the White river basin.

A prospectus sent to the OPM said in part:

"Construction of a steam electric plant of 125,000 kilowatt capacity on the Saline river and the construction of a dam on the North Fork of the Saline to provide water for the steam plant's operation would * * * well provide an integral part of the connected electrical system owned and operated in the states of Arkansas and Missouri, by the United States.

"It is reasonable to assume there will be no curtailment of the production of aluminum in Arkansas until after the passing of the present emergency but should, at any time in the future, the production * * * be curtailed, the steam plant could continue to be operated at full capacity."

Gas Rate Proposed.

The Arkansas Louisiana Gas Company has said that, upon the OPM's request, it will quote a price of not more than 5 1-2 cents per 1,000 cubic feet for gas, if a continuous load of not less than 60,000,000 cubic feet a day be used. The company would build whatever pipeline is necessary.

Saline county is urging that a 100,000,000-pound aluminum plant and a power plant to operate it, both recommended for Arkansas, be located near a \$21,000,000 alumina plant to be built near Bauxite.

Judge Again Finds For Alcoa

Gazette 10-3-41

New York, Oct. 2 (AP).—Federal Judge Francis G. Caffey ruled today the Aluminum Company of America had not monopolized virgin aluminum production nor castings as he continued reading his voluminous decision in the government's anti-trust action to dissolve the company.

It was his third day reading the

opinion from the bench in the case against Alcoa and 48 co-defendants after a trial which lasted 40 months. He was not expected to conclude his opinion for at least another day.

The court previously ruled there had been no monopoly on the part of Alcoa as to bauxite [aluminum ore], water power or alumina.

Before announcing his ruling on virgin aluminum, Judge Caffey discussed the government's allegation that Southern Aluminum, in North Carolina, had been purchased by Alcoa in 1914 to prevent the French ownership thereof from competing with Alcoa.

He ruled there had been no evidence such had been the case, stating that when Alcoa took over Southern Aluminum's plant for a net payment of \$6,172,247, the plant was not in operation, and there was no evidence that either the French ownership or anyone else other than Alcoa would ever have resumed operation.

Denies Act Violated.

In ruling on the government virgin aluminum charge, considered in legal circles as the crux of the government's complaint, Judge Caffey found:

That although Alcoa produced and sold all the virgin aluminum made in the United States until the close of the taking of testimony [August, 1940], the company was innocent of monopolization as defined in Section 2 of the Sherman act.

That Alcoa, so far as the manufacture of virgin aluminum was concerned, had not violated Section 2 of the Sherman act. He said the evidence showed aluminum manufactured by Alcoa had for many years been actively in competition with foreign virgin aluminum imported into the United States, scrap of secondary aluminum and other metals including steel, nickel, tin, zinc, copper and lead.

Competition Cited.

Discussing the government's charge that Alcoa had monopolized the manufacture of aluminum utensils, Judge Caffey cited figures indicating that from 1934 to 1937, in which latter year the government began its suit, Alcoa manufactured and sold \$13,360,000 worth of utensils against \$13,368,380 worth manufactured and sold by other aluminum utensil companies.

The court noted that seven "comparatively small" competitors of Alcoa, all engaged more or less in the manufacture of cooking utensils, had multiplied their original small investments during periods mentioned in the complaint, had divided millions of dollars in dividends and were prospering.

He said the government's charge that Alcoa controlled Aluminum Goods Manufacturing Company in which it holds 31 per cent of the stock was contradicted by the evidence of contests between the two companies and their directorates.

Second Plant Proposed At Helena

Gazette 10-3-41

If Helena or any other Arkansas city obtains an additional alumina plant which may be awarded to the state, its location would not interfere with plans for building an Arkansas aluminum plant or the alumina plant to be established between Bauxite and Bryant, H. K. Thatcher, director of the state Agricultural and Industrial Commission's Washington office, said yesterday.

Cities that have been under consideration as prospective sites for the alumina plant, Mr. Thatcher said, include Helena, Calion, Camden, West Memphis and Lake Village. It was rumored here several days ago Helena would be selected for an alumina plant. An alumina plant instead is involved, Mr. Thatcher said.

The additional alumina plant would have a favorable effect on the aluminum plant, since it would help furnish sufficient alumina to keep the aluminum plant operating after the emergency, Mr. Thatcher said.

It was learned that the Aluminum Company of America, which will operate the aluminum plant and the Bauxite alumina plant, has owned 75 acres at West Helena for several years.

Expansion Proposed.

The Bauxite alumina plant, originally announced as a \$21,000,000 industry having a 400,000,000-pound annual capacity, may produce a bil-

lion pounds a year, under revised plans. The aluminum plant, including a power plant, would cost \$60,000,000.

This week's New York federal court decision in an anti-trust suit against Alcoa may have "broken the log-jam" believed to have delayed announcements about the plant locations, Mr. Thatcher said. Alcoa was absolved of monopoly charges.

Still Another Decision For Alcoa

Gazette 10-4-41

New York, Oct. 3 (AP).—Federal Judge Francis G. Caffey ruled today in favor of the Aluminum Company of America and its 48 co-defendants on five more points in the government's anti-trust law case against them.

He found they had not monopolized the manufacture of cooking utensils, pistons, extrusions and structural parts, foil and miscellaneous fabricated products.

The government originally brought 12 counts of alleged monopolization. Including today's opinions, the judge has ruled in favor of the defendants on 10 points with no decisions for the government. Two more counts, involving sheet aluminum cable, remained to be decided.

Judge Caffey was in the fourth day of dictating his opinion. The full decision was expected to be completed next week.

Merger Of Alumina Units Favored

Gazette 10-4-41

Washington, Oct. 3 (AP).—Consolidation of two alumina plants previously recommended for Arkansas into one \$15,000,000 plant with an annual capacity of 1,000,000,000 pounds has been recommended to the War Department by the Office of Production Management, Representative Norrell (Dem., Ark.) announced today.

Mr. Norrell said the one plant would be built in Saline county, site of the state's principal bauxite deposits. Its construction would effect an \$8,000,000 savings in cost compared to the two smaller plants plus a large savings in operating costs.

The plant would employ 650 to 700 persons and would be located at Bauxite, Ark., where, Norrell said, land for its construction already had been obtained. The congressman said the site for a 10,000,000-pound aluminum plant recommended for the state had not been selected.

The Aluminum Company of America would operate under lease both the government-owned alumina and aluminum plants.

MORE OF ALCOA RULING GIVEN

Government Loses Three Points So Far.

N.Y. Sun 10-1-41

The fate of the \$300,000,000 Aluminum Company of America was still in doubt today as Judge Francis G. Caffey continued to deliver orally his decision in the longest trial in legal history, the Government's suit to dissolve the worldwide Alcoa organization as a monopoly charged with price-fixing and the restraint of trade.

Thus far, in two days of the estimated three or four it will take to complete the decision, the Government has lost three of twelve enumerated points on which the general charge of violating the Sherman act rests. Since it is usual, however, for a court to take up the minor points before reaching those upon which a final decision will be based, lawyers were not inclined today to regard these preliminary rulings

Judge Starts Several-Day Task Of Telling Who Won Alcoa Suit

Caffey, Reading Decision in 4-Year-Old Anti-Trust Action Against Aluminum Company, Finds No Monopoly of Bauxite or Power Facilities

Herald Tribune 10-1-41

Judge Francis G. Caffey began yesterday in United States District Court delivery of an oral opinion which he said would take several days to complete in the government's four-year-old anti-trust suit against the Aluminum Company of America.

After nearly five hours of steady talking the seventy-two-year-old jurist had dismissed the government's charges that Alcoa maintained a monopoly of bauxite, the compound from which aluminum is obtained, or of water-power developments in the United States.

These two points represented only a fraction of the charges Judge Caffey must substantiate or dismiss to determine whether he should grant the relief asked by the government in the forty-six-page petition filed on April 23, 1937, by former Attorney General Homer S. Cummings. In the petition the government seeks the declaration of Alcoa as an unlawful monopoly in violation of the Sherman anti-trust act, and asks that the company be dissolved and reorganized under several separate and independent corporations.

Decides on Oral Opinion

The case, the longest on record heard by a judge, without a jury, has assumed an even greater importance than when it was begun because of the national defense situation and the charges that have been made of an aluminum shortage. At the outset of the decision, Judge Caffey said he approached it "with great diffidence" because of the many unique factors of law involved and the voluminous testimony taken. He had previously decided an oral opinion would be simpler and more expedient than a lengthy written decision.

The consideration of the bauxite and water power questions yesterday came under the heading of monopoly charges, which Judge Caffey said he would consider first. Conspiracy charges and allegations of "other misconduct" will be taken up afterwards. The government, he noted, has made monopoly charges in twelve distinct sections of the aluminum industry.

Alcoa monopolizes 100 per cent of the bauxite production in the country, according to the petition. The alleged monopolistic control of this compound forms a basis of the anti-trust suit, since virtually all aluminum is derived from it. Bauxite is composed of aluminum, oxygen and chemically combined water, plus other minor impurities.

Most bauxite in the United States is found in Arkansas, with lesser quantities known to be in six other states. Dr. George Branner, state geologist of Arkansas, testified that in May, 1940, there were 10,296,996 tons of bauxite in his state, according to Judge Caffey. Dr. Branner testified, the court noted, that Alcoa controlled 48 per cent of this total, while Lawrence Litchfield, head of Alcoa's bauxite division, told the

as indicative of the outcome of the case.

Judge Caffey held that the Government had failed to convince him Alcoa exercised a control of the aluminum market prior to 1909 that it did not have under the provisions of its process patents, which expired in that year; he held further that the Government had failed to sustain its charge that Alcoa owned or controlled the available deposits of bauxite, the mineral from which virgin aluminum is obtained, and he ruled that the Government had failed again in its proof that Alcoa had acquired any monopoly in waterpower sites in the proximity of these bauxite deposits.

In arriving at this third conclusion Judge Caffey went through the considerable history of Alcoa's power negotiations, including the amalgamation through a stock exchange with the Duke power interests giving Alcoa control of power sites on the Saguenay River in Canada in 1925 and 1926.

Even if it were assumed that Alcoa had acquired all the estimated 1,200,000 to 1,540,000 horsepower available on this river, said Judge Caffey, the evidence shows that there are a substan-

trial Alcoa had 52 per cent control of the compound in Arkansas.

The testimony of these two principal witnesses, Judge Caffey said, "completely negates" the monopoly charges of the government so far as bauxite is concerned. "In so far as I can see," the court held, "the government completely fails to sustain its contention."

The failure of the government to substantiate its charges that Alcoa monopolized water power is "clear," Judge Caffey ruled, on the basis of Federal Power Commission reports alone. The petition alleged that Alcoa acquired water power plants and properties in excess of its needs and entered into restrictive contracts to keep competitors out.

Judge Caffey noted first in this connection that the prosecution itself at the trial evidenced "some ambiguity" in outlining its arguments on water power and that the court was "still in doubt" on the government's position. At any rate, the decision held, at the end of 1936, Alcoa had water power control to the equivalent of 408,000,000 horse power. It is plain, the court ruled, that Alcoa's water power holdings "are an insignificant portion of the total available in the United States."

The government's water-power charges in the case accordingly are "entirely without foundation," Judge Caffey said. The proof shows, he added, that what is owned by Alcoa in the United States "is but a small fraction" of what the government and others own.

Almost immediately after he had mounted the bench yesterday morning, Judge Caffey announced the final statistics of the four-year legal marathon, with which he literally ate and slept. He said that "upward of 58,000 pages" were in the record, including 41,722 pages of minutes, 15,000 pages of exhibits and 1,500 answers to interrogatories. The case finally came to trial June 1, 1938, and Judge Caffey took it under advisement on March 12, 1941, for a total of 356 trial days. There were 155 witnesses.

49 Defendants on Trial

Forty-nine defendants are on trial at present, including more than thirty individuals. Sixty-three were named in 1937 but some died and some of the corporations consolidated or disappeared. One of those who died was Andrew W. Mellon, former Secretary of the Treasury, whose family has controlled Alcoa for fifty years.

Present in court yesterday were Arthur Vining Davis, chairman of the board of Alcoa, and his brother, Edward K. Davis, chairman of the board of Aluminum, Ltd. William Watson Smith and Charles Evans Hughes jr. are chief defense lawyers, while the government's staff is headed by Walter L. Rice, Special Assistant Attorney General, who was less than thirty years old when the case began.

The decision will be continued at 10:30 a. m. today.

number of rivers in the United States and in Canada affording greater potential power development over which Alcoa had no control. He refused to follow the Government's theory that Alcoa had acquired power far in excess of its reasonable needs as part of a plan to exclude competition.

"I think the evidence is far from warranting a conclusion that Alcoa ever acquired water-power sites in excess of its reasonable needs," said Judge Caffey in pointing out that it was difficult for any organization to anticipate future needs in this respect with a great degree of accuracy.

REYNOLDS BUYS 2,000 ACRES OF BAUXITE LEASES

Expanded Operations Planned.

Gazette 10-5-41

The Reynolds Mining Corporation, a subsidiary of the Reynolds Metal Company of Richmond, Va., has acquired leases on approximately 2,000 acres of bauxite lands in Pulaski and Saline counties and probably will begin mining operations within a few weeks, O. C. Schmedemann, in charge of explorations for the company, said yesterday.

The lease agreements provide for payment of 50 cents for each ton of bauxite ore mined from the acreage, half of which is in Pulaski county in the Sweet Home and Ironton areas, Mr. Schmedemann said. Plans are being prepared for the sinking of shafts in both counties within a few weeks. From 1,000 to 2,000 tons of ore will be mined daily. Several hundred workmen will be employed in the mining operations.

Mr. Schmedemann, who said his company has entered the Arkansas bauxite fields with the intention of remaining permanently, said high-grade ore would be shipped for processing at the Lister Hill plant operated by the parent firm at Sheffield, Ala. Low-grade ore will be mined for proposed alumina plants to be established by the federal government in Arkansas.

Reynolds Firm 'Just Beginning' Operations.

The Reynolds company, which opened an office in Little Rock last May to begin acquisition of leases, is "just beginning" its Arkansas operations, Mr. Schmedemann said. "Our exploration program is in full force and we still are taking up leases," he said.

Mining operations of the Reynolds company will equal "the average to date" of the largest of the two other major bauxite mining firms in the state, Mr. Schmedemann said. Other major firms now operating in Arkansas are the Republic Mining and Manufacturing Company and the American Cyanamid and Chemical Corporation.

Alcoa Again Upheld By Judge Caffey

Gazette 10-5-41

New York, Oct. 4 (AP).—A firm having superior equipment and facilities will win out in competition without necessarily employing illegal methods, Federal Judge Francis G. Caffey declared today in continuing his opinion and decisions in the government's anti-trust law case against the Aluminum Company of America and 48 co-defendants.

Judge Caffey has cleared the defendants of 10 of the government's 12 charges that they monopolized certain phases of the aluminum industry. He was expected to rule next week on the other two and on whether the defendants, or any of them, conspired to violate the law.

"Suspicion Not Enough." In his discussion today of the charge that Alcoa monopolized the production and sale in interstate commerce of aluminum sheet and aluminum alloy sheet, the judge outlined complaints of the Baush Machine Tool Company of Springfield, Mass., which allegedly was forced from the sheet aluminum business by Alcoa.

"The Baush president," said Caffey, "conceded that Alcoa had subjected it to fair and keen competition. The Baush president's complaint was the Alcoa undersold him while he was introducing a new product [duralumin]. If fair com-

petition has its advantages for the public a competitor with superior advantages is entitled to avail himself of them."

From 1922 to 1931, the judge noted, Baush, according to its testimony, spent \$42,000 to improve its sheet production facilities. He said in his opinion Baush's actual expenditures for that purpose in that period were only \$15,000, while Alcoa, the record said, spent \$7,500,000 for the same purpose in the same period.

"Suspicion is not enough," the court declared. "The conduct of Alcoa may have left it open to criticism if suspicion alone warranted it."

He said that such suspicions, as engendered by the testimony, were "spasmodic and do not make out a case of unfair competition against Baush."

No Monopolization.

Baush, the judge said, failed to take advantage of mechanical improvements which Alcoa had used in making sheet aluminum. At one point, he said, Alcoa rolled sheets 138 inches wide while Baush, in a competitive attempt, rolled but an 18-inch sheet.

Judge Caffey said there were at least seven independent sheet aluminum dealers in the United States, four of them actively competing with Alcoa while three made their own sheets. He said the government in his opinion had not proven any monopolization by Alcoa on that point.

No Monopoly In Aluminum, Court Rules

Gazette 10-7-41

New York, Oct. 6 (AP).—The government today lost its Sherman anti-trust action against the Aluminum Company of America and 48 co-defendants after the longest trial in court history.

Federal Judge Francis G. Caffey, who has been reading his voluminous decision since last Tuesday, ruled the government had failed to prove any of its monopoly charges and was entitled to no relief in the suit, seeking dissolution of the company. Submission of evidence required 26 1-2 months, with Judge Caffey hearing the case without a jury.

Two more days will be needed for the reading of the court's verdict on government charges of conspiracy. In the opening portion of his opinion on these charges, Judge Caffey ruled there could be no injunctions against the defendants because of cartel agreements with Swiss, French, British, Norwegian and Italian aluminum producers.

"The oldest of these agreements terminated 45 years ago," his opinion said. "The youngest came to an end 26 years ago. They are dead and gone. In accordance with the ruling I made earlier, with regard to the monopoly charges, there can be no injunctions."

To Consider Other Phases. Judge Caffey, however, said he would consider the cartel agreements in connection with possible indications of misconduct against the defendants as alleged conspirators. The government charged the agreements provided for allocation of the aluminum field between Aluminum Company of America and foreign producers.

Similarity in Alcoa's prices and those of foreign firms competing in the United States was not indicative of any agreement between Alcoa and these firms to prevent competition, he ruled, adding that Alcoa had a right to agree with foreign companies that if they would "refrain from dumping" aluminum here, Alcoa would avoid any such practice with respect to Europe.

In his earlier verdict on the monopoly charges, Judge Caffey said: "I rule that the charges of monopoly concerning 12 branches of Alcoa's activity have not been proven."

He listed the branches as bauxite (aluminum ore), water power used in aluminum production, alumina, virgin aluminum (pig and ingot), castings, cooking utensils, pistons, extrusions and structural parts, foil, miscellaneous fabricated products, sheet aluminum and aluminum cable.

Aluminum Plant Sites Inspected.

Gazette 10-8-41

A series of inspection trips in connection with possible sites for aluminum and power plants approved for Arkansas is being made by Clifton H. Chadwick, Office of Production Management plant site specialist.

Mr. Chadwick planned to visit Camden, Calion and El Dorado today, after having been at Benton, Malvern and Arkadelphia. He will go to Pine Bluff, Helena and West Memphis later.

The OPM representative conferred briefly with Governor Adkins yesterday. Mr. Adkins indicated that the availability of water supplies may be a determining factor in the selection of the sites.

Reasons Cited For Finding For Alcoa

Gazette 10-8-41

New York, Oct. 7 (AP).—Federal Judge Francis G. Caffey ruled today there were several reasons why the government's conspiracy charge against the Aluminum Company of America and 48 co-defendants should not prevail under the head of Alcoa's "foreign acquisitions."

Continuing for a seventh day the reading of his opinion in the anti-trust suit, he said the government had failed to show that these acquisitions or Alcoa's behavior in this connection "either directly or indirectly affected commerce of the United States" and added that the evidence did not warrant a finding that the acquisitions ever constituted a "real element" in the building up of Alcoa.

Judge Caffey further ruled that Alcoa had been charged with conspiring to restrain sales of foreign aluminum, but that no co-conspirators had been named and "there can be no conspiracy on the part of anyone without one or more co-conspirators."

He did not indicate what his final conclusion would be on the conspiracy charge. The court already has ruled there was no monopolization in 12 Alcoa activities as charged by the government.

Judge Caffey noted the Supreme Court had ruled that a corporation acting through subsidiaries in interstate commerce was not necessarily to be held for violation of the Sherman anti-trust law by subsidiaries. "The Sherman law does not compel competition," he said. "Repression of competition must be proven to establish a violation."

He will resume dictating his opinion tomorrow.

Federal Fund For Bauxite Search Urged

Democrat 10-8-41

Washington (AP).—The House Appropriations Committee approved today funds for an eight-month search by the Bureau of Mines for sources of bauxite, the ore of aluminum.

Writing into the second supplemental defense appropriation bill a \$415,000 item for this purpose, the committee observed, "the defense requirements for aluminum greatly exceed the quantity of aluminum that can be produced from domestic bauxite and importations have been and are being brought in. The purpose of the appropriation is to determine the extent and the grade of domestic bauxite to increase the domestic supply."

Dr. R. R. Sayers, director of the Bureau of Mines, and Dr. W. C. Mendenhall, director of the Geological Survey, told the committee in testimony made public today that principal occurrences of bauxite ore were in Mississippi, Alabama, Georgia, Tennessee and Arkansas, with some relatively unimportant ones in Virginia.

In Georgia, said Mendenhall, it was feared that explorations would prove the reserves to be small.

He said it was necessary to increase the ore supply to handle the needs of national defense. He pointed out that in Arkansas, principal domestic source, there was enough of the present commercial grade to last only about three years. He said it would take about 3,500,000 tons to handle each year's needs.

No Evidence Of Conspiracy By Alcoa

Gazette 10-9-41

New York, Oct. 8 (AP).—The government lost the second round in

its three-point anti-trust battle with the Aluminum Company of America today when Federal Judge Francis G. Caffey rejected evidence of conspiracy.

His ruling that the government failed to establish any conspiracy between Alcoa and Aluminum, Ltd., or any of 48 co-defendants followed by two days his similar opinion against the government's monopoly charge.

Only one issue—that of alleged misconduct by the defendants—remained to be passed on by the court before a final ruling is made on the government's demand for injunctions, dissolution of the alleged trust and appointment of receivers and trustees.

The misconduct division of the tri-part charge will be taken up by Judge Caffey tomorrow, nine days after he started reading his opinion following the longest trial in history—more than two years.

Gazette 10-9-41

SIMPSON TO WASHINGTON. Lawson Simpson, Governor Adkins' executive secretary, has gone to Washington to represent the governor at a conference with Defense Plant Corporation officials on the proposed creation of an agency to buy bauxite for the alumina and aluminum plants recommended for Arkansas. Governor Adkins suggested that the agency be established to expedite operations and give all producers an equal opportunity to sell their ores.

Aluminum Expansion Drive to Be Probed.

Gazette 10-9-41

Washington, Oct. 8 (AP).—The Senate Defense Investigating Committee announced today it would question officials of the Aluminum Company of America next Tuesday on progress made in the drive to expand aluminum production. Witnesses will include Arthur Davis, chairman of the board of Alcoa, and Oscar Ewing, company attorney.

Chairman Truman (Dem., Mo.) said he was "very much dissatisfied" with the contract between the company and the Defense Plant Corporation of the government, a contract which he said was drafted by Ewing.

He was anxious, he said, to "have the meaning of the contract clarified so that the rights of the government will be fully protected."

Sources of Bauxite To Be Explored.

Gazette 10-9-41

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They said that in Arkansas, principal domestic source, there is enough of the present commercial grade to last only about three years.

Proposed Site For Aluminum Plant Studied

Democrat 10-10-41

T. D. Jolley, chief engineer for the Aluminum Company of America, and a representative of the Defense Plant Corporation of the RFC, arrived in Little Rock last night for final conferences with Clifton H. Chadwick, plant site specialist, Aluminum Division, Office of Production Management, regarding the selection of a site for a proposed \$60,000,000 aluminum plant for the state.

Declaring that "no decision has been reached" regarding the plant site, Mr. Chadwick said Saline County and Benton business men who charged last night the site already had been selected were "absolutely on the wrong track."

He declared a final decision should be reached in a "day or two" and added that an announcement could be expected soon from Washington.

Saline, Hot Spring Group Charges Politics.

Benton—Charges that the site for Arkansas' proposed aluminum plant had been chosen in Washington even before the visit to the state this week by Clifton H. Chadwick, OPM engineer, were hurled here last night in a meeting of Hot Spring and Saline County business men.

Speakers for the group, who preferred to remain anonymous, stated that if this is true, politics rather than good economics and efficient engineering is governing the location of defense industries.

Speakers for the group stated that they had "reliable information" that Camden has already been selected as the site for the \$60,000,000 aluminum plant, and that the OPM engineer in making surveys of seven proposed sites this week was merely making "courtesy calls" at the remaining six places. As further evidence of the irregularity of Mr. Chadwick's survey, it was pointed out that in one place where he stopped no site had even been recommended to the government. Local officials were puzzled when they were requested to point out possible plant sites.

Should the aluminum plant go to Camden, the Saline and Hot Spring County groups contend that their counties are entitled to an explanation from "our state officials and those in charge of selection of sites for this plant." The question to be answered is why a "mouth of the mine" location was ignored and Camden, approximately 100 miles distant, was chosen for the plant site.

Adkins Urges Impartial Site Selections

Democrat 10-10-41

Absolute impartiality in location of defense plants in Arkansas has been excised on his part, Governor Adkins said today, and declared that anyone who knows the facts, knows that no influence has been brought favoring any particular locality.

He made the statement in commenting on news stories from Benton in which an unnamed group was quoted as charging that their localities had been "discriminated against and that the site for the proposed aluminum plant had been disposed of."

"Delegations from Malvern and Benton sat with me in Washington," the governor said, "and heard me making telephone calls in an effort to obtain the same gas rates for Calion, Camden, Benton and Malvern. I was trying to get a standard rate so that no locality would be at a disadvantage because of different rates."

As further evidence of his impartiality in the matter the governor said he had called Clifford H. Chadwick, OPM plant site specialist this morning to again request that the aluminum plant site be selected impartially on the basis of economic qualities.

"I urged that all factors in favor of all possible locations be considered," the chief executive added, "and even asked him to go back to Malvern to look at another site they have there."

Mr. Chadwick, he said, denied that the aluminum plant site had yet been selected. The unnamed Benton group, quoted by news stories, charged that Camden had already been picked as the site for the plant, and that Governor Adkins last month called a Camden man to congratulate him on Camden having been chosen.

The governor said this morning the man referred to was Ben Laney.

"I did call Mr. Laney but only to advise him that certain data should be prepared by the group seeking the plant for that city."

Saying that Camden had been working for more than a year to obtain an aluminum plant, Governor Adkins declared that all possible aid had been given other localities seeking the plant. He exhibited a prospectus prepared by the state Agriculture and Industrial Commission for him and said various state agencies had assisted in the preparation of a prospectus for other cities.

Judge Frees Alcoa Of All Charges

Gazette 10-11-41

New York, Oct. 9 (AP).—The government's petition for dissolution of the Aluminum Company of America and the so-called trust which it alleged Alcoa and 24 corporate co-defendants comprised was denied today by Federal Judge Francis G. Caffey.

Petitions for injunctions against

any or all of the defendants named in the government's anti-trust suit also were denied. Judge Caffey, in doing so, praised Alcoa's board chairman, Arthur V. Davis, for building the company "into what it is today."

"The evidence compels the conclusion," the court said, "that it has not been shown that Alcoa is guilty of any violation of the Sherman act as was charged in the government's bill; that the government has failed to prove its charges in any of the three phases into which it divided the case, namely: 1, monopolization; 2, conspiracy; 3, misconduct."

MISUNDERSTOOD SPEECH BLAMED IN SITE DISPUTE

Plant Location Not Yet Chosen.

Gazette 10-11-41

A radio speech delivered at Washington by Congressman Clyde T. Ellis of Bentonville probably led to the mistaken belief at Malvern and Benton that a proposed \$60,000,000 aluminum plant already has been allocated to Camden, Governor Adkins said yesterday.

Referring to a meeting of Saline and Hot Spring county residents at Benton Thursday night, at which a charge was lodged that a site for the plant had been chosen at Washington before an OPM engineer reached the state this week, the governor said:

"Anyone who knows the facts knows that no official influence has been used in behalf of one location against another. The misunderstanding probably occurred at Washington recently when delegations from Camden, Benton and Malvern were there to press their claim for the plant."

"Congressman Ellis, in a radio speech while they were there, referred to Camden as the future aluminum center of America."

Adkins Cites Efforts To Facilitate Selection.

Governor Adkins said the Benton "mass meeting" was attended by nine persons. One of them was quoted by the Gazette's correspondent as saying Governor Adkins telephoned a Camden business man September 1 to congratulate him "on the fact that his city had been selected as the site of the aluminum plant."

"I telephoned Ben Laney, a Camden lawyer, only to advise him that certain data should be prepared by the group seeking the plant for that city," the governor said. "Delegates from Malvern and Benton sat in my room at Washington and heard me telephone to Shreveport [headquarters of the Arkansas Louisiana Gas Company] in an effort to obtain equal gas rates for such a plant at all cities from Rammel Dam to Calion."

"I asked Mr. Chadwick [Clifton H. Chadwick, OPM engineer who is in Arkansas to select a site] to weigh the economics involved at all potential locations. I asked him today to return to Malvern and inspect another site. The state Agricultural and Industrial Commission has co-operated with all cities asking aid in preparing brochures for presentation to the OPM, including Malvern, Benton, Camden and Calion."

T. D. Jolley, chief engineer of the Aluminum Company of America, was at Bauxite yesterday. He was joined later by a representative of the Defense Plant Corporation of the Reconstruction Finance Corporation. The Aluminum Company has a contract to build and operate the plant when a site is selected.

Bauxite Plan Would Aid Small Owners.

Governor Adkins said he conferred by telephone during the day with Lawson H. Simpson, his executive secretary, who is in Washington seeking aid of the OPM in establishing a governmental agency to drill test holes and buy bauxite from small owners. The OPM appeared interested in the proposal.

Mr. Adkins said. "Few small land owners could afford to test for bauxite," he added, "while the Aluminum Company and Reynolds Metals Company are able to take care of themselves."

Labor Problems Left To Local Leaders.

The governor said he had received many telegrams from C. I. O. leaders protesting against what they termed discrimination in favor of the American Federation of Labor at defense plants in Arkansas.

"I understand the C. I. O. has imported some labor from East St. Louis, Ill., site of an aluminum plant, since it won an election among employees at the Republic Mining and Manufacturing Company bauxite mines in Saline county," he said. "This may be true of the A. F. of L. at other plants."

"I'm disposed to let each city and plant take care of its own labor problems."

Governor Adkins has not replied to the C. I. O. telegrams.

Plant Site Report Due Wednesday

Gazette 10-12-41

Clifton H. Chadwick, Office of Production Management engineer, said here yesterday that his report on probable sites for construction of a \$60,000,000 aluminum plant in Arkansas will be delivered to OPM officials at Washington Wednesday.

No announcement of a selection will be made until then, he said, as he prepared to board a plane for California.

Cities mentioned in connection with the site are Camden, Malvern, Benton, Pine Bluff, Arkadelphia, Calion, Helena and West Memphis.

No work order for construction of a \$21,000,000 alumina plant in Saline county has been received by the Republic Mining and Manufacturing Company of Bauxite, subsidiary of the Aluminum Company of America.

Statehouse circles heard an unconfirmed report that Camden stood in the No. 1 position but this was rejected by officials, who said no choice had yet been made.

REMMEL DAM A POSSIBLE SITE FOR BIG PLANT

Likely to Be Located on River.

Gazette 10-14-41

The \$60,000,000 aluminum plant recommended for Arkansas probably will be built on the Ouachita river at a site not many miles from Bauxite, it was learned yesterday.

Rommel dam was named as the site in rumors which were not confirmed by representatives of companies which would be affected. Latest geographical speculation centered on a Hot Springs-Malvern-Benton triangle.

No announcement of location will be made until the Office of Production receives a report from Clifton Chadwick, OPM engineer, who toured the state last week. Leaving here Saturday, Mr. Chadwick said he would make his report in Washington Wednesday.

It is estimated that eight months will be required for construction of the aluminum plant. If it is located any considerable distance from the \$21,000,000 alumina plant to be built between Bauxite and Bryant, approximately 300 freight cars per day would be required for moving alumina to the aluminum plant. A

special railroad might be necessary.

Power Plant to Be Built in Connection.

A relatively small power plant will be built in connection with the aluminum plant. Present plans call for seven natural gas-operated, Diesel engines to drive direct current generators with capacity of 5,000 kilowatts each. The gas would be sweetened "sour gas" from south Arkansas. One generator would be used as a stand-by.

The Arkansas Power and Light Company and other private utilities are expected to supply the remainder of power needed on a temporary basis until a major power station is completed. This construction would require an estimated two or 2 1-2 years. The major station would have two 35,000-k.w. steam-operated generators, producing alternating current, which must be converted to direct current of 30,000 k.w., allowing for 5,000 k.w. conversion loss.

When the main power plant is completed, private utilities may have a contract to supply stand-by and emergency power. The Ark-La Electric Co-operative, composed of Arkansas and Louisiana co-operatives of the Rural Electrification Administration, wants to build the plant or at least to supply the stand-by power.

Might Strengthen Power Company's Position.

Water supply is a major factor in the site selection. Rommel dam, which impounds the Ouachita river to form Lake Catherine, is downstream from Carpenter dam, which forms the larger Lake Hamilton. Persons who are not connected with the A. P. and L. and who have closely followed the aluminum plant question, said that a site on the upper Ouachita would strengthen the power company's position in its request for the Federal Power Commission to renew permission for the construction of the proposed Blakely dam on the Ouachita. The A. P. and L. wants the F. P. C. to rescind an order cancelling the authority, issued last summer, but A. P. and L. officials said yesterday the Blakely dam project was not involved in the aluminum plant.

Announcement Of Plant Site Delayed.

Gazette 10-16-41
Announcement of the site of the \$60,000,000 aluminum plant recommended for Arkansas by the Office of Production Management is expected by Governor Adkins before Sunday, the governor said yesterday, following a telephone conversation with Washington.

Clifton H. Chadwick, OPM site specialist, has been delayed a day in filing his report and recommendations on sites by failure to obtain airplane accommodations between Little Rock and Washington, Governor Adkins said. Mr. Chadwick was forced to go to Kansas City, Mo., by train to secure a plane for Washington. He had hoped to file his report yesterday.

State-Owned Bauxite Ore Poses Problem

Democrat 10-19-41
State officials who are custodians of the largest unworked bauxite deposits in Arkansas are confident—or afraid—that they soon will be faced with one of the most controversial questions they could be asked to face.

That is: Shall the huge deposit of the strategic ore on the Confederate Home property near Sweet Home be mined?

When an effort was made four or five years ago to sell or lease mineral rights on the property, forcing the state to move the inmates of the home, women patriotic organizations immediately set forth for battle. The result was that the plan was dropped.

Now bauxite figures prominently in the nation's defense effort. Bauxite must be had to make aluminum. Arkansas produces 90 per cent of the United States domestic supply—and the state-owned ore on the Confederate Home property becomes more valuable each day.

Large Deposit Available.
An estimated 325,000 tons of known deposits have been located on the property. Of this amount, 159,000 tons have higher than 55 per cent alumina content. Now, with lower grade ores being used to produce alumina, the remainder of the de-

posit could be used for commercial aluminum production.

Members of the Board of Trustees of the institution here said they had been expecting for several months that the question of using the bauxite would be raised again. If it is, they agreed, the United Daughters of the Confederacy is certain to oppose the effort.

Some state officials have said that the Office of Production Management has been casting covetous eyes at the state-owned bauxite. They were afraid the OPM would step in and requisition the ore—at a price to be fixed by the government agency.

"The bauxite always will be there," one official said. "It won't deteriorate. If the government decides it wants it some arrangements will have to be made."

Alumina Plant Being Cleared Near Bauxite

Democrat 10-19-41

Clearing of 400-acres on the Missouri Pacific Railroad between Bauxite and Bryant on which a \$60,000,000 alumina plant will be built by the government has been started by crews of workmen from the Republic Mining and Manufacturing Co., L. R. Branting, superintendent, said yesterday.

Declaring that the work was only preliminary and that "we are just going ahead on our own," Mr. Branting said a contract for the construction of the huge plant had not yet been awarded by the Office of Production Management.

The plant will be operated by the Aluminum Company of America, which also owns Republic Mining and Manufacturing. It will be located a mile from the bauxite mines.

Mr. Branting said a right-of-way for a spur track from Republic's railroad had been cleared and timber cut and stumps removed from the plot.

Option on the 400 acres was held by Republic, Mr. Branting declared. Government lawyers are checking the abstract of titles before title is deeded to the government, he said.

A contract for construction of the plant, which will use ore from the nearby mines to make alumina—the base of aluminum—is being negotiated in Washington now, Mr. Branting said he had been informed. With the preliminary work already done, actual construction can begin soon after contracts are let, he said.

It has been estimated it will require eight months to build the plant.

The capacity of the Bauxite plant has not yet been determined. Originally scheduled to produce 500,000,000 pounds of alumina annually, officials later said the capacity might be doubled to take the place of a second plant which was contemplated.

Benton Has Little Hope Of Big Plant

Special to the Gazette. 10-23-41

Benton, Oct. 22.—Delay in Washington in announcing the site of the proposed \$60,000,000 aluminum plant is arousing curiosity among residents of central Arkansas. Pertinent questions regarding the delay were raised at a meeting today of Benton business men interested in bringing the aluminum plant to Saline county.

Arch Cooper, Saline county tax assessor, gave to the Gazette's correspondent a statement of four predictions that the group formulated: "If they prove false," Mr. Cooper said, "you have my promise of sincere repentance and apology."

1. Announcement of the location of the aluminum plant will be delayed until some political alignments are adjusted.
2. The plant will finally go to Camden, as promised months ago, despite the fact that Camden is 100 miles from the bauxite mines.
3. Malvern and Benton will be given some small industries as a kind of soothing syrup.
4. Governor Adkins will be able to give plausible explanations of all these developments.

"To us it seems wrong," the Saline county group said, "for young men to be drafted for defense of their country and then sold down the creek for a mess of political potage. With aluminum necessary to the defense program, and with labor, water power, transportation facilities and power available at the mouth of the mines, we believe it wrong for those in high places to

dicker with, maneuvers or delay the production of aluminum. We appeal for patriotism and sound economics and not political strategy in locating this plant."

Decision Due On Aluminum Plant Site Soon

Democrat 10-23-41

By B. N. TIMMONS.
(Democrat Washington Bureau.)
Washington—A final decision on the location of the Arkansas aluminum plant, and large scale power facilities to run it, is expected at almost any time now, it was learned here today.

There have been conferences on it over last week-end which extended through this week. As a result, it was reported, the minerals section of the Office of Production Management and Aluminum Company of America have agreed on a site for the aluminum plant.

However, announcement of it must await the final decision on power plant sites and the whole thing will be announced at one time. Meanwhile officials declined to give any indication as to where the aluminum plant is to be located.

Rep. W. F. Norrell said he has been "assured absolutely" that the aluminum plant will still go into Arkansas and that the new power facilities probably will be put there also more or less as originally planned.

It was not possible to learn what the power situation is, who will put up the necessary plants, who will operate them or where they will go. Officials either say they do not know or that the decision has not been made yet.

Power Issue Causes Delay.
They are all agreed that a decision will be reached very soon now and they expect it at almost any time.

The question of power has been hanging fire here for several months and has been holding back installation of the aluminum plant.

It means millions of dollars going into Arkansas, a total which eventually may run over \$100,000,000, consequently federal officials have been exploring all possible angles and have been going into the question thoroughly and completely. They have made more than one survey of resources and possible facilities in Arkansas and have discussed which agency of the government shall build it and who will operate it.

So vast will be the power plants developed to run the aluminum plant that their installed capacity will be in excess of the present installed capacity of the state and in excess of the total consumption of the state at present, officials of the Arkansas Power and Light Company said recently.

Despite the length of time the federal officials have taken on the power issue, it is now just about settled and should be announced in a few days. An announcement was expected last Monday, then Tuesday, then today. Now it is expected tomorrow or possibly Monday again.

Hot Springs Hears It's To Get Big Plant

Special to the Gazette. 11-1-41

Hot Springs, Oct. 31.—Reporting it had received information from "capitol circles in Little Rock and Washington," the Hot Springs Post, daily newspaper, published a first page article today saying that Washington officials will announce tomorrow location of the \$60,000,000 aluminum plant and the \$20,000,000 steam electric-power generating plant, and that several officials said "It looks like Hot Springs will get them." The paper quoted Governor Adkins as saying that the aluminum plant "will produce more electric power than is used over all of Arkansas today." The newspaper added that Arkansas Power and Light Company officials, confirming the governor's statement, said "Fully that much will be needed for the proposed aluminum plant."

Proposed Site Near Dam.
The paper said also that the aluminum plant site will be between Cove creek outlet into Lake Catherine and Rommel dam, and the power plant near the dam.

Cove creek is three-quarters of a mile from the dam.

The proposed power plant site would be only about 220 yards from the dam.

The area is on the main land, but addition of "splash gates" has raised the possibilities of the "altitude level" of the dam from 306 to

308 feet. The latter height would make an island of the proposed site.

However, it is improbable the lake ever will reach the peak levels. It usually is held at 304 feet, acting as a stabilizer for Carpenter dam, which holds Lake Hamilton's level at 400 feet.

Employees at the dam said that peak loads of electricity now being supplied would tend to keep the water down. Even though the water did reach its peak level, the site would be only about 50 yards from the main land, and a roadway could be constructed to lead to the site, it was said.

The size of the power plant, if it is established as a 150,000-kilowatt unit probably would be second only to a Philadelphia's 160,000-kilowatt plant, the largest "self-contained" plant in the United States.

It is estimated two years would be required to build the two plants.

General Power Policy Decided On for Aluminum Plant.

Washington, Oct. 31. (AP).—Congressman Oren Harris of Arkansas said tonight defense officials had decided on a general power policy for the contemplated new aluminum plant for Arkansas, which would pave the way for early construction. He said the policy would be to have the Defense Plant Corporation construct a huge power plant, to be operated in conjunction with the aluminum manufacturing plant. Interim power would be obtained from a "pool," he said, but the sources of the pool were one of the factors undetermined, and delaying decision as to the location of the plant and adjacent powerhouse. Lake Catherine and Camden are under consideration.

Mr. Harris estimated construction of the powerhouse would require 22 to 23 months. He said he had received his information regarding the power policy during conferences with officials of several defense agencies today.

The Defense Plant Corporation, a subsidiary of the Reconstruction Finance Corporation, was selected several weeks ago to construct the aluminum plant, which will be operated for the government by the Aluminum Company of America.

The aluminum company also will operate an alumina plant in connection with the processing plant. Alumina is the powdered substance from which aluminum is made.

The power plant will be of 135,000-kilowatt capacity and will utilize Arkansas's tremendous "sour-gas" reserves as fuel. This gas requires chemical treatment for removal of a sulfur content.

The aluminum plant will have a production schedule of 120,000 pounds yearly. Mr. Harris believed it would cost upwards of \$12,000,000. The power plant will cost approximately the same.

Governor Says Site May Be Announced Today.

Rommel dam and vicinity has been mentioned as a possible plant site recently. Spokesmen for companies which would be affected by such a selection did not confirm the rumors.

Governor Adkins said yesterday that the announcement of the location might be made in Washington today. He said he did not know the site to be favored.

Three groups of engineers have been in Arkansas surveying potential sites for the plants. The Ouachita river has been surveyed from Rommel dam to the Louisiana line. The governor previously had expressed belief that the aluminum plant would be built at Malvern, Camden or Calion, all on the Ouachita river.

The governor said that in a telephone conversation yesterday he asked the OPM Aluminum Division chief "not to consider me, mayors or anyone else in making the selection because the main thing is that Arkansas wants an aluminum plant."

Camden has been mentioned frequently in capitol speculation outside the governor's office. A Hot Springs-Malvern-Benton triangle which includes Rommel dam has been the runner-up among favorites.

New Delay In Aluminum Plant Site

Gazette 11-2-41

A long-delayed announcement of the site chosen for Arkansas's \$60,000,000 aluminum plant will be made by the Office of Production

Management early this week, "probably Tuesday or Wednesday," Congressman D. D. Terry said in Washington yesterday.

Mr. Terry said OPM officials had indicated the new announcement time. The official announcement had been expected yesterday.

The site is expected to be on or near the Ouachita river. One of the prospective locations, near Rommel dam in Hot Spring county, is close to limestone deposits estimated to contain 300,000 tons. Limestone will be used at an alumina plant, to be built between Bauxite and Bryant in Saline county, instead of at the aluminum plant.

A \$20,000,000 power plant may be built near the potential Rommel dam site.

Camden and Calion are leading contenders for the plants.

Pessimistic observers attributed the continued delay to interdepartmental disputes in Washington. Secretary of the Interior Ickes having criticized Secretary of Commerce Jones for the government's general contract with the Aluminum Company of America, which will operate the Arkansas plants. Rivalry between Arkansas communities is of little concern in the capital, these observers believe.

Any Sort of Decision Would Be a Relief.

Gazette 11-2-41
Joe Kimzey, member of the state Utilities Commission, described the long delay of the aluminum plant site announcement as "a war of nerves."

Mr. Kimzey, figuring that bad news is less harassing than no news, said some time ago that he believed Camden would get the plant. His personal choice was Magnet Cove, his home, or some other place in Hot Spring county.

Lesser lights and news reporters at the capitol, whose opinions aren't published, agreed that the United States would face a dim future if the entire war effort were delayed as long as the aluminum plant decision.

Market For Bauxite Assured

Gazette 11-7-41

Washington, Nov. 6. (AP).—Senator Caraway (D.-Ark.) said she had been assured today by the Office of Production Management that independent bauxite producers of Arkansas would find a ready market for their ore at an alumina plant projected for that state.

She said she and Representatives Norrell and Terry had received a letter advising that the Metals Reserve Corporation would receive, sample, analyze and arrange payment for the bauxite of Saline county and the adjoining area.

(Alumina is a powdered substance derived from bauxite. It is the basis for processing of aluminum needed for planes.)

Senator Caraway said some of the independent producers had expressed fear that the Aluminum Company of America's Republic Mining & Manufacturing Co., might be able to set its own price for the bauxite. The Aluminum Company will operate both alumina and aluminum plants for the government in Arkansas.

Use Low Grade Ore

"As you doubtless know, a large alumina plant has been recommended by the OPM for Arkansas," the letter to the Arkansasians stated.

"It is the intention to use Arkansas bauxite, particularly the lower grade, high silica material which has heretofore had a very limited market."

"Metals Reserve Corporation will receive, sample and analyze the bauxite delivered and arrange for payment to the producer. This should open up an entirely new market for bauxite producers, including owners of land upon which new discoveries of bauxite may be made."

"Actual stock purchase and stock piling of bauxite can not begin until the completion of the new alumina plant which will include crushing, sampling and laboratory facilities. It is hoped that it will not be long before the government will be in a position to receive bauxite."

Negro Professor's Article To Appear in Chemical Journal.

Special to the Gazette. 11-9-41

Pine Bluff, Nov. 7.—Word has been received by Prof. Lincoln L. Duiguid, head of the Department of Chemistry at A. M. & N. College at Pine Bluff, that his paper on

the use of amalgamated aluminum as a catalyst has been accepted by the Journal of the American Chemical Society for publication in the November issue.

[A catalyst is a substance used in chemistry to accelerate a reaction sought, the catalyst remaining practically unchanged after the process is completed.]

This paper represents the findings of extensive research work done by Professor Duiguid at Cornell University and A. M. & N. College. The discovery of the use of amalgamated aluminum as a catalyst is said to be of great value to industry.

Professor Duiguid earned his bachelor of science degree at West Virginia State College and his master of science degree at Cornell University. He has done some work toward his doctorate.

No Aluminum Plant Delay, Says Jones

Gazette 11-13-41

Washington, Nov. 12 (P).—Loan Administrator Jesse Jones said today there had been no delay in the administration's program to construct a huge aluminum plant in Arkansas. He told an interviewer there was nothing to add to this comment other than to say the plant would be built.

Representatives Norrell and Harris of Arkansas commended Jones for his interest in establishment of the plant and elaborated on the reason no site has been announced.

Representative Ellis had been critical because construction of the plant had not been started.

"There has been no delay in the program," Harris and Norrell said, "because the materials and machinery for the aluminum plant were ordered some months ago."

"There has been some delay in working out which will be the most economical site. However, if the site had been selected months ago, the situation wouldn't be more advanced because the materials needed for construction are just now becoming available."

Undecided on Two Sites.

It has been announced the Defense Plant Corporation, a subsidiary of the Reconstruction Finance Corporation, will finance construction of the aluminum plant and a power plant to be operated in conjunction with it. Both are to be leased to the Aluminum Company of America.

It is said the plants will be at Lake Catherine or Camden, depending on final estimates indicating which site would be the most economical from the standpoint of land costs, freight rates and other angles.

A contract for use of Arkansas sour gas reserves for fuel in manufacture of power is being negotiated.

Search for Power.

The congressmen said arrangements were under way to assure a source of power for use until the new power plant was in operation. They explained it would not be completed for about 22 months.

Ellis Denies Favoritism In Locating Plant.

Representative Ellis said today he wanted to "vehemently deny" a report he said had been circulating in south Arkansas that he was endeavoring to influence the location of a proposed Arkansas aluminum plant.

Ellis said he received almost identical telegrams from Hot Springs, Arkadelphia, Benton and Malvern, which said the senders were advised he was endeavoring to have the plant built at Camden.

"I have never said a word or done a thing in behalf of Camden or any other town as against the rest in the location of the aluminum plant," Ellis' statement said. "I have been desperately in the fight to save the plant for Arkansas."

"I have checked into and have determined the source is political and that certain ones are circulating these malicious lies for the sole purpose of injuring me."

"The aluminum companies don't want the plant constructed at all because they fear it would be used in competition with them after the war and the power companies don't want the plant because they know that a government power plant will have to be constructed which could be used in competition with them after the war."

Denies Governor's Statement.

Ellis said he had written William Anderson, chairman of the Industrial Committee of the Hot Springs Chamber of Commerce, that he had been misinformed and asking Anderson to give him the source of his report.

The congressman said reports heard by Anderson were "without any basis whatever."

Ellis said Gov. Homer M. Adkins was quoted in recent press reports as saying the congressman had referred to Camden in an address as "the future aluminum center of the world."

"This statement likewise was without foundation," Ellis' letter to Anderson continued. "I asked the governor about it and he tells me he was advised that I had said that."

Mr. McClure's Threat Surprises Officials.

A telegram signed by W. C. McClure, secretary of the Camden Chamber of Commerce, who threatened political repercussions if the proposed aluminum plant allocated to Arkansas is not erected at Camden, was studied by state officials yesterday.

The telegram was sent from Washington, D. C., to Frank Kelly, an official of the Arkansas Louisiana Gas Company at Shreveport, La. Time was 2 a. m.

The gas company was warned that, if the big plant is given to the Hot Springs-Malvern-Benton area, a newspaper column which is syndicated nationally will be used to "elect an anti-utility Arkansas in the United States Senate."

Since the gas company has had no part in selecting a site for the plant, the telegram was turned over to Governor Adkins and members of the state Utilities Commission. Speculation had it that the telegram referred to the Washington Merry-Go-Round, a column written by Drew Pearson and Robert S. Allen and published in the Gazette.

Since that column has been complimentary in its past references to Congressman Clyde T. Ellis, those who studied the telegram concluded that Mr. McClure referred to the Bentonville lawmaker, who has been mentioned as a possible candidate for the Senate next summer. Mr. Ellis has been an outspoken supporter of public power facilities.

'Power Bloc' Blamed For Plant Delay

Special to the Gazette. 11-14-41

Camden, Nov. 13.—Delay in the announcement of the site for the proposed aluminum plant was due primarily to the power situation, C. C. Rockenback of St. Louis, industrial commissioner of the St. Louis Southwestern Railway (Cotton Belt), said here last night. Mr. Rockenback was en route to Arizona for a vacation. He recently returned from Washington.

Mr. Rockenback said that OPM officials withdrew their announcement last week that Camden had been recommended as the site for the aluminum plant because of the "power bloc." He said the engineers had recommended Camden and that the chief of the Aluminum and Magnesium Division had signed the telegram received by some Arkansas newspapers.

Mr. Rockenback said several factors make Camden the ideal site for the plant. He mentioned the three railroads that pass through the city and the navigable Ouachita river. He said some of the bauxite ore to be used in the plant will be shipped from South America. Nearness to the natural gas supply will cut construction costs of a huge pipeline. It would cost at least \$500,000 less to build the plant here than at any other place now considered, he said.

DC Power For Aluminum Plant Proposed

Democrat 11-16-41

One unit of the projected Arkansas aluminum plant will use direct current generators in production of aluminum and will be the first such installation of its kind, it was reported by a reliable source yesterday.

Exact location of the plant is still a mystery, but from Washington came word that the final decision should be only a matter of hours.

Debate over location of the plant has not, delayed decision on the plant layout, an informant, a recent Washington visitor, said.

According to his information, the unit to utilize output of direct current generators is the idea of an Aluminum Company of America engineer, who for a number of years has been studying its possibilities.

At one time, when debate on the source of electric power for the plant was raging, it was reported that a plan to operate the entire plant from direct current generators was under consideration. Now, it appears, that one of the four "pots" will operate from DC generators and the remaining three will rely on alternating current.

All aluminum is made with direct current, but standard practice is to obtain alternating current and convert it to DC just before applying it to the "pots."

Seven direct current generators of 5,000 kilowatts each and powered by gas-fired Diesel engines will supply the power for the one unit. One of the generators will be for stand-by use.

Each of the three remaining "pots" also will require 30,000 kilowatts for operation. To supply them, it is planned to construct a 105,000 kw generating plant adjoining the aluminum plant.

If the aluminum plant is located on Lake Catherine, the power plant probably will be located on a peninsula jutting out into the lake, in order that lake water may be used in the condenser system. The condensers, which cool steam after it has passed through the turbines into water which can be pumped back into the boilers, require huge amounts of water, but it is pumped back after absorbing heat from the steam.

Each of the "pots" in the aluminum plant will have a capacity of 30,000 pounds and the first "pots" will be in operation before the entire plant is completed. More time will be required for construction of the generating plant, and a source of interim power will be necessary.

A permanent connection with an outside power source also will be necessary, since each of the three 35,000 KW generators in the power plant will have to be overhauled annually. While each of the generators is idle for overhauling, 20,000 KW of power from an outside source will be necessary to keep the entire aluminum plant in operation.

Fight on Plant Site Arouses Much Interest.

Zeal shown by Camden and the Malvern-Hot Springs-Benton area in their fight for the proposed \$60,000,000 aluminum plant has outstripped anything seen in Arkansas in many moons.

Conventional action has given way to the most intensive form of political pressure, some of which has bordered on intimidation. First, the Office of Production Management received a telegram charging that everything had been cut and dried for Camden. This was denied.

Then an OPM engineer returned to Arkansas. Governor Adkins said the engineer came back to inspect additional sites. He left by plane for California with a forecast that an announcement would be made about four days later. That was three weeks ago. He said flatly that no site had been approved at that time.

The governor announced that he and state agencies had co-operated with all interested cities in their efforts to obtain the big plant. The Arkansas Power and Light Company, with lines in 55 counties, also said it had taken no sides in the fight, explaining that it was ready to provide interim power anywhere in its territory.

Congressman Clyde T. Ellis of Bentonville joined in the battle with a charge that Aluminum Company of America, which has a contract to build and operate the plant somewhere in Arkansas, was purposely delaying the project because it did not relish government competition after the emergency period. The company promptly issued a denial, as did government officials.

Then came the most amazing event of all. An official of the Arkansas Louisiana Gas Company received a telegram from Washington, bearing the signature of W. C. McClure, secretary of the Camden Chamber of Commerce, threatening political consequences if the plant were awarded to any city except Camden.

State officials, to whom the telegram was referred, were irritated, to put it mildly. They were unable to understand why the gas company, which had no part in the choice of a site, should be subject to pressure.

The telegram warned the utility that a nationally known newspaper

column would be used to support Arkansas advocates of publicly owned utilities in the 1942 senatorial campaign if Camden didn't get the plant.

No one can condemn a city or its officials for fighting to the limit for such big stakes. But there are some who fear the project may be jeopardized by such tactics. "The gas company and power company serve both the Camden and Hot Springs-Malvern-Benton areas and could have little if any interest in the selection between the two. Governor Adkins and Congressman D. D. Terry of Little Rock have worked many months to get the plant for Arkansas, regardless of site.

Alcoa Buys Equipment For Plant

Gazette 11-19-41

The Aluminum Company of America has placed order for \$1,600,000 worth of equipment to be used in operating the 100,000,000-pound aluminum plant recommended for Arkansas, well-informed sources said last night.

Equipment will be delivered at the site selected for the plant. The fact that orders are being placed increased the assurance, given in Washington last week, that a delay in selecting the location does not mean that Arkansas will not get the plant.

Diesel motors capable of generating 60,000 kilowatts of direct current are included in the equipment ordered. Alcoa has placed orders for three units of 3,600 horsepower each, 25 units of 1,150 horsepower each and four units of 300 horsepower alternating current motors.

Diesel Motors Will Generate Current for New Plant.

Fort Smith, Ark., Nov. 18 (P).—C. R. Bayless, Fort Smith representative of the Electric Machinery Manufacturing Company of Minneapolis, said today Diesel motors capable of generating 60,000 kilowatts of direct current had been under order for three weeks to provide the major power requirements of Arkansas's proposed aluminum plant.

He said the equipment was ordered by the Aluminum Company of America through the Defense Plant Corporation.

Mr. Bayless said three units of 3,600 horsepower each had been ordered from the Nordberg Company, Milwaukee, and 25 units of 1,150 horsepower each from Cooper-Bessemer, Bessemer, Pa. He said his company would furnish four units of 300 horsepower alternating current motors, indicating that some auxiliary source of power would be used for a part of the plant's requirements.

Hot Springs Jubilant Over Site Selection

Special to the Gazette. 11-20-41

Hot Springs, Nov. 19.—News that the government's aluminum plant and a \$20,000,000 power plant will be erected on Lake Catherine, in Hot Spring county spread fast here this afternoon. Of the more than \$100,000,000 defense industries coming to Arkansas, this was the first of consequence near this city.

Both newspapers published extras. Officials of the Chamber of Commerce and many citizens sent telegrams of appreciation to Congressman W. F. Norrell.

Effort Well Organized.

The senior commercial organization joined with officers and members of the Malvern and Benton Chambers of Commerce in the fight to have the aluminum plant and the power unit erected here. Albert A. Kemp, president of the Chamber of Commerce; William Seis Jr., vice president, and Henry W. Stanley, had gone to Washington in an effort to bring the projects to Hot Spring county.

William M. Anderson, chairman of the Industrial Committee, and members of his committee have been working with Secretary-Manager Stanley to impress federal authorities with the advantages of this site including central location, proximity to ore, limestone, transportation lines, power sources, nat-

ural gas supply, water and various raw materials, as well as Hot Springs' facilities for housing workers.

Big Celebration Planned.

Mr. Stanley said that Hot Springs would celebrate with a "victory dinner" during the holiday recess of Congress to make it possible for Congressman Norrell to attend. Citizens of Malvern and Benton will be asked to participate.

"The choice had narrowed down to Camden and the Lake Catherine area," said Mr. Stanley. "Mr. Norrell was in there fighting our battle alone against a large delegation from Camden when I arrived in Washington last week to help present our case. Hot Springs and Malvern can't give too much thanks to their congressman."

Location of Plants.

The aluminum plant will be located on the first point west of Rempel dam (above it) and on the north side (the Hot Springs side) of Lake Catherine. Mr. Stanley said. The site is a broad peninsula which juts out into Lake Catherine just above the dam. While the power plant and the aluminum plant proper will occupy only about 30 acres, the entire project will have a 400-acre plat for development. It will be located almost equi-distant between Hot Springs and Malvern, about 12 miles from each city.

Mr. Stanley said that the power plant will be built on top of the peninsula and will utilize "sour" gas from the south Arkansas field. He said that 124,000,000 gallons of water from Lake Catherine would be used daily to cool the big motors. The water will be pumped through the plant from one side of the peninsula and out again on the other side back into the lake, and will not be contaminated.

The aluminum plant will be located immediately adjoining and just back of the power plant. It is estimated that 120,000 tons of alumina will be shipped inbound to the plant annually and would produce about 60,000 tons of aluminum.

To Utilize Much Power.

Estimated production of the power plant would be 120,000 kwh daily, that amount to be used by the plant itself. When compared with the 3,000 kwh peak load used by Hot Springs in a day, it represents a tremendous amount of power.

The figure is said to exceed the total present Arkansas power consumption by approximately 45,000 kwh.

Serving the immediate locality of the area is the Rock Island railroad while the Missouri Pacific Lines is only six miles distant.

To Employ 3,000 Men.

Preliminary estimates are that the vast project will employ 3,000 men for more than two years while construction is under way, while a permanent force of 600 technical workers would be employed continuously thereafter.

All materials for the project have been bought and work is scheduled to start immediately.

The project is being planned by the Office of Production Management, financed by the Plant Site Division of the Reconstruction Finance Corporation, and will be operated by the Aluminum Company of America.

While construction will start on the power plant and aluminum plant at the same time, the latter will bring in outside power to start production if it is completed first. Diesel engines will be used to pull the generators in the power plant.

BIG ALUMINUM PLANT WILL BE NEAR MALVERN Factory and Power Facilities to Be On Lake Catherine.

Gazette 11-20-41

Washington, Nov. 19 (P).—Jesse

Jones, federal loan administrator, announced today that upon the recommendation of OPM the aluminum plant for Arkansas, including its power facilities, would be located on Lake Catherine, near Malvern, Ark.

The plant will have an annual capacity of 128,000,000 pounds of aluminum and will cost approximately \$33,000,000, including power facilities.

The plant will be built by the Aluminum Company of America and operated by it under a five-year lease.

Representative Norrell (Dem., Ark.) had announced earlier that both the aluminum plant and the power plant, which eventually will supply all the power needed to operate it, will be located near Magnet Cove on Lake Catherine, between Malvern and Hot Springs on the "so-called Benton-Malvern-Hot Springs site."

Expects Plant to Be In Operation by Next June.

Norrell issued the following statement:

"I am delighted to learn that after weeks of serious and efficient consideration, the Office of Production Management, headed by William S. Knudsen, and the Reconstruction Finance Corporation, headed by Jesse Jones, have concluded that both the aluminum and power plants should be and are by them being located upon the so-called Benton-Malvern-Hot Springs proposed site near Magnet Cove on Lake Catherine between Malvern and Hot Springs, Ark.

"This has been the hardest fought battle in which I have engaged at any time, due to the efficient efforts of Congressman Harris (Dem., Ark.) who so vigorously and courageously represents the Seventh Congressional District.

"He has waged a terrific fight in behalf of Camden and I state frankly that no greater efforts could have been exerted in behalf of that area than was put forth by Mr. Harris. I further state frankly that Congressman Harris would have won if his position had been supported by the economic and engineering factors.

"However, careful analysis of the available evidence indicates that it would cost more to construct and operate the plants at Camden than at Malvern.

"I appreciate the splendid co-operation I have had in securing the location of these plants as near as possible to the bauxite deposits, having special reference to the delegations which have come to Washington from Benton, Hot Springs and Malvern, as well as the entire citizenship of that area, who have so graciously supported our efforts.

"The argument which has been waged for the past several weeks over the location of these plants has not necessarily delayed the construction of these projects.

"The aluminum plant will be one of the finest in the country, employing approximately 1,000 people annually.

"Its construction will start immediately and aluminum should be made in the plant by June of next year.

"The power plant is a major project, the exact cost of which cannot be accurately estimated at this time. However, the sum involved for construction of the power plant is approximately \$20,000,000. The action today assures for that section of Arkansas a mammoth industrial growth through the years to come and I am glad to have had some small part in securing the location of the plants where they justly belong—in the Benton-Malvern-Hot Springs area, which is the point nearest the bauxite deposits for the location."

Plants to Be Located Near Rempel Dam.

The aluminum plant announced for Arkansas yesterday will be in Hot Spring county, approximately two miles from the Garland county line; 10 miles southeast of Hot Springs; 12 miles northwest of Malvern; and 25 miles southwest, airline of the alumina plant being built between Bauxite and Bryant, Saline county.

Its power plant will be on a peninsula in the lake, approximately 400 yards above Rempel dam. The aluminum plant site, adjoining the lake, extends east down the Ouachita river. Its lake shore is opposite that of Lake Catherine State park. The Rock Island Lines' station at Cove creek is at the northeast corner of the aluminum plant tract. The tract extends approximately one-half mile north-south and three-quarters of a mile east-west. The plant site is approximately two miles south of U. S. Highway 270, which connects Hot Springs and Malvern.

Expressing hope that the announcement of Lake Catherine's selection as a site for the aluminum and power plants "will result in starting work on the plants immediately," Governor Adkins said he was glad that a final decision had been made.

"My interest at all times has been to get the plants in Arkansas," he said.

Specific location of the plants, awarded Arkansas on June 21, was delayed pending study by government engineers of proposed sites and other factors including power supplies. The probable location was narrowed to the Lake Catherine site and one near Camden a few weeks ago.

Well-informed sources said the chief factors in the choice of Lake Catherine were:

1. Water.
2. Gas.
3. Transportation, including freight proposals.

Diversified Mineral Deposits Near Plant Site.

The plant is three miles southwest of Magnet Cove, well known for diversified mineral deposits. These minerals were not deciding factors in locating the plant, but some of them eventually may be useful to the new industries.

Joe W. Kimzey of Magnet, state Utilities Commission member, said that the minerals include:

Calcite, "highest lime," which could be used at the alumina plant but not at the aluminum works.

Titanium ores. The tonnage is not large, but since 1932, production has been one of the world's largest. Titanium oxide is used in hardening steels and in pigments. It has been an element in smoke-screen compounds used by the navy.

Barium sulphate. The Magnet Cove Barium Corporation and a subsidiary of National Lead Products engage in barite operations. Used in paints, linoleum, oil cloths and as a heavy mud in oil well drilling.

Mica. Not of the high sheet mica grade, but can be used in insulation, lubricants, greases and roofing.

Precious stones. Scattered. Commercial operations not worthwhile.

Most of Alumina Plant Site at Bauxite Cleared.

L. R. Branting, superintendent of the Republic Mining and Manufacturing Company, Bauxite, an Alcoa subsidiary, was in New York. Bauxite interests knew no details regarding plans for starting work.

Most of the alumina plant site at Bauxite has been cleared. Alcoa will operate the alumina plant. Republic is the largest bauxite mining concern in the state. Ninety-five per cent of the nation's bauxite production has been in Saline and Pulaski counties.

Arkansas Louisiana Gas Company officials are in Washington, in connection with plans for operating the plants. Officials here said they did not know whether a fuel contract had been definitely lined up by their company.

High officials of the Rock Island were out of the city.

Building of New Highway May Be Necessary.

Activity in the Hot Springs-Malvern-Benton triangle may necessitate the building of a new highway link extending west from U. S. 67, just below the Hot Spring-Saline county line, to U. S. 270 at Butterfield. Such a route between Little Rock and Hot Springs would be shorter than the present Highway 70 route, an official said.

Lake Catherine and Camden were the principal sites considered by the OPM. The former's water advantage was a major factor, and the cost of building the industry at Camden would have been more than \$500,000 greater than at Rammel dam, it was reliably reported.

Arkansas and a Great Aluminum Industry. 21-41

Now that the location of the great Arkansas aluminum plant has been settled at Washington by the Office of Production Management and the Reconstruction Finance Corporation the people of this state will congratulate themselves on the acquisition of a major new industry and will look beyond the present emergency to normal times.

The Arkansas public will hope and believe that the aluminum plant in Hot Spring county and the companion alumina plant at Bauxite will be permanent industries. The two projects will represent an outlay of some \$50,000,000. That is too large an investment to be left unproductive when emergency demand for aluminum

ceases. And there appears to be sound reason for anticipating that the post-war years will find America and other countries using aluminum in ever-increasing amounts. Both in pure form and in alloys it is one of the most serviceable of all industrial metals.

Amid all the satisfaction that will be felt in Arkansas over the eagerly awaited and welcome announcement that this state will have a great aluminum plant many people will feel a peculiar regret that Harvey C. Couch was not spared to see what would have been his greatest reward and happiness — the erection of another great industrial plant to utilize Arkansas resources and contribute to the progress of the state. Lake Catherine, on whose shores the \$33,000,000 plant is to stand, was Harvey Couch's creation.

Gas Company Plans Line To New Plant Site

Democrat 11-23-41
Firm to Connect McKamie Field With Aluminum Project.

Construction of a pipeline to carry gas to the \$33,000,000 aluminum plant near Rammel Dam for the generation of the huge amount of electrical power which will be used in the processing of the vital defense metal will be one of the largest jobs in connection with the building of the new plant.

Officials of the Arkansas-Louisiana Gas Co., which will supply the estimated 40,000,000 cubic feet which will be consumed daily, said that a new pipeline would have to be built from the McKamie gas field in Columbia County to the plant site, a distance of 80 airline miles.

The route for the pipeline and the size are being determined in Washington at conferences between defense officials and engineers of the gas company, R. W. Curran, manager of Little Rock office of the company said yesterday.

Line to Cost \$80,000.

Mr. Curran said the pipeline would be either 16 or 18 inches. A 16-inch line costs about \$1,000 a mile, he declared.

The electric plant at the aluminum industry will have a capacity of 120,000 kilowatt hours.

Apparently no new construction would be required to provide the plant with electric power pending the completion of its own generating plant. A pool of private utilities will supply the power.

R. E. Ritchie, vice president of the Arkansas Power and Light Co., which will head the pool, said only two or three miles of lines, only two or three at the outside, would have to be constructed to bring power to the plant while the power plant which will be built to serve the project is under construction.

The Rock Island Lines also will be in an excellent geographical location to serve the plant. The railroad's Hot Springs tracks parallel the site selected for the plant.

Officials said the railroad would build tracks inside the area to serve the plant but just how many miles would have to be built has not yet been determined.

Missouri Pacific Lines officials said they could serve the plant by building seven or eight miles of track, from either the main line immediately south of Malvern or from a point on the Hot Springs line near Lonsdale.

Officials estimated the construction of the line would cost \$250,000. The alumina plant near Bauxite will be served by the Bauxite and Northern Railway, which is a subsidiary of the Republic Mining and Manufacturing Co. The line has a connection with the Missouri Pacific at Bauxite Junction.

The privately owned road already handles all freight traffic for the Republic Mining Co. Officials, it was said, plan to improve the road to handle the increased traffic.

'Inside' Fight Over Plant Site Interesting

Gazette 11-23-41
It would be interesting to know the inside of the Washington fight which saw private utilities emerge triumphant over federal agencies in their bid for the right to serve immediate power to the big Arkansas aluminum plant.

Last June, when the outlook was darkest for the private companies, Governor Adkins and Arkansas's congressmen signed a request that the Rural Electrification Administration provide power. This probably meant the permanent power supply, but the REA also had offered to build lines to furnish power

between the time the aluminum plant is ready for operation next June until its 120,000 kilowatt power plant can be completed.

Congressman Clyde T. Ellis of Bentonville, an advocate of public power, may be able to explain the situation.

Governor Adkins has indicated no preference, insisting that power was what he wanted, regardless of source. At least one member of the state Utilities Commission, however, has been outspoken in opposition to encroachment of the REA in the project. He is A. B. Hill.

Although the state administration gave aid to both Camden and the Benton-Hot Springs-Malvern areas in their contest for the aluminum plant, another member of the Utilities Commission was happy when the industry went to the latter. He is Commissioner Joe Kimzey of Magnet, whose home is near the site in Hot Spring county.

Alcoa Names A. P. Allen To Build Plant

Gazette 11-23-41

Pittsburgh, Pa., Nov. 22 (AP).—The Aluminum Company of America, which will operate the government's \$13,000,000 aluminum plant to be built in Hot Spring county, Ark., today named A. P. Allen of its staff as construction superintendent on the project.

WORK STARTED ON \$21,000,000 ALUMINA PLANT

Permanent Buildings Planned.

Gazette 11-25-41

Large scale construction on the \$21,000,000 alumina plant between Bauxite and Bryant, in Saline county, 22 miles from Little Rock, will begin within two weeks. The McGeorge Construction Company of Pine Bluff is completing grading and clearing of the plant site and railroad. The W. Horace Williams Construction Company began moving in heavy construction equipment yesterday.

F. A. Billhardt of Cleveland, O., construction superintendent of the project, said buildings will be of permanent construction, indicating the plant will be used after the defense emergency is ended.

Mr. Billhardt said a large part of the plant will consist of pipelines and huge storage tanks where the low grade bauxite ore will be processed. The buildings will be of concrete and brick, or concrete and corrugated iron. The office buildings will be of wood construction.

The plant will be operated by the Aluminum Company of America, parent company of the Republic Mining and Manufacturing Company, the principal bauxite mining firm in the state.

The construction superintendent said a large portion of the work would require highly skilled workmen, and the plant will require about 11 months to complete. Design of the units has been approved and work on concrete foundations of the buildings will begin soon.

Plant Will Employ 300 Skilled Workers.

The plant will not require a large number of workmen, either during construction or operation. The plant will employ from 300 to 500 persons. It will have a production capacity of about 400,000,000 pounds annually, requiring about 800,000,000 pounds of ore each year for capacity production.

It was explained the plant will be a refining unit, and probably will produce alumina for the five new aluminum plants now planned, or under construction. The low grade ore will be sent to this plant directly from mines.

During the refining process, the ore will be mixed with water and several chemicals, while stored in large tanks. These tanks will be

connected with pipelines, through which the ore will be transferred.

When the refining process is nearing completion, the refined ore will be strained of impurities. Then it will be heated by a gas-heat process. The finished alumina will resemble a dull white powder. This will be sent to various aluminum plants, similar to the one slated for construction near Malvern.

Governor Adkins and several members of the Arkansas Congressional delegation have reported that plans are on foot to increase the alumina output of the plant to 1,000,000,000 pounds annually. Although the current plans have not provided for the increased production, additional units may be added at any time.

Plant Site Located On Hurricane Creek.

The plant site is about two miles east of Bauxite, halfway between Bauxite and Bryant on Hurricane creek. Most of the plant will be located on the site of the old McAdams farm. It is east of the Bauxite-Bryant road.

Temporary office buildings have been completed on the plant site. The railroad right-of-way is nearing completion. The plant will be served by the Bauxite and Northern railroad, owned by the Republic company.

Mr. Billhardt, construction superintendent, has been connected with the Aluminum Company for the past 10 years. He was assistant superintendent of construction with the firm at Cleveland, O., before receiving this assignment.

He moved with his family to Benton yesterday.

Construction officials expressed fear of a housing shortage in the area. The town of Bauxite is owned by the Bauxite firm and there are no vacant homes. Others connected with the project said there were few vacant houses or apartments in Benton or Little Rock.

There are no plans for the construction of additional houses in the Bauxite area by the Aluminum Company, it was indicated.

Location Of New Plants Uncertain

Gazette 11-26-41

Whether Arkansas obtains additional defense industries depends upon the extent of the United States' war participation, Governor Adkins said yesterday after returning from a governors' conference on defense matters at New Orleans, La.

More than \$300,000,000 worth of defense work has been awarded to Arkansas. "Some" additional industries are possible, but nothing definite has been lined up, the governor said. Efforts to locate new plants and to make permanent those which have been announced, are being continued, he said. In addresses, the governor has said that further manganese development might be expected.

Mr. Adkins had received no late information regarding plans to increase the Bauxite alumina plant's capacity from 400,000,000 to 1,000,000,000 pounds, but the expansion is probable, he said. An expansion of plans for the Pine Bluff incendiary bomb arsenal was announced last week.

CHOICE OF SITE FOR ALUMINUM PLANT SCORED

Harris Says Major Factors Ignored.

Gazette 11-29-41

Washington, Nov. 28 (AP).—Representatives Harris (Dem., Ark.) charged today that economic and engineering factors were ignored in last week's decision to locate Arkansas's big aluminum plant at Lake Catherine, instead of Camden.

In a statement placed in the Congressional Record Harris declared that "private interests"

brought about a reversal of a decision to locate the plant at Camden because of the better accessibility of power at that city.

He quoted Chairman Leland Olds of the Federal Power Commission as having told a House Appropriations Committee this week the aluminum plant and the power plant to be built at its site to furnish electricity for its operation "should be located at Camden." Harris said J. A. Krug, OPM power consultant, concurred in this opinion.

Utilities Blamed For Change in Location.

Harris said the OPM first announced on November 5 the plant would be located at Camden.

"Immediately after the announcement was made locating this plant at Camden," Harris asserted, "a rush telegram came to Washington and was carried to the Office of Production Management."

Harris said the message came from private power companies enlisted to furnish temporary power pending construction of the power plant and made a change in their proposal, causing the OPM to recall its earlier decision.

The power companies Harris said, had proposed originally the pooling of their power at Camden.

The aluminum and power plants are to be built by the Defense Plant Corporation, RFC subsidiary.

Harris charged the power companies, a group of 11, including the Arkansas Power and Light Company, admit it "is costing \$122,000 more" to provide the temporary power at Lake Catherine, near Hot Springs and Malvern.

"It took only two weeks to bring about a reversal of all economical factors from a study of six months or more and change this location to Lake Catherine, and on the property of the private power company, where more than \$33,000,000 of the people's money will be spent" in building the plants.

REA Said to Have Offered Lower Rate.

Harris further charged that the Rural Electrification Administration had proposed to furnish a part of the temporary power at 6.2 mills per kilowatt hour while the private companies were making a proposed charge of over seven mills, yet the Defense Plant Corporation was hesitating about its acceptance.

Harris said the gas company to supply natural gas to fuel the power plant originally proposed to deliver gas at Camden for five cents per thousand cubic feet, at Lake Catherine, at 5 1-2 cents, but subsequently upped the price to Camden to 5.41 and fixed the price to Lake Catherine at 5.53 while admitting that "it will require an additional expenditure to Lake Catherine over Camden of \$400,000."

Utility Heads Not Available for Comment

Gazette 11-29-41
Officials of the Arkansas Power and Light Company and the Arkansas-Louisiana Gas Company were not reached for comment on Congressman Harris' statement last night.

His reference to a sudden change in plans recalled that the OPM notified the Arkansas Gazette by telegraph November 5 that Camden had been selected as the site of the aluminum plant. Ten minutes later an official of the OPM recalled the telegram, explaining that last-minute details had not been settled.

Both utility companies announced last week that they had not participated in the choice of the site. The Arkansas Power and Light Company said the OPM asked if it could furnish power in its territory of 55 counties. The company replied that it could.

A gas company official, to demonstrate neutrality between Camden and the Hot Spring county site, turned over to Governor Adkins and the state Utilities Commission a telegram bearing the signature of Secretary W. C. McClure of the Camden Chamber of Commerce, threatening reprisals if the plant were placed elsewhere than Camden.

Mr. Branting Returns.

The construction superintendent for the Aluminum Company of America's Lake Catherine aluminum plant may arrive in a few days, L. R. Branting, superintendent of the Republic Mining and Manufacturing Company at Bauxite, said yesterday after returning from a trip to Pittsburgh and New York. Mr. Branting said that Alcoa at Pitts-

burgh and the Office of Production Management presumably will announce details for building the aluminum plant and the alumina plant at Bauxite. He emphasized that Republic, an Alcoa subsidiary, is not building the new industries. Materials purchased before the plant locations were announced has arrived at Bauxite, but the amount of this equipment is not large, Mr. Branting said. Bauxite interests have received a bill of lading for copper buss bars, for use in electrical insulation. They will not be used for "months," Mr. Branting said. A representative of the Federal Housing Administration was at Bauxite in connection with anticipated housing needs. The superintendent had received no information regarding plans for housing construction for plant workers at the two sites.

Arkansas Power Row Recounted

Gazette 11-29-41

An article about the Arkansas aluminum and power plants by the Washington Merry-Go-Round, written at Washington, makes these statements in substance:

That when Representative Clyde Ellis took a group to OPM Director William Knudsen last February to ask that a government alumina plant be erected in Arkansas Knudsen said "the government is not going into competition with the aluminum companies."

That three months later when an aluminum shortage developed Knudsen agreed to build a government plant in Arkansas if the necessary electric power could be obtained.

That Representative Ellis and Harry Slattery, head of the Rural Electrification Administration, working with REA engineers submitted a plan to supply power from publicly owned sources at three mills or less per kilowatt hour.

That this was countered by a private utility plan and at a showdown held by OPM it developed that the private utilities actually had only 33,000 of the 120,000 kilowatts needed and proposed getting the rest from the public pool and new construction; and Governor Adkins then joined the Arkansas Congressional delegation urging adoption of the Ellis-REA proposal.

That Knudsen gave his approval and on June 25 OPM announced that it had authorized the building in Arkansas of a government alumina plant for which Jesse Jones later negotiated a contract with Alcoa.

That Slattery then asked Jones for a \$16,000,000 construction loan but Jones said that instead of lending REA the money he would have the Defense Plant Corporation handle the job, although the REA had spent thousands of dollars on surveys and plans and had contracted for six generators and other equipment in the belief that money could be obtained from the RFC because OPM awarded the alumina plant to Arkansas on the basis of the Ellis-REA power proposal.

That after Clyde Ellis asked Mr. Roosevelt to intervene the president expressed himself strongly in favor of the REA plan and sent such word to Jesse Jones.

That when Ellis conferred with RFC engineers the following day it was news to them that Jones had given the plant to the DPC.

That the DPC has asked REA engineers to build the power plant, which REA had offered to build in 11 months while the DPC contract merely calls for the first of the four 35,000 k. w. units to be delivered in 22 months.

Governor Silent On Plant Site Dispute.

Gazette 11-30-41

Governor Adkins declined comment yesterday on charges by Representative Harris (Dem., Ark.) that economic and engineering factors were ignored in last week's decision to locate Arkansas's big aluminum plant at Lake Catherine instead of Camden.

"My only interest has been to get the plant located in Arkansas," said Mr. Adkins. "The details were left up to others. I appreciate the help everybody concerned has given in obtaining the plant for the state."

Mr. Harris, in a statement inserted in the Congressional Record, charged that "private interests" brought about a reversal of a decision to locate the plant at Camden because of the better accessibility of power at that city.

More Power Offered For ALCOA Plant

Democrat 12-7-41
The Arkansas Power and Light Company yesterday submitted a proposal to supply the entire 105,000 kilowatt hours of electricity which will be required as interim power for the \$33,000,000 aluminum plant to be constructed in Arkansas.

Hamilton Moses, president of the utility, declared that at the request of the Defense Plant Corporation, which will build the plant, the company revised its earlier offer to supply 65,000 kilowatts of the interim power to cover the entire operations of the plant until a generating system, which will be a part of the huge project, is placed into operation.

Mr. Moses said that at conferences last week in Washington the Defense Plant Corporation declared that four, instead of three, pot-lines—in which alumina is reduced to aluminum—would be installed and that three would be operated on alternating current.

The Rural Electrification Administration also is attempting to obtain a contract to supply a part of the interim power. The REA probably would obtain its power from the Grand River Dam in Oklahoma. In that event, transmission lines to carry the power to the plant site would have to be built.

State's Bauxite Output More Than Doubled

Democrat 12-7-41
Ore Production For 1941 to Reach New All-Time High Mark.

Production of bauxite—the ore from which aluminum is made—has more than doubled in the two-county Arkansas field during the past year and increased demands for the ore to keep new aluminum and alumina plants which the government soon will build in Arkansas operating will provide an impetus that will further step up output of mines.

The State Geological Survey estimated yesterday that production this year would total 1,021,344.76 long tons—which is more than double the 487,677.31 tons mined last year and almost twice as large as the 530,000 tons produced in 1918, heretofore the record production year.

More than 60 per cent of the bauxite was mined by the Republic Mining and Manufacturing Co., Bauxite, which controls extensive fields in Saline County. The company is owned by the Aluminum Company of America. Independent operators in Saline and Pulaski Counties accounted for the rest of the production.

Dr. George C. Branner, state geologist, pointed out that in the past only Grade A ore, which contains 55 per cent or more alumina has been mined for aluminum production or for use in chemicals or abrasives.

To Mine "Low Grade."

Now, he added, the Office of Production Management has scheduled a program to mine 1,618,000 tons of the lower grades. The \$22,000,000 alumina plant near Bauxite will use this lower ore exclusively, he declared.

In addition, the Reynolds Mining Company is conducting extensive explorations throughout the two-county field, which has 94 per cent of the domestic supply of the vital ore, with the intentions of starting operations soon. So far, "not one spadeful of dirt has been turned" by the company, it was said yesterday.

Independent operators, which in the past have confined their sales to chemical and abrasive companies, are beginning to "cash in" on the unprecedented demand created by the defense program.

Graham R. Hall, who with his father operates the Dixie Bauxite Co., Sweet Home, said that for the first time his firm has made sales of the ore to an aluminum company during the past year. He estimated operations had increased 10 per cent during the last 12 months, with the sales to the aluminum company responsible for the upswing in production.

The American Cyanamid Co., which has its own mines in the two-county field for use in making chemicals and abrasives, only recently completed filling an order for the Reynolds Metal Co., which has constructed aluminum plants in Alabama. The Reynolds firm also owns the Reynolds Mining Company.

Dulin Plans New Plant.

Only last week the Dulin Bauxite Co., Inc., announced plans for a

new plant on the Missouri Pacific Lines near Sweet Home which would dry bauxite from its mines in the Dixon Road. The property has a production of about 120 tons daily.

Dr. Branner pointed out that the present rate of production would exhaust all known supply of the Grade A ore containing more than 55 per cent alumina, in about 10 years. He estimates that on January 1, 1941, there were 10,980,000 tons in known deposits in the state.

The Bureau of Mines, however, estimated that on February 1, 1941, there were only 9,090,000 tons.

Dr. Branner's estimates placed the number of tons of the Grade B ore, having 50 to 55 per cent alumina content, at 4,060,000 tons and the amount of Grade C ore, having a bauxite content of from 40 to 50 per cent, at 17,422,000 long tons.

He pointed out that the cost of producing alumina—the first step in the manufacture of aluminum—is in proportion to the alumina content of the ore. The higher the alumina content, the lower the cost.

He declared there were hundreds of tons of the high grade ore available from South America and domestic sources and that the lower grade ores won't be in demand for aluminum purposes as long as production costs are so high using it. **Valuable State Deposit.**

Alumina produced at the Bauxite plant with the lower grades will cost the government more than that produced with the higher grades, he declared.

Meanwhile, the state continued to hold 327,173 tons of mineable bauxite on the Confederate Home property, near Sweet Home, and as far as could be learned no steps had been taken to place it into production.

The bauxite on the property is divided by grades as follows:

55 per cent or more alumina	179,910 tons
45-49.9 per cent alumina	76,100 tons
45-49.9 per cent alumina	35,451 tons
35-45 per cent (for blending)	35,712 tons

BIG ALUMINUM PLANT SITE NOT CHOSEN FINALLY

Camden Said to Be In Running.

Gazette 12-7-41
Orders awarding the \$33,000,000 aluminum plant and power plant to the Hot Springs-Malvern-Benton area are being held in abeyance pending further study of the Lake Catherine site and proposed Camden site, it was disclosed yesterday.

This was disclosed when T. D. Jolley, chief engineer of the Aluminum Company of America, which will build and operate the plant for the Defense Plant Corporation, and other engineers inspected the Lake Catherine site yesterday and the proposed Camden site Friday.

A. P. Allen, construction superintendent of the aluminum plant inadvertently revealed at Lake Catherine yesterday that orders to proceed with construction have been rescinded, later attempted to withdraw the statement.

The Office of Production Management in Washington was closed yesterday afternoon and the report could not be confirmed, but it was learned there is a good chance that the plant site may be switched to Camden.

Economic Factors Will Decide, Says Mr. McClure.

A delegation from Camden, which originally was awarded the plant by the OPM only to have the announcement withdrawn a half-hour later, is in Washington attempting to show that "the advantages of Camden are far superior" to the Lake Catherine site.

W. C. McClure, secretary of the Camden Chamber of Commerce, has been in Washington for two weeks. He was joined last week by A. Roy Allen, Camden publisher, Major Don Harrell and City Engineer Mac Graves.

Mr. McClure told the Gazette over telephone last night that he "understood the orders" for construction of the plant on Lake Catherine are being held in abeyance. He added that "it is un-

questionably true that economic factors will ultimately decide the location of the plant." Camden has charged that it will cost at least \$600,000 more to build the plant at Lake Catherine than on the Ouachita river at Camden.

Up to Washington Officials, Says Governor.

Governor Adkins told a Gazette reporter yesterday the selection of the site will be "left entirely in the hands of the Office of Production Management and Defense Plant Corporation," without interference by the state administration.

He is not concerned as to where the plant is located just so it is in Arkansas, he said.

L. R. Branting, superintendent of the Republic Mining and Manufacturing Company, Bauxite, a subsidiary of the Alcoa, said "all decisions regarding the location of the plant must be made in Washington."

Some Preliminary Work Already Under Way.

The Rock Island Lines has started construction of a spur to the proposed Lake Catherine site. Employment offices have been established at Malvern and Hot Springs. Access roads have been studied.

The state Planning Board has completed a housing survey of Hot Springs, Malvern and Benton. A report of the survey is being prepared by the National Resources Planning Board regional office at Dallas, Tex.

L. A. Henry, engineer-director of the Planning Board, said the survey indicates that normal building programs will suffice to meet the demands of families who may move into the area. A Housing Bureau has been set up at Hot Springs to list available space there.

Site Not Finally Decided, Says Official.

Special to the Gazette.
Hot Springs, Dec. 6.—Whether the \$33,000,000 aluminum plant and power unit will be located between Hot Springs and Malvern or at Camden will depend on the recommendation of three engineers, each an authority on water power, who already have looked over the sites above and below Rammel dam and who spent yesterday in a survey at Camden.

Authority for the startling information that Camden is not out of the picture is A. P. Allen, Borden, N. C., engaged by the Aluminum Company of America to build the big plant, which Alcoa will operate. One of the three engineering experts is Thomas D. Jolley, chief engineer of the Alcoa interests. Name of the two other engineers could not be ascertained. One is from Pittsburgh, where Mr. Jolley has headquarters, and the other is said to be from New York.

Hot Springs newspapermen went to Malvern today to consult Mr. Allen. Mr. Allen's first hint that location of the aluminum plant had not been decided finally came when one of the newspapermen asked if he were going to the site of the big project.

"Is that the site?" Mr. Allen asked.

The startled newspapermen immediately opened up with a barrage of questions.

Jesse Jones May Decide.
"It is generally believed that the man who will determine the location of the aluminum plant is Jesse Jones, head of the Reconstruction Finance Corporation," Mr. Allen said. "Mr. Jones is strictly a practical business man. He is going to invest the government's money in the spot where it will cost less to build and where such investment will earn the most dollars."

"Thom D. Jolley, accompanied by two unbiased, unprejudiced engineers, all authorities on water power, have looked over the proposed site here. They went to Camden Friday, where they were to make a similar investigation. They did not say anything to indicate what conclusion they had reached here, or what impressions they had formed. They may not express any opinion after they leave Camden. I cannot speak for them. I only know they came here for a specific purpose and went to Camden for the same reason. The report they will make probably will be placed before Jesse Jones, yet I cannot state that for a certainty. I do think, however, that the location of the aluminum plant depends on such report."

Mr. Allen said the site below Rammel dam for the aluminum plant, and the location chosen on Lake Catherine above the Rammel dam for the power unit "were suitable." About 33 acres will be required,

although the plant proper will not cover the entire tract. Maximum employment will be about 1,200 men during construction, Mr. Allen said, and he believed that he could "have the first line going in about seven months after building operations started." It will require about 18 months for final completion of the aluminum plant, he said.

"It should be finished about April, 1943," Mr. Allen reported.

He predicted, however, that two years will be required to build the steam power plant. When the aluminum plant is in operation, not more than 800 men will be employed, and for the power unit not more than 50 men, working in three shifts, will be employed.

Hot Springs Still Confident.

Persons who have assisted Malvern in its effort to get the aluminum plant, but who did not wish to make an extensive statement, said they knew of the survey that Mr. Jolley and his colleagues made, and the same procedure was followed at Camden, "but we are not going to get unduly excited," one of the Hot Springs civic leaders said. "If we thought the site for the aluminum plant and power unit would be changed, you would have seen evidence of our concern before this," he said. I don't believe it will be long before confirmation of the two plants between Hot Springs and Malvern will be announced from Washington."

Political Motive Suspected.

Another took the view that the report of possible change and the visit of Mr. Jolley and two other engineers may have been to "make things easier for Harris," referring to Representative Harris, El Dorado, who fired a protest at the OPM, charging economy would have been effected if Camden had been chosen for the aluminum plant. Representative Harris, it was pointed out, is likely to have opposition, and the loss of the aluminum project would not help him any.

No sooner, however, did word of Mr. Allen's statement get circulated around Malvern than civic leaders took steps to minimize the report. Mr. Allen informed Hot Springs newspapermen he would prefer to retract his statement and say nothing.

Camden Committee Invited to Capital.

Special to the Gazette. 12-7-41
Camden, Dec. 6. — Following a surprise inspection of a proposed aluminum plant site near here yesterday by Alcoa officials, it was revealed tonight that a group of Camden business men was invited to Washington a few days ago to discuss this proposed plant and other defense plants.

Officials who visited this area yesterday inspected a site on the Ouachita river near the old Bivens place, which was surveyed several months ago.

This site is on the Ouachita river and adjacent to the River Terminal Corporation's plant, where barges and towboats from New Orleans dock with much freight, cotton and sugar. Railroad facilities also are adjacent.

The delegation included: T. D. Jolley, Pittsburgh, Pa., chief engineer; A. P. Allen of North Carolina, construction superintendent; J. W. Jarrett of Little Rock, state manager of the R. F. C.; B. Croydeon of Pittsburgh, hydraulic engineer; T. W. Billhart, superintendent of the alumina plant at Bryant, and L. R. Branting, superintendent of the Republic Mining Company, a subsidiary of Alcoa.

It was reported here that the survey resulted from dissatisfaction with the Lake Catherine site.

Congressman Oren Harris of El Dorado, of the Seventh Congressional District, charged that a combination of utility interests had disregarded economic factors of the Camden site and had "padded" figures to swing the plant for the Lake Catherine site. Mr. Harris said that the Camden plant could be built for at least \$600,000 less than at Lake Catherine.

Additional Power Offered by A. P. & L.

Gazette 12-7-41
The Arkansas Power and Light Company has offered to increase its commitment of 65,000 kilowatts of interim power to 100,000 kilowatts if a fourth line of aluminum reduction pots is decided on for the plant in Arkansas, C. H. Moses, president of the company, said yesterday following his return from Washington, where he submitted the new offer to the Defense Plant Corporation.

"The OPM decided last June that 65,000 kilowatts of power from transmission sources was the maximum amount that could be justified for use in the plant," Mr. Moses said. "But if it is decided to put in a four-pot line, which would in-

crease aluminum production from 100,000,000 pounds per year to about 125,000,000, the power pool which the Arkansas company has arranged will be ready to serve it."

Mr. Moses made it clear in his letter to Defense Plant Corporation that his offer was not based on any particular site. "We will serve the aluminum plant wherever it is located if interim power is desired without any difference in rate," he said.

Called "Stupendous Undertaking."

Engineers of power companies who worked out the power pool report that it is one of the most stupendous tasks of its kind ever undertaken, Mr. Moses said. He said it would result in presenting about as much power at one site as all

Arkansas now uses for residential, commercial and industrial purposes. "The fact that the Arkansas Power and Light Company is willing to spend its own money, and get other companies to make expenditures, for delivery of power for such a short time—about 18 months—indicates how far we have gone to get this industry for Arkansas," he said.

In Washington it was said that if a fourth pot line is installed in the plant, two instead of one, direct current generating units may be installed, because engineers estimate that with the use of "sour gas," power for the aluminum plant can be produced in direct current as cheaply as anywhere in the country. Even if alternating current is transmitted to the aluminum plant, it would have to be changed into direct current with rectifiers for use in aluminum reduction.

Washington Officials Refuse To Comment on Situation.

Gazette 12-7-41
Washington, Dec. 6 (AP).—Officials of the Office of Production Management and the R. F. C.'s Defense Plant Corporation withheld comment tonight on possibility of a change in the proposed location of a \$32,000,000 aluminum project for Arkansas.

Representative Harris, whose district includes Camden, said he "understood" that a party of engineers from the Aluminum Company of America, which will operate the plants for the government, were re-examining some of the engineering features.

Chairman Leland S. Olds of the Federal Power Commission recently expressed the view before a House Appropriations Committee that Camden offered the better power site, and J. A. Krug, OPM power co-ordinator, concurred.

ALCOA Plant Site Fight Is Renewed

Democrat 12-7-41
Camden May Yet Get Project Announced For Lake Catherine.

The possibility that Camden may yet be considered as the site for the \$33,000,000 Aluminum Company of America plant—officially designated by the OPM to a site on Lake Catherine in Hot Spring County—was disclosed yesterday by a series of quick-breaking developments.

A. P. Allen, Badin, N. C., sent to Arkansas by the ALCOA to superintend construction of the plant, was the first to reveal the possible change when he told three Hot Springs business men "there is still some doubt that the Lake Catherine site will actually be used."

Mr. Allen later in the day retracted the statement, but asserted that Tom D. Jolley, chief engineer for ALCOA, and two other power engineers from Pittsburgh and New York had inspected the Camden site Thursday. Mr. Allen said he accompanied them on the inspection trip to Camden and on a previous tour of inspection of the proposed site at Rammel Dam on Lake Catherine.

May Be a Change, Harris Says.

From Washington came the statement of Rep. Oren Harris, El Dorado, who had been supporting Camden as the location of the plant, that a re-investigation of the sites was being made and that "there may be a change yet."

The third factor in the developments was the fact that, although it has been three weeks since the Lake Catherine site had been announced for the plant, no activity, other than preliminary surveys, had been started there.

The Rock Island railroad has begun preliminary work toward laying of a spur track to supply the Lake Catherine plant, and railroad officials were obviously surprised by reports of the day's sudden developments.

Rep. W. F. Norrell, Monticello, from Washington, stated "no change will be made that I know of." He said he had checked the situation yesterday before government offices closed for the week-end and was told by the Office of Production Management and the defense plant corporation, the two agencies concerned, that there has been no change and that none is in prospect.

Issue Settled, Norrell Insists.
Norrell said he is confident the plant will be built at Lake Catherine as agreed.

"It has been settled," he declared. "and I don't think there will be any change."

Carroll Cuffman, president of the Malvern Chamber of Commerce, who with Rep. Norrell had been instrumental in obtaining the plant for his area, also was emphatic that "there is nothing to the reports that the plant might be moved to Camden."

Mr. Cuffman described it as "an erroneous report that shouldn't even be published."

The three newspaper men who "broke" the statement of Mr. Allen that the plant possibly might still go to Camden were Jerry Niel, Associated Press correspondent in Hot Springs; Roy Bosson, Hot Springs Sentinel-Record reporter and correspondent of the Arkansas Democrat, and Walter Ebel, veteran Hot Springs newspaper man.

Yesterday's developments could be described as only another troubled step in a series of problems surrounding selection of the site for the plant.

Plans Previously Revised.

In the beginning, the OPM released a statement to a number of newspapers announcing Camden for the site and then withdrew the selection, but not until Camden learned that it had been named and then rejected. Shortly afterward, Lake Catherine was chosen for the site for the plant and the battle has been on ever since with Camden authorities never having given up their efforts.

When the three Hot Springs newspapermen contacted Mr. Allen yesterday they quoted him as saying:

"There is still some doubt that the Lake Catherine site will actually be used. The engineers are to make an unbiased report on economic factors favoring each site. You know, of course, that the Reconstruction Finance Corporation is to finance the building and the RFC is going to build it at a place where it will incur the least cost. Jesse Jones is a good business man."

The newspapermen also quoted him as saying "whichever site is chosen, it will cover about 33 acres and employ about 1,200 workers at the maximum during the construction period; and when completed the aluminum plant will employ about 800 men and the power plant about 50 men."

Allen later told newspapermen he wanted to retract the entire statement.

Victory Banquet Planned.

A "victory banquet" has been planned by the Hot Springs Chamber of Commerce for December 16, honoring Representative Norrell and Mr. Cuffman for their efforts in obtaining the plant.

Representative Harris, reporting from Washington, said that five men are making a re-investigation of the sites for the Aluminum Company of America, contractor for the plant, and the federal agencies.

He said he did not know what the outcome will be but that a new report on the sites is due in the nation's capital over the week-end.

Shortly after it had been announced that Lake Catherine was to be the site of the huge aluminum-power development, Harris issued a blast against the action, maintaining that the Camden site was better and more economical as well. The new investigation of the sites was started since then.

Harris said he had no information to go on as to what will be reported, but commented: "Lake Catherine may not be what they thought it was before," and added: "There may be a change yet."

Those who had been following and working on the aluminum plant matter gave a sigh of relief when the site selection was finally announced, believing that everything was settled and that actual construction was about to begin.

State Might Lose Plant.

With these new developments, the fight may be opened all over again. There was some fear implied in Washington that if it is opened up too far, the whole thing might be lost.

However, such fears when expressed before have proved to be groundless and the state has been assured a number of times that the plant will definitely go into Arkansas at one site or another.

There was no hint in Washington as to what the outcome of the new investigation will be. The government offices were closed as was the ALCOA office there. Those officials who could be reached said the expected report had not come in and that until it does they have no further information about the situation and do not know what will be done.

The report is expected to reach Washington by Monday.

Camden Delegation Goes to Washington for Parley.

Washington—A delegation from Camden, Ark., was here last week in an effort to reverse a recent decision which awarded a \$33,000,000 aluminum plant to a site near Hot Springs on Lake Catherine instead of to Camden.

It was understood that the Camden delegation was told that the Lake Catherine site was selected in preference to Camden because it was estimated the cost of construction would be \$7,000 less at the Hot Springs County site.

It was in an effort to refute what the Camden delegation termed "erroneous information" about cost figures that prompted the trip to Washington.

The delegation told defense officials, it was learned, that the plant foundation would not cost \$330,000 more to build at Camden than at Lake Catherine and that freight rates at Camden were not higher than those in effect at Lake Catherine.

Camden representatives also told defense officials that the cost of interim power for the plant would be the same at Camden as at Lake Catherine.

Options on Plant Site Given to RFC.

Special to the Gazette, 12-9-41

Hot Springs, Dec. 8.—Carroll Cuffman, president of the Malvern Chamber of Commerce, notified friends here today that options to buy the last 150 acres necessary for the site of the aluminum plant between Hot Springs and Malvern had been turned over to the R. F. C. which will advance money for construction of the project, as well as for the power unit. The combined investment will total \$33,000,000.

Mr. Cuffman also reported that despite doubt as to whether the aluminum plant will be built near here or near Camden, the foreman in charge of building a spur from the main line to the plant site has been instructed to complete the job as rapidly as possible. Mr. Cuffman is optimistic that no change in the location of the aluminum plant and power unit will be made.

Alcoa Officials Rent Homes And Office at Malvern.

Special to the Gazette, 12-9-41

Malvern, Dec. 8.—C. J. Varnell, Pittsburgh, Pa., chief clerk of the Aluminum Company of America for the building of \$33,000,000 aluminum plant assigned to Arkansas, arrived in Malvern today and said he will make his home here during construction of the plant.

A. P. Allen, construction engineer for the plant, has selected offices in the Emerson building on West Second. Mr. Allen also has rented a home here.

BIG ALUMINUM PLANT WILL BE BUILT ON LAKE

Selection Said to Be Definite.

Gazette 12-10-41

The proposed \$33,000,000 aluminum plant and power unit will be constructed on Lake Catherine in the Hot Springs-Benton-Malvern triangle, the Gazette learned from a high authority last night.

The plant will be constructed and operated for the Defense Plant Corporation by the Aluminum Company of America. Jesse Jones, chairman of the Defense Plant Corporation, in Washington said he could make no announcement regarding the plant because of the War Department's censorship, but the Gazette's informants said the plant would be built on Lake Catherine and not at Camden.

A. P. Allen, Alcoa superintendent of construction of the plant, declined to comment on the report.

Camden Delegation Still At Work in Washington.

An Associated Press dispatch from Washington last night said, however, that the Camden delegation still is in Washington trying to secure the plant.

Congressman Norrell, whose district includes the Lake Catherine

site, was quoted as saying: "In my judgment the plant site is not going to be changed from Lake Catherine."

Site Has Been Cause Of Bitter Controversy.

The Office of Production Management in Washington announced early in November that the plant would be built at Camden but withdrew the announcement an hour later. Two weeks later the OPM announced Lake Catherine had been selected as the site, which is about 25 miles from the alumina plant under construction at Bryant.

Representative Oren Harris of El Dorado protested against the Lake Catherine site. He charged it would cost \$600,000 more to build the plant there than at Camden. When T. D. Jolley, chief engineer for Alcoa, and other officials inspected both the Lake Catherine and Camden sites Saturday, it was disclosed that orders to construct the plant and power unit had been held up.

Plant Due to Be In Operation by Spring of 1942.

Because of the outbreak of war, it is expected that construction of the plant will be rushed. Mr. Allen refused to say whether he had received orders to proceed, but a Gazette's informant predicted that work will be under way on Lake Catherine within a few days.

The Rock Island Lines is continuing work on a 1,000-foot loading track at the plant site near Malvern. W. B. Futrell, assistant freight manager, said he had received no assurance that the plant would be built there. "We want to be prepared should the plant be built," he said.

Work on the plant designs and material schedules have been completed by the Alcoa. It was started soon after the defense plant plan was initiated in order to speed construction once the plant was authorized.

Alcoa has been holding bids from contractors for grading and concrete work. Fabrication of steel for the buildings was ordered several weeks ago and major items of equipment have been on order for several months. More than \$8,000,000 had been contracted for in advance for the Arkansas aluminum plant alone.

Alcoa announced November 20 that it expected pouring of concrete to begin within the next few weeks and that steel work would begin by February. The plant is scheduled to go into operation in the spring of 1942.

In addition to 10,000 tons of steel needed for the fabrication and erection of the buildings, 8,000 tons of steel plate will be required for the reduction furnaces and other operating equipment. About 35,000 cubic yards of concrete will be poured and foundations of the plant will cover approximately 21 acres. For transmitting the tremendous amounts of electricity needed for the electrolytic production of aluminum, more than 6,000,000 pounds of copper busbar will be installed.

Private utilities will supply power for the plant while a gas Diesel engine power plant and a steam power plant will be built. The power units will utilize "sour" gas from South Arkansas fields.

To process bauxite into alumina, raw materials needed for the aluminum-producing process, Alcoa is building an alumina plant with a yearly output of nearly 1,000,000,000 pounds for the government at Bryant, between Bauxite and Malvern.

Large quantities of carbon electrodes are used in production of aluminum. These electrodes will be manufactured in a plant to be built as part of the Arkansas

Offices for Alcoa at Malvern Being Prepared.

Special to the Gazette, 12-11-41

Malvern, Dec. 10.—Remodeling of the Emerson building on West Second street started today preparatory to occupancy by officials of Aluminum Company of America, which will construct \$33,000,000 plant at Lake Catherine.

The building will house offices of A. P. Allen, construction foreman; L. J. Varnell, Alcoa, Tenn., chief clerk; Kenneth Chambers, Pittsburgh, purchasing agent, and the personnel supervisor.

Harris Confirms Site For Aluminum Plant.

Gazette 12-11-41

Washington, Dec. 10 (AP).—Representative Harris (Dem., Ark.) said today he had been advised by the Defense Plant Corporation that the projected Arkansas aluminum plant would be built at Lake Catherine.

The development will cost an estimated \$32,000,000 and consist of an aluminum processing plant and a power plant to furnish it with electricity.

Congressman Harris' announcement that the aluminum plant will remain at Lake Catherine in Hot Springs county corroborated a report circulated in Arkansas Tuesday.

The OPM selected the Malvern-Benton-Hot Springs area as a site two weeks ago.

Adkins Breaks Ground Today For Big Plant

Democrat 12-13-41

Hot Springs (AP).—Under the impetus of a wartime speedup, ground-breaking for Arkansas' new \$33,000,000 aluminum and power plants on Lake Catherine was pushed forward to today.

The honor of turning the first spade of dirt in ceremonies at 10:30 a. m. was assigned to Governor Adkins.

Others on the ground-breaking program were Mayors Leo P. McLaughlin of Hot Springs and K. K. Kight of Malvern, Secretary Henry M. Stanley of the Hot Springs Chamber of Commerce, President Carroll Cuffman of the Malvern C. of C., and A. P. Allen, construction superintendent for the Aluminum Company of America.

The ground-breaking ceremony followed a succession of new developments, including:

Announcement from Washington by Representative Harris that the Rural Electrification Administration would build a \$4,000,000 generating plant at or near Camden. This plant is expected to supply 45,000 kilowatts of the aluminum works' needs between Jan. 1, 1943, and about Jan. 1, 1944, when generating facilities on Lake Catherine probably will be complete. The Camden unit will be fueled by sour gas.

Another Washington announcement, from Federal Works Administrator Fleming, said that contracts had been signed whereby the Ark-La Electric Co-operative would supply 32,500 kilowatts of the aluminum plant's needs. The announcement said this meant aluminum production would start five months earlier than if it had to wait for the Lake Catherine steam plant's completion.

Co-Ops To Ask Power Line Permit

Gazette 12-15-41

An application for a certificate of convenience and necessity soon will be filed with the state Utilities Commission by the Ark-La Electric Co-operative, which will construct a 186-mile, \$2,000,000 line to bring power to the Lake Catherine aluminum plant, Thomas Fitzhugh, lawyer for the co-operative, said yesterday.

Ark-La's Board of Directors, meeting at Shreveport, La., Saturday, ratified contracts signed with the Defense Plant Corporation at Washington last week, under which the co-operative will furnish 32,500 kilowatts for one string of aluminum pots at the \$33,000,000 plant.

Engineers are working on designs for the line, which must be in service by next June 1. Ark-La will buy the power from the Federal Works Agency, which recently took over the operation of the Grand river dam in Oklahoma. The line will extend from Muskogee, Okla., to Lake Catherine.

Ark-La, consisting of five Arkansas and five Louisiana co-operatives backed by the Rural Electrification Administration, will sell power at 6.2 mills per kilowatt on an 85 per cent load factor. This interim power will enable the aluminum plant to start operations five months earlier than it could have started by waiting for the completion of a steam generating plant.

The REA will build a \$4,000,000 power plant at Camden.

OPM May Set Up Bauxite Stock Pile.

Gazette 12-18-41

Statehouse circles heard yesterday the Office of Production Management has decided to establish a bauxite stock pile for the benefit of individual property owners near the Aluminum Company of America mines at Bauxite.

If this choice is verified, owners of bauxite-producing lands near Sweet Home may not be able to

mine the mineral profitably because of the cost of transportation. State officials were under the impression originally several stock piles would be placed in the bauxite territory.

Three fixed charges in production of bauxite are being considered by the individual property owners. They are:

The cost of getting the ore out of the ground.

Payment of royalty on the basis of 50 cents a ton.

Transportation to the proposed new alumina plant at Bauxite.

Much testing has been in progress in the Bauxite territory since the alumina and big aluminum plants were allotted to the state. Since the industry will use just so much bauxite, Sweet Home owners of bauxite property may not enjoy the benefits of a ready market if enough is produced in Saline county.

OPM Prices For Bauxite \$3 to \$5.40

Gazette 12-21-41

Average prices to be paid for bauxite mined for use in Arkansas's new aluminum industry will be \$3 to \$5.40 a ton, Dr. George C. Branner announced yesterday after his return from Washington.

The state geologist said the Office of Production Management will release a schedule of prices within two or three weeks. Owners of land containing bauxite deposits have been anxiously awaiting the announcement.

Prices will be paid on a dry basis, Dr. Branner said. The tentative schedule is lower than prices now paid, he said, but pointed out that the alumina plant will use a lower grade of ore than that being mined.

Lowest grades will be bought at prices below \$3 and higher grades will command more than \$5.40, the geologist said. The proposed stock pile near the Aluminum Company of America's mines in Saline county will not be started for several months, he estimated, because sheds and laboratory equipment must be set up first.

Statehouse circles were informed that an agency will be set up soon by a representative of the OPM or Defense Plant Corporation to purchase bauxite ore from independent owners.

Large Force Working At Alumina Plant Site

Democrat 12-21-41

Benton.—The construction of the \$21,000,000 alumina plant, to be erected one and a half miles northeast of Bauxite, is in progress. The 150-acre tract has been cleared and the McGeorge Construction Co. of Pine Bluff has the contract for clearing, grubbing and excavating.

The W. Horace Williams Construction Co. of New Orleans has erected temporary office buildings on the site and has 20 men employed doing detail work. F. A. Bilhart is general superintendent. The Williams Co. has a contract for finished excavation and building the foundations for the main buildings. The contract for the erection of the main buildings has not been announced.

A spur track a mile and a half in length has been built from the Bauxite and Northern railroad to the plant site. The Bauxite and Northern is a short line from the main line of the Missouri Pacific to the Republic Mining & Manufacturing Co. plant. The spur will be used to haul the ore from the Republic plant to the new plant when it is completed.

Bauxite Reserves Only Enough for Six Years.

Gazette 12-28-41

Washington, Dec. 27 (AP).—The Bureau of Mines estimated today reserves of bauxite, source of aluminum, would be exhausted in the United States within six years if foreign imports are stopped and the present rate of consumption maintained.

A report from a survey by the bureau and the Geological Survey placed commercial bauxite reserves in this country as roughly 18,000,000 tons. It said there are further reserves of 11,000,000 to 14,000,000 tons of bauxite of a grade too low to recover under present commercial processes.

The report said bauxite requirements would reach almost 3,000,000 tons annually by July, 1942. This is four times the 1940 consumption for all purposes.

Spa Aluminum Plan



The metal producing plant of the Alumi and company officials have disclosed that will look almost exactly like the Tennessee company holds the contract for construction verted into aluminum.

Work Rushed On New Plants In Arkansas

Democrat 1-4-42

Conversion of Bauxite Into Metal Is Long Complicated Process.

By TREMAIN F. ROBINSON.

(Democrat Washington Bureau.)

Washington.—Construction of the Arkansas aluminum and alumina plants will come as part of the ultimate idea started by Napoleon III, emperor of the French.

Aluminum from the Arkansas establishment will go into our Army for giant bombers and other planes and it will be used for other defense purposes and essential civilian uses. But modern as it is, the present use aluminum plays in fighting our enemies is only the climax of an idea started by the Third Napoleon.

It was not until 1825 that the first aluminum was extracted from ore and little success was had with it before 1855. At that time a Frenchman, Henri Sainte-Claire Deville, exhibited a bar of aluminum at the Paris Exposition, Napoleon heard about the metal and its properties and gave the backing of his government to its development.

The metal is light and malleable and Napoleon was interested in it because he wanted to speed up his Army and to do so, he must lighten its equipment. Armies of the world today are using aluminum for the same purpose—to lighten equipment—and vast amounts are needed by the United States. That is why the Arkansas plants are being built.

Aluminum used to cost more than silver. It cost \$545 a pound in 1852. The Frenchman brought it down to \$34 a pound by 1856. Now, by using the electrolytic process developed by Charles Martin Hall, it costs around 20 cents a pound.

The process to be used in Arkansas to get aluminum out of the ground is a long one and complicated, starting, of course, with digging up the ore.

After the bauxite is mined, it must first be broken up, which is done by huge crushers, after which it is sprayed with water to remove the clay, then drained, then put into drying kilns to drive off all moisture. When this is done, the ore is ready for the first processing—the one that turns it into alumina.

In Arkansas, a huge plant for making the alumina will be built to have a capacity of 1,000,000,000 pounds. In this process the crushed, washed and dried bauxite from the mines is further reduced in size in crushers and hammer mills. Finally, it is ground into a powder, mixed with a hot solution of sodium hydroxide and pumped into pressure tanks, or digesters. In this operation, the caustic soda dissolves the aluminum hydroxide out of the ore to form a sodium aluminate solution. Impurities remain in solid form and are removed when the solution is pumped through filters.

Processing Explained. Once through the filters, the solution goes into precipitating tanks as high as a five or six story building. As it cools, aluminum hydroxide crystals settle out of the solution.

The whole thing remains in the tanks until the precipitation is completed, after which the aluminum hydroxide is moved and washed and heated white hot in large rotating kilns to drive off the chemically combined water and to change the character of the material so it will not reabsorb moisture from the air. That is the alumina. Two pounds of bauxite must be used to get one pound of alumina.

That is the work that will be done by the new alumina plant near Bryant. From there, however, the alumina will go to the plant to be constructed at Lake Catherine to be treated and made into aluminum. Making aluminum out of alumina is the expensive and complicated part of the process.

From Powder to Metal.

Alumina is a powder. To change it into the metal, aluminum, the magic of electricity will be applied at the Lake Catherine plant. The metal is produced in furnaces, or electrical cells, which are rectangular in shape and consist of steel shells lined with carbon. The lining serves as the cathode and the current is led into each cell through carbon anodes suspended from above the cells on overhead busbars. In the reduction works now in operation, there are long rows of these electrolytic cells, each one being capable of turning out about 250 pounds of aluminum every day. Officials of the Aluminum Company of America, which has the government contract to build and operate the Lake Catherine plant, say the one there will be like this.

The operation is based on the fact that alumina, when dissolved in molten cryolite, can be decomposed by the passage of an electric current without change in the solvent. In actually doing the job, the cryolite bath is first put into the electrolytic cell. When it has been fused by electricity, the alumina is added and dissolved. When the current hits it, the alumina is separated into its component parts of aluminum and oxygen. The oxygen combines with the carbon and escapes through the crust of the bath. The aluminum drops to the bottom of the cell, where it remains as a molten layer.

Much Electricity Required. That is all there is to it. When this is done, the metal is run off into big buckets and poured into molds and formed into pigs weighing about 50 pounds each.

Although it is aluminum by then, it still has some dross and bath materials mixed up in it. Consequently, the pigs have to be remelted again to remove them. If alloys are used, the alloying can be done at the same time the metal is remelted, and the metal is cast into ingot for use by industry.

Four pounds of ore were required to make the two pounds of alumina which were necessary for the production of one pound of metallic aluminum. And in the production of this one pound of aluminum, 12 kilowatt-hours of electricity and three-fourths of a pound of carbon electrode were consumed. Taking into account the materials used in the various processes from the mining of bauxite to the manufacture of aluminum, Alcoa figures that it takes nine pounds of raw materials to make one pound of aluminum.

Construction Of Alumina Plant Gains

Gazette 1-4-42

Operations at the \$21,000,000 alumina plant being built between Bauxite and Bryant, Saline county, are expected to be started in June, F. A. Billhardt of Cleveland, O., construction superintendent, said yesterday.

The plant, to be operated by the Aluminum Company of America, will be partly complete when regular operations start. A new section will be completed each month thereafter, until full production is available on January 1, 1943.

The ultimate capacity of the plant will be 1,000,000,000 pounds annually. It is estimated that 150 truckloads of 10 tons each will be needed each 24 hours, to keep the plant operating. Trucks will bring bauxite from "all" mines at Bauxite and in surrounding territory.

Mr. Billhardt said that the first shipment of materials from the plant is expected to be made in July.

Traffic will require improved roads. Access roads also will be needed, for the convenience of men working at the plant, the construction superintendent said.

Grading Progresses.

Grading is approximately 60 per cent complete. The Chicago Bridge and Iron Works will start erecting some steel next week. A shipment of steel will arrive a week from tomorrow. Concrete work is slightly behind schedule, but this can be made up, Mr. Billhardt said.

Railroad tracks are about 50 per cent complete. Materials can be moved to most of the locations in the plant area.

Approximately 200 persons are working for all contractors engaged in the alumina plant construction. Between 500 and 600 may be employed in the next two months, the superintendent said.

State Has Bauxite for 5.8 Years of War If Exports Were Cut Off

Estimate Does Not Include Lower Grades Which Cannot Now Be Used Economically

Democrat 1-11-42
By CLAUD CURLIN.

Bauxite reserves of the United States, 98 per cent of which are in Saline and Pulaski Counties, are sufficient to satisfy war needs "as now envisioned" for 5.8 years "should it become necessary under emergency conditions to prohibit imports," the Bureau of Mines declared in a report on "Bauxite Resources of the United States".

But the Bureau warned—and it is this possibility that makes some State officials apprehensive lest the war effort deprive the State of one of its richest natural resources—that should the United States have to depend entirely on the domestic supply of bauxite to feed the ever-expanding aluminum industry that at the end of the 5.8 years "the aluminum industry must depend entirely on foreign bauxite or resort to other raw materials, such as alunite or high-grade clays at greatly increased costs."

In any discussion of bauxite resources of the country, Arkansas naturally figures more prominently than any other section. Of the known 29,028,000 long tons of bauxite, 27,254,000 tons are located in the two-county field centering at Sweet Home and Bauxite.

However, not all of the 29-million tons can be counted on to provide ore for making alumina to produce aluminum for planes and other material. Only the Grade A and Grade B ores—that is, ores with not less than 50 per cent alumina content—can be used under present methods economically.

Subtracting still further from the amount of domestic ore that actually is available to aluminum plants is the fact that Grades A and B ores

them individually," the Bureau of Mines report declared.

In the second mining method, underground shafts are used, resulting in more selectivity "because the high grade ore can be removed and the low-grade left untouched," the report said.

"However, underground mining results in a higher percentage of mining losses because of the necessity of leaving good ore in the mine roof and as pillars to support the roof.

"Where underground mining methods are used it is not uncommon to find it necessary to leave from 25 to as much as 50 per cent in the mine roof.

"Hence, if an ore body is estimated to contain 100,000 tons of bauxite

Estimated bauxite reserves of United States, by long tons, grade and alumina content:

State	Grade and Alumina Content				Total
	A 55%	B 50-55	C 45-50	D 30-45	
Arkansas	9,090,000	8,433,000	7,803,000	1,198,000	27,254,000
Alabama	16,000	79,000	33,000	230,000	358,000
Georgia	237,000	311,000	481,000	1,029,000	1,029,000
Mississippi		23,000	100,000	200,000	323,000
Tennessee		36,000	22,000		58,000
Virginia		6,000			6,000
Totals	9,343,000	8,898,000	8,439,000	2,348,000	29,028,000

must also supply consumers of bauxite for other purposes.

Aluminum Use Smallest.

In 1938, 1939 and 1940, 51, 54 and 52 per cent of the domestic production went for purposes other than the manufacture of metallic aluminum.

"It is of special interest to note," the report declared, "that the use for abrasive purposes rose from 82,000 tons in 1939 to 129,000 tons in 1940, probably reflecting increased use of abrasives in the defense effort.

"It is not unlikely that during continuation of the defense preparations the domestic need for bauxite for purposes other than metallic aluminum may reach or exceed 250,000 long tons annually, most of which probably will come from domestic mines."

Aluminum needs, the report said, will require 2,850,000 long tons of bauxite annually, making a total demand for all purposes of 3,200,000 long tons.

Another consideration which must be taken into account in determining the amount of bauxite actually available for all purposes, is the losses in mining.

Some Lost In Mining.

Two methods of mining are used in Arkansas—and both result in a loss of the known supply.

One is open-pit mining, done when the deposit occurs near the surface, and the loss under this method is estimated at 10 to 15 per cent. After surface coverings are laid back, huge scrapers or power shovel diggers move in and scoop up thousands of pounds of ore in one operation.

"Irregular extensions of bauxite into the underlying clay, or lateral extension, must often be left because of the excessive cost of recovering

one might reasonably expect to recover about 85,000 to 90,000 tons by open-pit methods; but if it is necessary to mine underground, the final recovery might not be more than 75,000 tons and even as low as 50,000 tons. . . ."

Mining Not Always Feasible.

"Although a certain deposit of bauxite with fairly well-defined dimensions may be known to exist, so that an estimate of its contents is possible, still it may be uneconomical, or even physically impossible, to mine it.

"The ingenuity of American mining engineers is well known, and it may be improper to refer to a deposit as 'physically impossible to mine.'

"However, bauxite is a low-price commodity, a price commonly paid for mined ore being \$4 or less per ton. Therefore, although any deposit probably can be mined at a price, the cost under some conditions might be far beyond the range of economy, even at greatly increased ore prices.

"In considering reserves, then, it must be borne in mind that the tonnage calculated as in place must be reduced to account for mining losses ranging from 10 to possibly 50 per cent, and further by some unknown figure to cover these 'physically unminable' deposits."

Of the total bauxite reserve, only nine million tons is Grade A ore—that is, containing 55 per cent or more alumina. Almost all commercial production in the past has been of this grade.

There are almost nine million tons of Grade B ore containing 50 to 55 per cent alumina, which under emergency conditions may be used for aluminum after washing or concentration to reduce the silica content. The government is planning, in fact, to utilize Grade B ore.

Only Two Grades Usable.
For all practicable purposes, how-

ever, these two grades are the only ones usable today. Grade C, which contains 45 to 50 per cent alumina and Grade D, containing 30 to 45 per cent, cannot be counted on.

"The concentration of Grade C ore," the report said, "has never been attempted commercially, and unless it is subsequently found amenable to concentration, or can be used in some process other than those now in commercial use, it is doubtful if Grade C ore can be considered a source of metallic metal. This applies to Grade D ore also."

The report was not at all hopeful about finding some other basis source to replace bauxite in the manufacture of aluminum.

"Although numerous processes for the utilization of alunite and clay for aluminum manufacture have been suggested, the fact remains that at present no such process has been proved commercially successful."

"If alunite rock, containing as little as 30 per cent alunite, could be utilized (which is doubtful), the amount available would be 9,434,000 short tons, or 2,800,000 tons of alumina equivalent, equal to 1,400,000 tons of metal. This would supply national needs at the estimated necessary rate for one year and nine months."

Improved Processes Needed.

If this type of rock could be utilized commercially, it was said, "it seems pertinent to assume that with proper modification the extraction process used for alunite of that grade could be used with at least some success on Grade C and D bauxite ores, and thus extend the life of domestic resources two to three years more."

"If processes can be developed for utilizing alunite and low-grade bauxite ores as seems possible from research studies, and an opportunity is afforded for their commercial demonstration, possibly such stimulus may encourage initiation of new processes or modification of others whereby clays may eventually become the domestic source of aluminum if foreign supplies are cut off."

"Metallic aluminum has been made experimentally in the laboratory from high-aluminum clays, and it is reported that such clays have been utilized in Europe on a minimum pilot-plant scale.

"However, the utilization of clays in this country heretofore has presented too many technical and economic problems to make it a competitor of bauxite as a raw material for aluminum.

"Furthermore, no intensive survey sources of clay technically suitable has ever been made of national report for aluminum. It is presumed, however, that ample quantities will be found to be available if a suitable commercial process can be developed."

Large Quantities Imported.

Some of the conclusions reached by the authors of the reports after touring the states in which the deposits are found were:

1. More than half the domestic bauxite is being mined for uses other than the manufacture of metallic aluminum. (In Arkansas, the Republic Mining and Manufacturing Co., a subsidiary of the Aluminum Co. of America, is by far the largest producer, and all of its production goes into metallic aluminum. The remaining production goes into the manufacture of abrasives, chemicals and other products).

2. More than 95 per cent of the domestic output comes from Arkansas.

3. Bauxite imported during the past three years has furnished the raw material for more than 70 per cent of the metallic aluminum made in the country.

4. About four tons of bauxite is required to produce one ton of metallic aluminum.

Arkansas already is feeling the effects of the increased aluminum program. Production during 1941 was estimated by Dr. George C. Branner to total 1,021,433.76 long tons, more than double the 487,677.31 tons mined in 1940.

Dr. Branner also pointed out that the Office of Production Management was encouraging the mining of the Grade B ore, earmarking funds to buy 1,618,000 tons.

The \$22,000,000 alumina plant under construction near Bauxite will use some of the lower grade ore—the first time it has been used commercially in the production of aluminum.

ALCOA OFFICER HERE TO SPEED UP PRODUCTION

Explains Duties At C. of C. Dinner.

Gazette 1-13-42

Appointment of Thomas C. Jones as regional manager of the Aluminum Company of America, to coordinate work of the bauxite mines at Bauxite, and the alumina and aluminum plants, now under construction, was announced at the annual dinner of the Little Rock Chamber of Commerce at Hotel Marion last night.

In an address, Mr. Jones said his work would be to co-ordinate the work of the two plants and the mine "to get out the maximum amount of aluminum in the shortest amount of time."

He said his company would contribute greatly to the war effort since aluminum is used in the manufacture of airplanes, armor plate, fuses and detonators, and many other war materials.

He predicted the two new plants would employ between 2,000 and 2,500 workers. These, with their families, will add approximately 8,000 or 10,000 persons to the Little Rock trade area, he said.

Mr. Jones joined Alcoa in 1919 after completing 20 months service in the army, leaving it as a first lieutenant of artillery. He spent the next five years in the Production and Research departments of the company and, until a few months ago, was connected with the Sales Department. At that time he was appointed manager of the St. Louis (Mo.) office.

He is a native of Delaware, O., and was educated at the Case School of Applied Science in Cleveland, O. He is married and has a 14-year-old daughter.

Mr. Jones will establish an office in Little Rock. Mrs. Jones and his daughter will move here.

Aluminum Monopoly In U. S. Denied.

Gazette 1-15-42

Washington, Jan. 14 (AP).—William Watson Smith, counsel for the Aluminum Company of America, denied today assistant Attorney Gen. Thurman Arnold's assertion before a congressional committee that the company had exercised a 100 per cent control over aluminum in this country.

"It had never had such control," Smith told a House Military Subcommittee before which Arnold appeared as part of its inquiry into co-operation of business in the nation's defense program.

Arnold had mentioned the Aluminum Company to illustrate his argument that international cartels, controlling production of metals, had placed this country in a disadvantageous position for full utilization of its productive capacity.

"Except during wartimes," Smith said, "the Aluminum Company, for many years past, has encountered active competition in the United States market from importations of foreign aluminum in the United States."

"It is hard to please Mr. Arnold," Smith said in discussing the assistant attorney general's comments on reduced aluminum prices. "If the Aluminum Company increases its prices, he criticizes it on the ground that it is extorting money from the public. If the company reduces prices, he criticizes it on the ground that it is trying to affect the result of a lawsuit."

New Market For Bauxite Likely

Gazette 1-18-42

Washington, Jan. 17 (AP).—The outlook for sale of bauxite by the small independent dealers in Arkansas brightened today.

Governor Adkins said after a conference with Office of Production Management and Defense Plant Corporation officials that the

government planned to set up an independent testing laboratory and purchasing agency so that small owners of bauxite might sell the product for use in making aluminum.

"But the picture is not too rosy yet," said the governor. "The price is entirely too low and I am doing all I can to see the independent owners are protected."

He urged the War Department and OPM to locate charcoal and manganese plants in Arkansas. That subject now is being studied, he added.

Rubber Plant Discussed.

The governor said he also had discussed with the Reconstruction Finance Corporation the possibility of obtaining a synthetic rubber plant in the state. He was told he would have to confer with rubber companies who would operate the plants.

Access roads and other improvements at the incendiary bomb plant at Pine Bluff were urged by him in a conference with the War Department's chemical warfare service officers.

Adkins said he would leave here this afternoon for Little Rock.

U.S. to Double Production Of Aluminum

Gazette 1-22-42

Washington, Jan. 21 (AP).—America's aluminum output will be doubled and the magnesium production increased five-fold through expansion programs under way to meet the heavy bomber schedule, the Office for Emergency Management disclosed today in a survey of natural resources.

It listed many acute material shortages but declared "The clear superiority of the United States in raw materials is encouraging in the world struggle which gives natural resources a major role.

The report set 1941 aluminum production at 600,000,000 pounds. It said that because of the demands for construction of heavy bombers, which use 30,000 pounds per plane as compared with 5,000 pounds for a fighter, new aluminum plants designed to double the output already were being built.

Production of magnesium was about 33,000,000 pounds in 1941 and "next year we expect to produce five times as much," the report said.

REA May Get Larger Share In Power Plan

Democrat 1-25-42

Possibility that the Rural Electrification Administration eventually would supply the bulk of interim power for the Arkansas Aluminum Company was seen here yesterday by persons who are thoroughly familiar with negotiations which resulted in both the REA and the Arkansas Power & Light Co. securing contracts to furnish the temporary power.

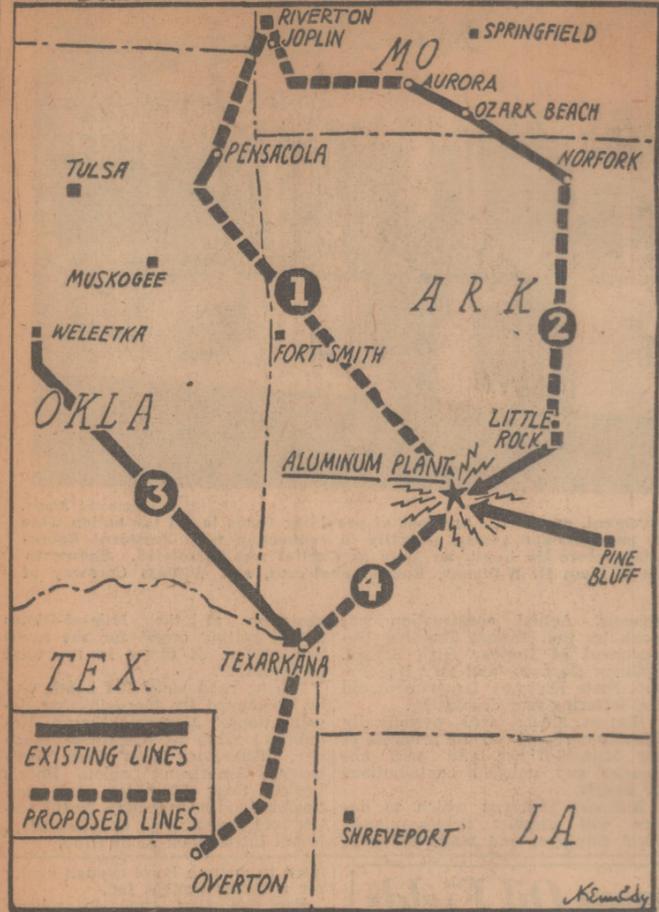
The War Production Board's order that the Pensacola Dam on the Grand river in Oklahoma, from which the REA will obtain its power, be interconnected with private companies at Riverton, Kan., prompted the observation.

The Riverton connection was to have formed one of the major links in the 11-company power pool, organized by the A. P. and L. to insure delivery of the 65,000 kilowatts from which the company has a contract. Under the WPB order, the 35,000 kilowatts which was to have been delivered by the pool will be transmitted over REA lines through a 55-mile connection to be built from Pensacola, site of the dam, to Riverton.

Just what effect, if any, this change in the power pool's set-up will have on the prices of staples were not clear. The highest levels on new high crops since 1937 and soy beans year tops, corn and rye reached late to 12 year peaks, oats hit 14 more. Cotton leaped around \$5 a bushel, the highest level in a decade and the average price of staples rose to sharp rise into farm commodities. The price control bill brought a treatment accorded agriculture in military needs and the "favored" increasing use of many staples for ing them. "point where they will start absorb- ment industries are expanded to the war-economical factors before arm- of work by priorities and other as 3,000,000 persons may be thrown

Aluminum Plant Power Sources

Democrat 1-25-42



Here are the major transmission lines—proposed and existing—which are involved in the question of interim power for the Arkansas aluminum plant on Lake Catherine.

No. 1 is the 197-mile transmission line from Markham's Ferry, on the Grand River in Oklahoma, to the plant site—the line which was the bone of contention between the Arkansas Power and Light Company and the governmental agency and authority for which was granted by the State Utilities Commission only at the request of the War Production Board. No. 4 is a line which would be built by the Arkansas Power and Light and the Southwestern Gas and Electric from Overton, Tex., to the plant site. An existing line, No. 3, would tie in power from the Oklahoma Gas and Electric's Weleetka station. No. 2 is a proposed extension which has been abandoned by A. P. & L. It would extend from Little Rock to Norfolk to connect with other lines extending to Riverton, Kan., tapping a source of 35,000 kilowatts there. However, the WPB directed the REA to build the connecting line with Riverton, interconnecting with Pensacola dam.

Thomas Fitzhugh, attorney for

the Ark-La Co-operative, REA operating unit that will build the transmission line, said one of the terminals would be at Markham's Ferry instead of Pensacola, the actual dam site, to better tie in with future developments on the Grand River. A dam will be built at Markham's Ferry and Ft. Gibson, below the line terminus. Mr. Fitzhugh pointed out that two 110-kv. lines already extend from Pensacola to Ft. Gibson.

The 11-company power pool formed by the A. P. & L. to insure delivery of 65,000 kilowatts to the aluminum plant had included the Riverton interconnection as an important part of the pool. Under WPB's order, the REA lines will transport the 35,000 kilowatts in addition to the 32,500 kilowatts for which it has a contract.

Mr. Fitzhugh said the REA line from Markham's Ferry would "be as straight as it is possible to build a line." The \$3,000,000 project will be completed by June 1, when the aluminum plant is expected to begin operations.

U. S. Bauxite Production At New Peak

Gazette 1-30-42

Washington, Jan. 29 (AP).—United States 1941 production of bauxite, the ore from which aluminum is taken for aircraft manufacture, totaled approximately 899,500 long tons, exceeding the previous peak of the World War year of 1918 by 50 per cent and surpassing 1940 output by 105 per cent, the Bureau of Mines reported today.

Bauxite imports during the first nine months of 1941 totaled 749,264 tons, considerably greater than ever received during any previous full 12-months. Consumption of the ore in this country also broke all records, amounting to an estimated 1,700,000 tons compared with 1,072,000 tons in 1940.

Of the estimated 1941 bauxite production, Arkansas contributed 92 per cent and Alabama, Georgia, and Virginia, the remaining eight per cent. The greatest increase in mine production was in Arkansas and Alabama.

Aluminum Production Reviewed

Gazette 2-1-42

The first producers of aluminum had to convince the public of its many uses because the metal was too cheap and plentiful to be used for jewelry. A. P. Allen, director of construction at the Aluminum Company of America plant on Lake Catherine near Malvern, told members of the Engineers Club at the Frederica hotel yesterday.

"A little over 100 years ago the king of Siam wore the only known piece of aluminum on his watch chain. The metal was introduced in the form of the knives and forks at a banquet of kings and queens of Europe at Paris in 1870, but was only a curiosity 60 years ago," Mr. Allen said.

He explained aluminum is the third most plentiful element in the world, following oxygen and silicon. Mr. Allen described how Charles M. Hall solved the problem of separating aluminum from alumina, and the early efforts to produce the metal on a commercial basis. Mr. Hall and his associates first produced only 50 pounds of the metal daily, he said.

Mr. Allen ended his talk by describing the various processes of aluminum production with blackboard illustrations.

Alcoa Official Speaks Before Engineers Club

Democrat 2-1-42

A. P. Allen, long-time official of the Aluminum Company of America, who is in charge of the aluminum plant which is now under construction near Malvern, was the feature speaker yesterday in a meeting of the Engineers Club in the Frederica Hotel.

Although he confined his address to the technical side of the refining of aluminum, Mr. Allen said after the meeting adjourned that "satisfactory progress" was being made in the construction work. Most of the surveying and mapping of the huge plant site has been completed, he said, and workmen now are employed in two 10-hour shifts in grading earth on building sites.

The speaker traced briefly the history of aluminum, declaring that as recent as 60 years ago the metal was a laboratory oddity with no practical use, since it was difficult to refine.

Huge amounts of electricity used in refining aluminum oxide into the useful product are not needed for power, but as a chemical reacting agent, Mr. Allen said. Twelve kilowatt hours of energy are needed to refine one pound of aluminum.

A joint meeting of the Engineers Club and the Arkansas Society of Professional Engineers will be held next Saturday in the Frederica. The club will meet February 28 with the Arkansas Engineers Club in the Hotel Marion.

Reynolds Co., To Open Own Bauxite Mines

Officials Decline To Reveal Extent Of New Operations.

Democrat 2-1-42
The Reynolds Metal Company soon will start mining bauxite in Saline and Pulaski Counties, but just how extensive its operations will be comes under the head of "military secrets."

The company, organized in Arkansas last August, has leased extensive properties in the two-county bauxite field to secure ore for a new alumina plant which the company has under construction in Alabama.

O. C. Schmedeman, manager, said operations were about ready to begin. Further information, however, he refused to divulge, declaring that it came under the broad term of "military secrets."

The company made test drills on many tracts in the two-county field. At the time the company was organized, Mr. Schmedeman said a lower grade ore than commonly used in the production of alumina would be mined.

The government also has announced it would purchase a large amount of the lower grade ore—the first time it has been used commercially for the production of alumina.

Bauxite production last year reached a new all-time high of almost 1,000,000 tons—double the previous high of 1918. Mining of the lower grade for aluminum production is expected to add to the total production for 1942.

The Reynolds company hopes, through its Arkansas mining properties, to make its Alabama alumina plant self sufficient insofar as bauxite is concerned.

In the past, the only company producing bauxite for use in making aluminum was the Republic Mining and Manufacturing Co., a subsidiary of the Aluminum Co. of America.

State Bauxite Production Sets Record

Democrat 2-1-42

By B. N. TIMMONS
(Democrat Washington Bureau.)
Washington—Production of bauxite in Arkansas nearly doubled that of 1940 and, as in past years, the state again mined practically all of the bauxite produced in the nation, the Bureau of Mines of the Interior Department reported today.

Based on a series of canvasses made for the Office of Production Management, the report shows that Arkansas produced 822,600 long tons of the ore in 1941 as compared with only 427,532 in 1940. This was a far greater production than that of any recent year. In 1939 the state put out 361,690 tons, in 1938 it mined 293,663 tons and in 1937 the total was 407,462 tons.

The state's 1941 production represented 92 per cent of the nation's

total output, the remaining eight per cent coming from Alabama, Georgia and Virginia, which together produced 76,900 tons. Production of the United States last year exceeded the previous peak reached in the World War year of 1918 by nearly 50 per cent, and the greatest increase was in Arkansas, the bureau reported.

Total output for the nation was 899,500 long tons, as compared with only 438,913 in 1940. Imports during the first nine months totaled 749,264 tons, a tonnage considerably greater than ever received during any previous full 12-month period. Last year, imports amounted to 629,552 tons. Production and importations this year are expected to "greatly surpass" those of 1941, the bureau said.

Consumption of bauxite last year also broke all records totaling approximately 1,700,000 tons, compared with 1,072,000 the year before. The aluminum industry used about 70 per cent and the chemical, abrasive and other industries used the rest.

Arkansas To Help Much In Arming Nation

Democrat 2-1-42
Will Have Two Army Camps and Variety Of War Industries.

When the Allied nations get around to taking the initiative against the Axis powers, Arkansas will have her "compliments" riding aboard many an implement of destruction addressed to the enemy.

Early last summer, the nation awoke to the realization that aluminum, vitally needed for the production of fighting planes and bombers, was suddenly scarce. The Office of Production Management announced that an additional 30,000,000 pounds of aluminum were needed annually if the nation was to increase its output of aircraft.

Two Aluminum Plants.
Soon thereafter, Arkansas was the recipient of \$60,000,000 in new plants to help produce the precious metal, because it had the ore, the power and labor available to carry on this effort without interruption of other industries.

Already a big bauxite ore producer, Arkansas acquired the alumina plant, to cost \$20,000,000 to construct, near the bauxite mines, some 20 miles west of Little Rock, near Benton. Then followed the acquisition of the aluminum plant and power plant on Lake Catherine, between Hot Springs and Malvern, the two having a combined cost of \$33,000,000.

As more power was needed for these gigantic efforts, a \$5,000,000 power plant to generate current with sour gas, was planned for Camden. It is a Rural Electrification project, and is still in an indefinite stage.

Work on the aluminum plants has begun, and by mid-summer Arkansas will be turning out thousands of pounds of the needed metal. Both the Bauxite and Lake Catherine plants are being constructed and will be operated by the Aluminum Company of America, with government funds.

Just how many pounds of aluminum will be produced at Lake Catherine has become restricted military information since the outbreak of war, but it is definitely known that Arkansas' contribution in this field will be considerable.

Big Alumina Capacity.

The alumina plant at Bauxite is reported to have a capacity of 600,000,000 pounds of ore production when completed. This is the first step in reduction of the bauxite ore, which will be shipped by rail not only to the Lake Catherine plant, but to others being operated by ALCOA.

About 3,000 men will be employed on the Lake Catherine project during construction, with 600 employed permanently once the plant gets into production.

Good Bauxite Possibilities At Gillam Park Seen.

Gazette 2-4-42
Roy Prewitt, lawyer representing a firm engaged in making explorations for possible bauxite deposits, said yesterday the Gillam park area offers "a good possibility for bauxite."

The City Council authorized Mayor Moyer Monday night to appoint a committee to investigate an offer by the firm to survey the park at an estimated cost of \$1,000. The mayor had taken no action yesterday.

Mr. Prewitt said his firm operates some mining properties east and southeast of the park and employs a driller, engineer and part-time chemist for exploratory work.

ARKANSAS AREA TO GET TEST IN BAUXITE QUEST

Government Will Make Survey.

Gazette 2-6-42

Department of Interior agents were prepared yesterday to spend about \$100,000 searching for new bauxite deposits in a 600-square mile area extending from Pulaski to Clark county.

Tests for the ore from which aluminum is produced for warplanes will begin in about three weeks. A magnetic survey of the area has been under way several weeks. A supplementary gravity survey began yesterday.

Offices have been established by Mark C. Melamphy of the United States Bureau of Mines and Dr. G. C. Bryson of the United States Geological Survey at the Colonial Courts on West Roosevelt road.

Huge Area South Of Little Rock To Be Tested.

The area in which tests will be made begins at Sweet Home, Pulaski county, and extends south of Woodson near the corners of Pulaski, Grant and Jefferson counties. The line turns southwest there and continues through DeWitt, Saline county, Fetner in Grant county and Faber, Hot Spring county. It touches the tip of Clark county and turns north about eight miles. Then it returns to Pulaski county along a line that includes Friendship and Malvern in Hot Spring county, Benton in Saline and Alexander in Pulaski county.

Mr. Melamphy said tests will be drilled where bauxite is most likely to be found. He said individual property owners will not be considered.

"When we find property that appears suitable, we will ask the owner for permission to drill," he explained. "We will be glad to receive all information possible from property owners but we will not drill at sites just because the owners ask it."

State Geology Department Completes Magnetic Survey.

Dr. George C. Branner, state geologist, said his department has completed a magnetic survey of the area. It showed that the entire area now under consideration is in one field, he said.

The gravity survey will show the presence of granite and its distance from the surface. From this information the geologists can judge the chances of locating bauxite.

No Person or Corporation To Have Special Consideration.

Lease buyers who entered the field when negotiations were under way to obtain an aluminum plant for Arkansas already are trying to cash in on the government testing program. Mr. Melamphy confirmed a report that representatives of a mining corporation organized at Russellville have conferred with him about the program.

"We have made it clear," he said, "that no person or corporation will receive consideration until our surveys have indicated the possible presence of new deposits."

Dr. Branner cast doubt on a report that one set of promoters has obtained a contract to produce a large amount of bauxite for the Defense Plant Corporation, for use when the alumina plant is completed.

"The Defense Plant Corporation is interested only in contracts with the Republic Mining and Manufacturing Company, a unit of the Aluminum Company of America, and the Reynolds Metals Company and American Cyanamid Company," he said. "They are the largest companies and are in position to fulfill contracts."

Lease Holders and Landowners Fear Low Prices.

The Defense Plant Corporation's proposed schedule of prices for bauxite has not been made public. Holders of leases and landowners near Sweet Home have expressed

fear that prices will be so low that only the higher grades can be profitably mined and shipped to the stock pile at the alumina plant site. They say that such a situation will result in waste of lower grades because small operators cannot compete with the "big three."

Larger companies can afford to sell bauxite at low prices, or even give it to the Defense Plant Corporation, because they control the price of finished aluminum that will be produced on a cost-plus basis for the government, the independents agree.

New Sources Of Chromium, Aluminum

Gazette 2-12-42

By HOWARD W. BLAKESLEE.
New York, Feb. 11 (AP).—New American sources of chromium and aluminum were reported to the American Institute of Mining and Metallurgical Engineers today. Both are due to American inventive genius in extracting metal by new processes from ores which formerly were worthless.

The chromium method promises 80,000 tons a year of a metal which has been almost entirely imported. Chromium is a hardener for armor plate and is necessary in stainless steel.

The new chromium extraction applies to considerable deposits near Yellowstone park, in the Stillwater region of Montana.

The new sources of aluminum is alunite, with a promise of adding to the nation's resources a three-year supply of about 3,480,000 tons of aluminum. The alunite deposits are at Enumclaw, Wash.; Sulphur, Cactus Range and Boyd, Nev.; Beaver and Marysville, Ut.; Calico Peak and Democrat Hill, Col., and possibly at Quartzite, Ari.

In some of these alunite deposits 10 per cent of the mineral has been concentrated enough to make aluminum. The other 90 per cent has been beyond reach of economical methods, and now provides the new source.

Bauxite Reserves May Be Exhausted

Gazette 2-19-42

Arkansas's bauxite reserves may be exhausted in five or six years if the government's proposed new production schedule is followed. Dr. George C. Branner warned yesterday.

The state geologist, who returned from Washington yesterday, said the War Production Board is preparing to call for more bauxite than originally planned for use at the new Saline county alumina plant because of plans to increase warplane production.

"The WPB had a goal of 1,515,000 tons of low grade ore and 909,000 tons of high grade ore annually," he said. "The great majority of this bauxite is 50 per cent or higher in grade."

"At this rate of production, our reserves would be depleted in a few years. My studies and those of the United States Bureau of Mines and Office of Production Management indicate exhaustion of the deposits would occur between 5.4 and 7.6 years.

"If the government decides to increase this production, it is easy to see the seriousness of the situation. It's a problem which the state should solve. It may become a matter of how much bauxite the state will permit to be mined in a year. Restrictions would require legislative action which might be in the form of higher taxes.

"Obviously it is not a good national or state policy to mine all of Arkansas's bauxite reserves. The question is: Can it be avoided? In my opinion it would be better to import all ore possible from Dutch Guinea and save our supply. Aluminum is the metal of the future and we can't say this will be the last war."

Prices Withheld.

Prices which the government will pay for Arkansas bauxite have been withheld because producers and the Metals Reserve Company, a Reconstruction Finance Corporation unit, could not agree on a schedule, Dr. Branner said.

As a result James R. Evans, a Montana mining engineer, will be sent here soon by the Metals Reserve Company to study costs and survey the part small producers

can play in the program. A price schedule probably will be set up on the basis of his recommendations.

A representative of the Bureau of Mines is here already to search for "every ton available for use in making aluminum for planes," Dr. Branner said. Magnetic and gravity surveys are being made in Pulaski, Saline, Hot Spring, Grant and Clark counties.

PLAN BIG JUMP IN OUTPUT OF U.S. ALUMINUM

More Magnesium Also Needed.

Gazette 2-27-42

(By the Associated Press.)
Washington, Feb. 26.—The War Production Board disclosed today that President Roosevelt's "blueprint for victory" calling for production of 125,000 fighting planes in 1943 would necessitate a \$350,000,000 expansion of aluminum capacity and a vast increase in magnesium production.

The government, officials said, is taking steps to provide for an annual aluminum supply approximating more than 2,500,000,000 pounds—compared with former production goals approximating 1,700,000,000 pounds annually.

Magnesium output, totaling 33,000,000 pounds last year, must be increased to 725,000,000 pounds next year.

William L. Batt, WPB materials director, told a press conference the new expansion program would double again the size of the aluminum industry in 1939. One 640,000,000-pound expansion program now is well on the way to completion. Surveys for power requirements and plant sites already are under way for another 640,000,000 pound increase.

To Require Great Amount Of Electric Current.

Batt said the vast aluminum industry which will develop by mid-1943 would require an additional continual 24-hour supply of 1,000,000 kilowatts of electricity. He said such an additional drain on power supplies would force curtailment of non-essential uses of electricity.

The total output of aluminum now contemplated will be "far beyond the reach of anything the Axis powers, together with all the occupied countries, can ever contemplate," Batt said.

The Aluminum Company of America will carry the burden of aluminum ingot production under the expansion program, Batt said, but contracts will be spread among various aluminum fabricators.

Aluminum productions in this country last year totaled 615,000,000 pounds. This year, output is expected to exceed 1,000,000,000 pounds. Canadian imports amounting to 250,000,000 pounds this year, will be increased to 450,000,000 next year under government commitments already negotiated.

Magnesium Expansion To Depend on New Deposits.

Under the new plans, the present 400,000,000-pound magnesium expansion program will be increased 325,000,000 pounds a year, and will depend heavily upon newly developed production processes and rich magnesium deposits discovered in western Michigan. Six companies already have contracted to build magnesium plants with an aggregate capacity of 175,000,000 pounds annually, Batt said.

Mining Engineer To Study Bauxite.

Gazette 3-10-42

James R. Evans, a mining engineer of the Metals Reserve Corporation of the Reconstruction Finance Corporation, has been assigned to duty here in connection with a survey of bauxite deposits in Saline, Pulaski and Grant counties, R. F. C. officials announced yesterday. The agency is charged with the survey and procurement of vital defense metals for the

United Nations' war effort.

The corporation will have headquarters in Little Rock, probably at the state R. F. C. offices.

OWNERS CLAIM WASTE OF LOW GRADE BAUXITE

Changes Urged In Processing.

Bauxite 3-15-42

More than two-thirds of the bauxite ore in Saline and Pulaski county fields is being wasted and can be recovered only through a change in the mining and reduction system, a large group of land owners in the bauxite producing section said yesterday.

Under the prevailing price scales for the raw ore, only the highest grade ore can be mined, they said. Large quantities of ore above and below is shifted aside or left in the fields. Some of this ore can be recovered later, but the cost probably would be prohibitive.

Under the present rate, only the ore containing 55 per cent alumina and a maximum of seven per cent silica can be profitably mined in the Sweet Home fields and shipped to the new reduction plant at Bryant. The Sweet Home fields are said to contain about 25 per cent of the bauxite ore in the state.

Columnists Warn Of Aluminum Shortage.

Drew Pearson and Robert S. Allen, in the Washington Merry-Go-Round column appearing in Friday's issue of the Gazette, warned that despite the construction of many new aluminum plants and huge quantities of low grade ore, "we may find ourselves faced with another aluminum shortage—chiefly because in setting up the new plants, we followed the monopoly ideas of the Aluminum Company of America."

The columnists said that for many years the company had melted its ore with caustic soda according to the Bayer process. This system requires high grade ore, most of which has been imported. Germany, France and Russia have used a lime soda process and have been able to use the low grade ores which abound in their countries, as well as the United States, they pointed out.

Maximum Price Received Said to Be \$4.50 a Ton.

Small miners charged that although the market quotations for the high grade ore is about \$8.50 a ton, the maximum they have been able to obtain is \$4.50, delivered to the reduction plant. Of this amount, the overall mining expense is \$2. They must pay the landowner a royalty of from 35 cents to \$1 a ton. Transportation costs from the mine to the railroad averages 40 cents a ton. The Missouri Pacific Lines has a fixed price of \$1.30 a ton for transporting the ore from Sweet Home to the Bryant reduction plant. This includes a 65-cent a ton switching fee, paid to the Bauxite and Northern Railroad, owned by the Aluminum Company of America.

Aluminum ore prices are near an all-time low. The land owners claimed the current prices paid to the Aluminum Company of America by the Reynolds Metals Corporation at ship side in Dutch Guiana, is above the price the small mining companies are receiving for the ore in Arkansas.

97 Pct. of Bauxite In U. S. in Arkansas.

According to a survey completed by J. R. Thoenen for the United States Bureau of Mines last summer, the Arkansas fields contain 27,254,000 tons of bauxite ore above "D" grade. This represents 97 per cent of the nation's domestic deposits. Of this amount, only 9,900,000 tons is classed as "A" grade or better.

The Republic Mining and Manufacturing Company has been "scrapping" the old mines in the vicinity of the new reduction unit sites for

ore which will be processed in the new plants. This includes much ore rejected at the time the better grades of ore was removed.

Legislation Fixing Ore Prices to Be Sought.

The land owners said they would seek legislation which would fix ore prices on a scale which would permit the mining of all ore of "D" grade or better, with fixed prices for royalties, mining, and transportation to the government stock piles which are expected to be near Bauxite.

The mining requirements could be written into agreements for operation of the new government-financed reduction plants. The land owners also will ask additional facilities be installed for the reduction of low grade ore by a process used by other countries but which has been rejected by Alcoa, principal processing agency for aluminum in this country.

Larger property owners of the section said they probably would begin a concerted move for mining reforms this week.

T. F. Field of Duluth, Minn., arrived in Little Rock last week to establish offices of the Reserve Metals Company, a government agency. James R. Evans of Butte, Mont., arrived here earlier. Both are mining engineers. They will make a study of the bauxite situation and report to Washington D. C.

CONCESSIONS IN BAUXITE PRICES EXPECTED SOON

Low Grade Ore To Benefit.

Gazette 3-20-42

Price concessions that would permit independent owners of bauxite deposits in Pulaski county to sell ore profitably to the government's big alumina plant at Bauxite, Saline county, were believed imminent yesterday.

Governor Adkins announced after a conference with two officials of the Aluminum Company of America that the company believes "special consideration" should be given independent operators in the Sweet Home and Arch street pike areas because of difference in freight charges to the plant.

The Aluminum company, owners of large deposits surrounding the Bauxite plant, will build and operate the alumina plant for the Defense Plant Corporation. Pulaski county independents had expressed fear that a reported price schedule f. o. b. the stock pile at the plant would prohibit them from selling low grade ores profitably.

Price Discourages Low Grade Mining.

Thomas C. Jones, regional manager of the Aluminum Company of America, who conferred with the governor, said a complaint of landowners, published in Sunday's Gazette, that more than two-thirds of the bauxite in Saline and Pulaski counties is being wasted probably is correct but he denied that the waste resulted from an inability to reduce the ore to metallic aluminum.

The waste is resulting from the price for low grade ores which, he said, had been fixed by the federal government at too low a figure to make its mining economically feasible.

A Washington Merry-Go-Round column written by Drew Pearson and Robert S. Allen and published in the March 13 edition of the Gazette charged the waste of low grade ores would result because the alumina and aluminum plants being built near Bauxite and Lake Catherine would not handle them. "Every single fact in this article is incorrect," Mr. Jones charged.

Alumina Plant Can Process All Grades.

"At the suggestion of Alcoa, which is building both plants, the alumina plant was designed to process any ore brought to it, regardless of its grade. After the bauxite is converted into alumina, its previous grade makes no difference as far as the aluminum plant is concerned.

The alumina in bauxite forms an affinity with silicon and no known process, either laboratory or practical, can separate them. Bauxite's grade is determined by the amount of silicon in it. If bauxite is 50 per cent alumina and 15 per cent silicon, only 35 per cent of the alumina may be recovered by any known process.

"Since the same amount of work is required to extract a smaller amount of alumina from a low grade ore as a greater amount from a high grade one, the amount of alumina in bauxite over and above the amount of silicon determines its value.

"Under the present price level, it is possible for mining companies to show a profit only on the high grade ores mined. If the price levels for low grade ores are raised, much more bauxite will become available for reduction into aluminum.

"The alumina plant, although operated by Alcoa, will purchase bauxite from anyone who mines it and brings it to the plant, whether a billion-dollar corporation or a small farmer. However, the price at which Alcoa buys it will be guided by the ore's grade and government price levels."

Conference Arranged With Metals Agent.

The governor has arranged a conference for tomorrow to discuss the problem with DeWitt Smith of Washington, representative of the Metals Reserve Corporation.

Two other representatives of the DPC already are making a study of low grade ores and bauxite prices in the Pulaski-Saline areas. They are T. F. Field, consultant, who is surveying the economic possibilities for small producers of high and low grade bauxite, and James R. Evans, mining engineer who is studying the purchase and stock piling of the ore.

Governor Adkins said Mr. Smith informed him the government is interested in getting the alumina plant in operation at once and that an "adjustment of prices in behalf of smaller producers" should be made.

Report Finds Need For Premium Price.

A report prepared for the governor on Pulaski county bauxite showed most of the ore body lies on the east side of Fourche mountain. A large deposit is found on the southwest side of the mountain. Much of the ore lies along the county road between Sweet Home and the Arch street pike, the report said.

The governor's report, based on a reported price schedule which has never been published, indicated that independent operators would lose from 25 to 63 cents a ton on ore mined at Sweet Home and shipped to the stock pile at Bauxite unless price concessions were made.

"Aluminum needed for the war effort is at a premium," the report said. "Yet, under the tentative price schedule, it would be impossible to mine any ore [in the Sweet Home area] that had an alumina content of less than 50 per cent and a silica content of more than 11 per cent, although it is contemplated that even lower grades will be usable at the new plant.

"Only the low grade ore located near the alumina plant can be mined profitably. Since more of the large ore bodies near the plant are owned by the Aluminum Company of America they (the company) alone will profit from the processing of low grade ore."

Low Grade Bauxite Might Be Ruined.

The report, which the governor said contained "something to think about," said that unless the independent operators are given consideration land owners must reduce royalties and the state will lose severance taxes while "the United States loses forever large deposits of usable ore."

It contended that independents would be forced to mine only the high grade ore and leave the low grade bauxite "to be ruined by cave-ins and contaminations with siliceous materials."

The report suggested a government subsidy for strip-mining of low grade bauxite "to make available all ore which is usable and thereby not only speed up our aluminum production effort but protect natural resources from enormous wastage." It said that in strip mining, instead of underground mining, 35 to 50 per cent more ore can be produced.

Aluminum-From-Clay Process Reported.

New York, March 19 (AP).—Alfred R. Globus, 21, reported tonight his

claim to discovery of a method of extracting aluminum from common clay, something scientists have been trying to do, unsuccessfully, ever since another 21-year-old, Charles Martin Hall, founder of the Aluminum Company of America, discovered how to get it from other minerals 56 years ago.

Representatives of firms interested in aluminum production said probably only industrial trial could show whether a new extraction process like this was worthwhile, but any common clay extraction method, if successful commercially, was of great importance.

Globus' process is basically one of dissolving the clays with sulfuric acid and sodium hydroxide. Electrolysis is used to recover the acids, and where there happens to be a lot of iron in the clay, the electrolysis serves to separate it from the aluminum and recover the iron as a by-product.

Globus claims he will be able to produce 200 to 250 pounds of aluminum from one ton of usable clay. A ton of bauxite, the standard source, yields about half a ton of aluminum. Globus claims his process will produce aluminum oxide at a cost of between one and two cents a pound, a figure comparing well with other processes.

Arkansas Bauxite Shipped to Alabama.

Gazette 3-21-42

Bauxite mined from Arkansas deposits by the Reynolds Ore Company will be shipped to the alumina reduction plant of the Reynolds Metals Company at Sheffield, Ala., where it will be turned into metal, officials of the company said yesterday.

Active mining of domestic bauxite has been started by the Reynolds Ore Company, a subsidiary of the Reynolds Metals Company, in the Sweet Home fields. Original shipments of bauxite for the Reynolds plant came from The Netherlands, East Indies, and was transported more than 8,000 miles. During the past fall, the Reynolds company made contracts for bauxite from Surinam, Netherlands colony in Central America.

Using bauxite from domestic sources will release badly needed shipping. The Reynolds company was the second concern in the United States to start production of virgin aluminum. Their plants are operating on a capacity production basis, officials here said.

Lower Rail Rates Asked On Bauxite

Gazette 3-22-42

Lower freight rates on movement of bauxite from Sweet Home to the alumina plant in Saline county and the establishment of a bauxite stock pile in Pulaski county were advocated by Governor Adkins yesterday.

The governor discussed the problems, which are worrying independent operators, with DeWitt Smith, representative of the Metals Reserve Corporation, and T. F. Field, consultant for the same defense agency.

Mr. Adkins also said he is dissatisfied with the reported schedule of prices to be paid for bauxite delivered to the alumina plant.

"I can't understand why the price of a precious defense ore like bauxite should be less than that of coal," he said. "I don't want to say anything detrimental to our coal producers, but the comparison is all wrong."

It was learned that the alumina project will be named the Hurricane Creek plant. Hurricane creek flows adjacent to the plant site between Bauxite and Bryant.

Mining of Low Grade Ore Said Restricted.

Charges that excessive freight rates and monopolistic practices by the Aluminum Company of America have created a situation in which only the low grade ore located near the Hurricane Creek alumina plant could be mined profitably, were contained in a report to the governor by Roy Prewitt, Little Rock lawyer.

The plant will be equipped to handle low grade ores, but the price schedules now in effect will make mining of these low grades prohibitive.

"Since more of the large ore bodies near this plant are owned by the Aluminum Company of America they alone will profit from the processing of low grade ore. The producers who own the land on which there are ore deposits outside that small area, not only

will not get the benefits of any bauxite development, but the war production effort will not get the benefit of the maximum amount of available ore," the report said.

Stocks of Waste Ore May Be Processed.

Speaking of the Aluminum Company, the report said "They have been furnished money to build an alumina and an aluminum plant near the field. They will lease and operate these plants and will be paid by the government for processing the bauxite through its every stage into aluminum. . . . they actually could give their ore to the government and still make money. They can now actually get paid for processing their large stock piles of waste ore that has been discarded as waste for years, even though it is of the very lowest grade. Further, it will place them in an advantageous position to push a program to acquire control of the bauxite reserves by being able to offer higher prices for the acreage in fee than can others. Since they are now facing stiff competition in the processing field, it might be worth something to them to control the domestic bauxite at its source."

The report denied that the Aluminum Company had an actual monopoly on the bauxite reserves in the state. It said that by controlling the bauxite and aluminum market, the company has been able to force the landowners to hold and pay taxes on his ore until such time as the company was ready to take it at its own price.

Excellent contracts with the OPM has placed the concern in a position to acquire at bargain prices, major ore bodies that are now in independent hands, the report charged.

Subsidy Suggested For Strip Mining.

The report suggested that "some subsidy for strip mining be placed into effect" to enable producers to make available all usable ore. From 35 to 50 per cent more ore can be obtained by strip mining, the report said. The Aluminum Company has been strip mining its large deposits near the site of the alumina plant site for more than a year, the report said.

Copies of the report, together with charts and maps were forwarded to members of the Arkansas congressional delegation in Washington.

Mine Owners Seek Low Rate On Bauxite

Democrat 3-22-42

Adjustment of freight rates as one method of bringing about a price concession that would permit independent owners of Bauxite in Pulaski and Saline Counties to sell ore profitably to the government's alumina plant at Bauxite was suggested by Governor Adkins yesterday following a conference with DeWitt Smith, Washington, a representative of the Metals Reserve Corporation.

The conference between the governor and the government official's grew out of recent complaints of independent operators that a proposed price schedule announced by the government for ore which it is stockpiling for the new plant was not high enough to permit the operators to make a profit.

A revision of the schedule had been sought.

Freight rates on the bauxite ore from the two-county field to the stockpile at the plant vary from 65 cents to \$1.30 a ton. The figures were contained in a report which was submitted to the governor last week.

Rates Compared.

"For the purpose of comparison, the Missouri Pacific and the Bauxite and Northern have a rate of 50 cents a ton over the same route on sand, gravel, crushed rock and other freight of a similar nature, and the Rock Island has a rate of 35 cents a ton for the same distance," the report said.

Informed persons said that in computing the freight rates, an arbitrary value of \$8 a ton was fixed on bauxite. At the same time, a value of \$2.75 a ton is used in assessing the state's 2.7 per cent severance tax.

The proposed government price schedule will make it impossible "from a practical standpoint" for ore in the Sweet Home area to be mined unless "royalties to landowners are reduced or freight rates are reduced."

The governor, following the con-

ference with Mr. Smith and other government officials, said that Mr. Smith was "thinking along lines which had been previously suggested"; that is, some action to increase the producers' difference between cost and price.

Mr. Smith, who left Little Rock immediately after seeing the governor for an inspection trip of the bauxite field, was not available for comment.

Also Interested in Manganese.

He plans to spend two days in the state.

Governor Adkins said Mr. Smith was interested in manganese and other strategic minerals.

The report which was handed to the governor declared that the proposed price schedule would make the mining of lower grade ores unprofitable and ultimately would result in the loss of about 35 per cent of the 27,254,000 tons of the ore in the state.

"As the situation now stands, only the low grade ores located near the alumina plant can be mined profitably," the report said. "Since more of the large ore bodies near this plant are owned by the Aluminum Company of America (which will operate the alumina plant and a \$33,000,000 plant) they alone will profit from the processing of low grade ore. . . ."

The report also urged that the government subsidize strip mining operations, by which from 35 to 50 per cent more ore can be mined from a deposit. This operation is more expensive than shaft mining.

New Plant To Use Arkansas Bauxite

Gazette 3-26-42

Washington, March 25 (AP).—Representative Sanders (Dem., La.) said he was assured by war production officials today work would be started soon on an alumina plant at Baton Rouge, La., costing in excess of \$15,000,000.

Sanders said the plant would be reconstructed and operated for the Reconstruction Finance Corporation's Defense Plant Corporation by the Aluminum Company of America which is building a similar plant for the government in Arkansas in connection with an alumina plant at Lake Catherine, Ark.

Alumina is a powdered substance from which aluminum is made.

The representative said the plant would "utilize bauxite from Arkansas as well as ore from Central and South America. Baton Rouge was selected as the site because of its location.

"The importance of this plant for Baton Rouge can not be over-emphasized because of other industries it will inevitably attract," Sanders said.

"The Aluminum Company will rush construction as rapidly as possible since priority ratings on everything necessary to complete it have been granted."

U. S. May Take Confederate Home Bauxite

Democrat 3-29-42

Just what will be done about the 291,461 tons of "economically mineable" bauxite which is located on property of the Arkansas Confederate Home, Sweet Home, remained a mystery yesterday.

Mrs. John Lofton, Little Rock, a member of the Honorary Board which supervised the institution, said that the question of what to do with the large bauxite deposit "hasn't been raised" since a proposal for the state to sell it was withdrawn about three years ago after severe criticism.

Mrs. Lofton, however, expressed the opinion that the government would, when the need arose, make arrangements to take over the strategic mineral.

Production of bauxite has been greatly increased in recent months. The alumina plant which the government is building at Bryant will use Arkansas ore.

Of the mineable bauxite located on the state-owned property, 179,910 tons are of 55 per cent or more of alumina content, 76,100 tons contains from 50 to 54.9 per cent alumina and 35,451 tons 45 to 49.9 alumina. The remainder has an alumina content of from 35 to 45 per cent.

At the present time the population of the home is 96. Of this number, only six are Confederate veter-

ans, the remainder being wives and widows of veterans.

PRODUCTION OF BAUXITE ORE TO BE SPEEDED UP

Acceleration Planned in Arkansas.

Gazette 4-1-42

Washington, March 31 (AP).—The government is proceeding with plans for a possible increase in production of high-grade bauxite in Arkansas to 2,000,000 long tons per year, and for stockpiling any excess of current production over consumption.

Charles E. Henderson, president of the Metals Reserve Company, set up by Jesse Jones to deal with domestic production of strategic materials, discussed the bauxite situation in a report now being studied by the chief of the Reconstruction Finance Corporation.

Contracts have been made with American Cyanamid and Chemical Corporation and with Reynolds Mining Company for production of 540,000 and 300,000 long tons per annum, respectively, of low-grade bauxite in Arkansas, Henderson reported.

Republic Mining To Increase Production.

"Republic Mining and Manufacturing Company, a subsidiary of Aluminum Company of America is proceeding with stripping operations preliminary to increased production," the report said, "and with several small producers will supply the balance of approximately 840,000 long tons per annum required for the 1,000,000,000-pound alumina plant now under construction in Arkansas.

"Plans are proceeding for possible increase in production of high-grade bauxite in Arkansas to 2,000,000 long tons per annum, and for stockpiling any excess of current production over consumption.

"The above program represents a total increase of approximately 200 per cent over 1941 domestic production of bauxite, and is scheduled to keep pace with increasing requirements for aluminum.

"In addition, our engineers are making studies on the ground in Arkansas in connection with possible emergency production from Arkansas far in excess of the above program."

Manganese Plant At Batesville Mentioned.

The report mentioned arrangements previously reported under way for construction of a manganese concentrating plant of from 300 to 500 tons daily capacity in the vicinity of Batesville, Ark.

"Arrangements have been made to pay a premium of 2-3-4 cents per pound on over-quota production of lead, for a period of 2-1-2 years from February 1, 1942," Henderson said. "Substantial stimulation of small mine production may be expected to result from the premium price of 9.25 cents per pound, which is in excess of the highest average price level for lead in 50 years."

He said expansion of domestic zinc facilities had been effected by the Metals Reserve Company through contracts for purchase of production or through agreements to make necessary concentrate productions available on projects of American Smelting and Refining Company, American Zinc, Lead and Smelting Company, Anaconda Copper Mining Company and United Zinc Smelting Company, in Texas, Missouri, Montana and West Virginia.

Agents in Arkansas Unwilling to Comment

Arkansas representatives of affected companies declined comment last night on the Metals Reserve Company's announcement of a possible increase in production of 2,000,000 tons of high grade bauxite ore in Arkansas. Acting State Geologist Richard J. Anderson was unavailable.

However, it previously had been estimated by former state Geologist George C. Branner if the War Pro-

duction Board's plans for a goal of 1,615,000 tons of low grade ore and 909,000 tons of high grade ore annually were carried out, the Arkansas deposits would be exhausted within a few years.

Production of bauxite ore in Arkansas has averaged around 400,000 tons annually in the past. Of the approximately 37,023,000 tons of "known" bauxite reserves in Arkansas, 10,890,000 has alumina content of 55 per cent or more and 8,711,000 tons, 50 to 54.99 per cent, it has been estimated. An estimated 17,422,000 tons has an alumina content of 45 to 49.99 per cent. The estimated 18,511,000 tons of "unknown" bauxite includes all three of those classes.

There are three major producers of Bauxite ore in Arkansas, the Republic Mining and Manufacturing Company, a subsidiary of the Aluminum Company of America; the American Cyanamid and Chemical Corporation and the Reynolds Metals Corporation.

Officials of the companies said they had not been notified of the new contracts announced by the Metals Reserve Company, set up by the Reconstruction Finance Corporation to increase the domestic production of strategic metals.

Reynolds Co. Aluminum Output Up

Gazette 3-7-42

New York, April 6 (AP).—Because of the war effort, the president of the Reynolds Metals Company today said the organization's present expanded capacity for aluminum alloy production now exceeds the nation's total output in 1939.

R. S. Reynolds, executive of the company which has 30 separate manufacturing units in 18 cities in 13 states, said in his annual report to the stockholders:

"The company's operations are fast becoming integrated to the point where the successive stages of production, from the mining of bauxite to the fabrication of aluminum products, will enable the company to supply the much needed material for additional thousands of military planes.

"In this great emergency we face the future with confidence. We not only have our own domestic bauxite mines, but we also have favorable contracts for foreign bauxite in the Western hemisphere."

Mr. Reynolds reported the company's 1941 net income was \$2,867,674, equal, after preferred dividends, to \$2.53 a common share, compared with 1940 net profit of \$2,428,277, or \$2.10 a share.

Report Withheld On Arkansas Production.

The Reynolds Metals Company did not enter the Arkansas bauxite fields until 1940. It has obtained several mining properties in Saline and Pulaski counties. Mining operations have not been started by the concern. Officials said they were not permitted to disclose location of their properties, or production capacities of their facilities. Whether metals will be processed in reduction plants under construction in the Bauxite area or shipped to the firm's principal reduction plant at Sheffield, Ala., was not disclosed.

\$4,000,000

Plant For Bauxite Area

Gazette 4-19-42

A \$4,000,000 addition to the alumina plant near Bauxite will be constructed to produce synthetic cryolite, a substance necessary in extraction of aluminum, Governor Adkins said he was informed unofficially yesterday. Work will begin at once and should be completed this summer, permitting early production of aluminum needed for construction of warplanes.

The new unit will be called an electrolyte plant. Cryolite in its natural mineral form was imported from Greenland until two or three years ago when scientists learned that high grade fluorspar could be used to make synthetic cryolite by

a chemical process.

Will Ship Fluorspar.

The fluorspar will be shipped from mines in Kentucky and other states. The resultant cryolite will be used at the Jones mill plant near Malvern and other aluminum plants to extract aluminum from alumina. When mixed with alumina and electrolyzed, cryolite combines with oxygen, depositing aluminum metal.

When Governor Adkins learned a synthetic plant would have to be built somewhere to meet mill requirements, he persuaded the Defense Plant Corporation to place it in Arkansas. The new unit, like the alumina and aluminum plants, will be built and operated for the DPC by the Aluminum Company of America. Its power requirement is relatively small.

\$4,000,000

Addition To Alumina Plant

Democrat 4-19-42

A \$4,000,000 addition will be built to the Hurricane Creek Alumina Plant, now under construction near Bauxite, to make synthetic cryolite, an essential material in the manufacture of aluminum, Governor Adkins said yesterday he had been "unofficially advised."

Cryolite, which formerly was found only in Greenland, is used as a catalyst in the reduction of alumina to aluminum. A process for making a synthetic material from sodium carbonate, fluorites and bauxite was developed two years ago by the Aluminum Company of America, which will operate the government-owned Hurricane Creek plant and the Lake Catherine alumina plant.

The addition is expected to be in operation soon after the alumina plant is completed. Between 175 and 200 persons, in addition to the 1,000 to be employed in the alumina plant, will be given jobs.

Cryolite is used as an electrolyte in manufacturing aluminum. It is mixed with the alumina, placed in large pots and subjected to electric currents. The aluminum which results settles to the bottom of the pots and the waste materials rises to the top.

The Aluminum Company has been manufacturing cryolite at an East St. Louis plant for two years.

Before the new process was discovered, it was necessary to import the fluoride from Greenland.

New Plant To Be Built Near Bauxite

Gazette 4-22-42

Washington, April 21 (AP).—Representative Norrell (Dem., Ark.) announced today the Aluminum Branch of the War Production Board had advised him a plant costing in excess of \$5,000,000 would be built near Bauxite, in Saline county, Arkansas, for the manufacture of synthetic cryolite and aluminum fluoride, need for processing of aluminum.

Mr. Norrell said the officials had decided to locate the new plant, which would employ 150 people, near the alumina plant in Saline county, operated in conjunction with the big alumina plant at Lake Catherine. He said the new plant, like the alumina and alumina plants, will be operated for the Defense Plant Corporation by the Aluminum Company of America. Construction will require more than 1,000 workers, he said.

Cryolite Unit Expected to Be Ready This Summer

Construction of the cryolite unit, which will be called an "electrolite plant," will start immediately and will be completed in the summer, informed sources here said. The new unit will be built near the Hurricane Creek alumina plant.

It will use fluorspar from mines in Kentucky and other states. The cryolite will be used at the Jones mill plant near Malvern and other aluminum plants in the United States. The plant's electric power requirement will be relatively small.

Governor Adkins, who unofficially announced the award of the electrolyte plant last week, persuaded the DPC to locate it in Arkansas, after learning that such a plant would be built.

Resume Tests For Bauxite Deposits

Gazette 4-30-42

Washington, April 29 (AP).—Tests drilling for deposits of bauxite, the chief ore of aluminum, are being resumed in Saline and Pulaski counties, Arkansas, Director R. R. Sayers of the Mines Bureau reported today.

The director said the exploratory work was being carried on in an area of 250 square miles between Little Rock and Benton, to determine the location, size and nature of hitherto unknown bauxite deposits and the quality of the ore.

HUNTING FOR BAUXITE



—Gazette Staff Photo.
This shows a test drilling rig in operation on a tract of land on the Sweet Home-Arch Street pike cut-off yesterday, to determine the size and quality of bauxite deposits in the area.

DELICATE MACHINERY SPOTS DEPOSITS OF VALUABLE MINERALS

Gazette 5-3-42

Exploration parties of the United States Bureau of Mines and the United States Geological Survey have started test drillings for deposits of bauxite over a large area in central Arkansas to determine the location, nature and size of the deposits and the quality of the ore.

The survey is being conducted in a 250-square mile area in Saline and Pulaski counties, between Little Rock and Benton. The investigators expect to launch a new project to extend from Benton to Arkadelphia when the work in the Little Rock-Benton area is completed.

The test drillings are made in sections where extensive investigations with highly technical instruments by experts from both services indicate the presence of bauxite ore. Locations of the drillings in the Little Rock-Benton area are based upon investigations which have been in progress since December, 1941. The Bureau of Mines contracted for geophysical work with companies specializing in scientific prospecting, and the Geological Survey is conducting geological surveys.

Wide Area Covered.
Hundreds of observations were made with the delicate instruments throughout the territory. These observations were carefully plotted on a large map and studied in detail before deciding the locations for test drilling. To get a perspective view of the geophysical data,

Seek to Determine Amount Of High Grade Ore Available.

The exploration work is being conducted by the United States Bureau of Mines in co-operation with the Metals Reserve Corporation in an effort to determine the amount of high grade bauxite ore available for production of aluminum in the Arkansas fields.

Aluminum officials here explained that although the earth's surface contains a higher percentage of bauxite than it does of either iron or copper, cost of mining the bauxite ore is the principal handicap. Only ore containing a high content of aluminum can be profitably mined, it was explained.

Many private concerns have been making tests in the Pulaski-Saline county region. Some testings have been made in Grant county. With the location of reduction facilities in the mining region, it is expected the grade of ore which can be mined at a profit will be reduced.

HUNTING FOR BAUXITE



—Gazette Staff Photo.
This shows a test drilling rig in operation on a tract of land on the Sweet Home-Arch Street pike cut-off yesterday, to determine the size and quality of bauxite deposits in the area.

DELICATE MACHINERY SPOTS DEPOSITS OF VALUABLE MINERALS

Gazette 5-3-42

the network of measurements must be extended beyond the area in which the interest is centered. For the bauxite study, observations were made as far as Pine Bluff, Conway, Lonoke and Searcy.

Because granite, or syenite, which usually is associated with bauxite in that region is more magnetic and more dense than the surrounding or underlying rocks, two different methods were employed in the geophysical work. One method measured the magnetic properties of the rocks, and another method computed the density of the strata.

Delicate Instruments Used.
The chief instrument in this type of work is the magnetic investigation, called a magnetometer, which, when mounted in its working position on a tripod resembles a surveyor's transit. The instrument is easily disturbed by the presence of even small bits of iron or steel. Operators do not have knives or steel belt buckles while at work. The operators must make the observations away from fences, pipes and power lines.

The gravity meter is used in measuring the density of the rock. It is so sensitive that it can record units so infinitesimal as one 300,000,000 (three hundred millionth) part of an ounce. It is larger and heavier than the magnetometer and requires the most careful handling and protection.

The temperature of the instrument must be kept constant to within a few thousandths of a de-

gree. This is accomplished by means of an electrical heating coil, controlled by a delicate thermostat. The windows of the automobile in which the instrument is carried are equipped with blinds to keep out sunlight. The unit is suspended by a spring cradle in the car.

When operating on a highway, the unit is not removed from the vehicle. A hole in the automobile permits the observer to drop a specially designed tripod through the hole, mount the instrument on it, and take the reading. To transport the instrument across fields and wooded sections, it is carried in a special device on a man's back, or swung between poles like a stretcher.

Pencil Lead Recorded.

To demonstrate the sensitivity of the instrument, the operators placed a paper upon the unit's measuring system and the instrument balanced. The operator removed the paper and wrote the word "Smith" on the paper with a pencil. He failed to dot the "i." The amount of lead used in writing the word "Smith" placed the instrument out of balance. It was removed again and the dot placed over the "i." Addition of the dot caused an additional deflection.

When these observations are completed, the test drilling crews begin their work. This unit consists of two large trucks, one with a derrick, and the other hauling a 500-gallon water tank. The derrick supports a small core-drilling unit. Water is forced through the drill pipes, forcing the shavings to the surface. These shavings are washed and inspected by geologists, who remain with the unit. If the shavings indicate strata of the type they are seeking, a core-drilling is made, and the core inspected for more detailed information. From the core, the geologists can obtain a definite idea about the type of deposit.

Base Price Of \$4 Ton On Bauxite

Gazette 6-30-42

A base price of \$4 per long dry ton of bauxite ore at the Hurricane Creek alumina plant of Ward's spur, for material analyzing 50 per cent alumina and 13 per cent silica, was fixed by the Metals Reserve Division of the Reconstruction Finance Corporation yesterday.

H. DeWitt Smith, head of the division, notified Governor Adkins that two schedules for milling ores have been set up which "apparently have appealed to small and large producers alike, and we anticipate that so-called small producers in 1943 may well produce more bauxite than the entire 1941 production of the state."

In computing the prices to be paid for other grades of ores at the Hurricane Creek plant, the federal agency will deduct 14 cents per ton for each per cent of alumina less than 50 per cent and 43 cents for each per cent of silica above 13 per cent. A credit of 14 cents will be allowed for each per cent of alumina above 50 per cent and 20 cents for each per cent of silica less than 13.

Deductions Cited On Pulaski Ore.

For Pulaski county ore, f. o. b. Ward's spur, the base price of \$4 a ton will prevail. Deductions of 10 cents for each per cent of alumina less than 50 per cent and of 21 cents for each per cent of silica above 13 per cent will be made. Correspondingly, credits of 10 and 20 cents for each per cent will be offered for ore containing more alumina than 50 per cent and less silica than 13 per cent.

No ore will be purchased where the available alumina is less than 32 per cent.

Governor Adkins said he had no had time to check the schedules but commented that they "seem to me."

Independent Miner Says Price 'Very Fair.'

P. A. Dulin, president of the Dulin Bauxite Company, which operates in Pulaski and Saline counties, said last night he believed the price fixed by the MRD a "very fair" one.

Ward's spur is used only for reserve, he said. Low grade bauxite mined in Pulaski county is brought to the spur, which is six miles from Little Rock on the Arch Street pike and on the Rock Island Lines tracks, for storage.

New Stock Pile to Be Considered

Gazette 7-7-42

The Metals Reserve Division of the Defense Plant Corporation agreed yesterday to reopen the question of establishing a stock pile for bauxite ore near Sweet Home.

Reply to a telegram sent by Governor Adkins, Director H. DeWitt Smith of the division said: "We have requested Field and Evans [representatives assigned to Arkansas about six months ago] to give immediate consideration to your view that a bauxite stock pile should be established in the vicinity of Sweet Home or near the Rock Island Lines shops in the suburb of Little Rock. We will advise you further at the earliest opportunity."

A new angle to the problem was presented yesterday when the state Highway Department announced that the Sweet Home-Arch Street pike cut-off cannot be repaired with blacktop or other bituminous product after July 22, under a new federal regulation restricting use of the material.

BAUXITE MINING DUE FOR SPURT, OPERATORS SAY

Gazette 7-9-42

Gratified by Order Of WPB.

Action of the War Production Board in placing production of high-grade bauxite under complete

Decision On Stock Pile Awaited

Gazette 7-11-42

Probable location of a bauxite stock pile in the Sweet Home area was being studied yesterday by officials of the Defense Plant Corporation as the problem faced by producers in that district became more acute.

Supt. Harvey Brown of the county Road and Bridge Department announced that the cut-off road between Sweet Home and the stock pile on the Arch Street pike will be closed today to trucks hauling more than three yards of ore, with a gross weight of more than 12,000 pounds.

Trucks loaded with five yards of ore, with gross weight of about 20,000 pounds, will be routed from Sweet Home to Little Rock, west on Roosevelt road to Arch street and south on U. S. Highway 167 to the stock pile at Ward's spur.

State Highway Director W. W. Mitchell said trucks equipped with proper tires would be permitted to haul the heavier loads over Roosevelt road and Highway 167. The gross weight limit is 40,000 pounds, he said.

Stock Pile Decision Expected Soon.

Mr. Mitchell said he conferred this week with a representative of the Metals Reserve Division of the Defense Plant Corporation concerning the proposed stock pile at Sweet Home.

James Evans, field agent of the Metals Reserve Division, has been studying the proposal several days.

Governor Adkins and Congressman David D. Terry of Little Rock announced Saturday they had urged Director H. DeWitt Smith of the Metals Reserve Division to establish a stock pile at Sweet Home or Biddle Shops at the outskirts of Little Rock.

Decision On Bauxite Stock Pile Expected.

Gazette 7-12-42

Governor Adkins' effort to obtain a stock pile for bauxite ore at Sweet Home may be successful tomorrow.

He said he has scheduled a conference with James Evans of the Metals Reserve, Division of the Defense Plant Corporation, who has been stationed in Arkansas on a special assignment for six or eight months.

The Metals Reserve Division has had an important role in the development of bauxite deposits in Pulaski and Saline counties. The Defense Plant Corporation will be the purchasing agency for bauxite to be used in its new alumina plant in Saline county.

The governor, assisted by Congressman David D. Terry of Little Rock, has urged the establishment of the Sweet Home stock pile for several months on the ground that most of Pulaski county's bauxite is found on that side of Granite mountain.

allocation control will mean increased activity in the Pulaski and Saline county fields and reopening many abandoned mines in the area, operators predicted yesterday.

Under the restrictions expected under the new order, bauxite containing less than 15 per cent silica will be used primarily for manufacture of aviation gasoline, abrasives and aluminum. Producers of many other bauxite products, including chemicals, will be forced to obtain alumina from low-grade ore.

The change is expected to place a new value on the low-grade ore, much of which has been passed up in the Arkansas fields after the higher grades were extracted. Independent operators have said that they were unable to mine the lower grade ore at a profit.

Large Quantities Of Low Grade Ore Available.

Veteran bauxite miners say that large quantities of low-grade ore could be recovered from mines abandoned after removal of the high grades. This ore could be extracted by a simple scraping process which already has been started by the Republic Mining and Manufacturing Company on most of its Saline county properties.

The new order is expected to increase basic prices of bauxite and to cause establishment of additional stock piles in the center of the producing areas to facilitate shipment of larger quantities to out-of-state processing plants.

The Republic Mining and Manufacturing Company and the Metals Reserve Corporation to be operated by the Aluminum Company of America in Arkansas will continue to process high-grade ore. Products

Rate Expert T. E. Wood of the Arkansas Corporation Commission indicated that the Defense Plant Corporation, purchasers of the bauxite to be processed at the Saline county alumina plant, could file an application for a one-line freight rate on the Missouri Pacific Lines from Sweet Home to the alumina plant. The present two-line rate, including switching charged by the Bauxite and Northern railroad, is double that of the one-line tariff filed by the Rock Island Lines, Mr. Wood said.

May Use Convoys In Shipment of Bauxite.

Washington, Aug. 12 (AP).—Dr. J. C. Kielstra, governor of Dutch Guiana, said today after a conference with President Roosevelt, that he hoped "that a way may be found that shipments of bauxite from Surinam to this country may be safe against submarines." Bauxite is needed to make aluminum for airplanes and other war products.

Dr. Kielstra hinted at the possibility of using armed convoys to assure a steady flow of bauxite.

The president today also talked with R. J. Tawney, British economist, who said they discussed British labor and other economic problems.

of these plants will go into aluminum production.

Average ore shipped to these reduction plants contains about 55 per cent alumina with about seven per cent silica. A large amount of ore from the Sweet Home fields has been shipped to out-of-state processing plants for manufacture of abrasives and chemicals. Several Sweet Home operators recently signed contracts to deliver large quantities of ore for these purposes. Abrasives are listed near the top of the critical list. Large quantities are needed in manufacture of airplanes and other war essentials.

Two-Thirds of Ore Said To Have Been Wasted.

Bauxite operators have charged that more than two-thirds of the bauxite ore in Saline and Pulaski counties is wasted under the current systems of mining and reduction. They believe that the new order will end this waste.

A recent survey by the United States Bureau of Mines showed that Arkansas fields contained 27,254,000 tons of Class D bauxite or better. This represents 97 per cent of the nation's domestic supply. Of this amount, only 9,900,000 tons is classed as A grade or better. Until recently only A grade ore was processed in the Arkansas reduction plants.

First Aluminum Plant Unit Ready to Go

Lake Catherine Production Starts This Week, Says Norrell.

Washington (AP)—Construction of the huge government aluminum plant near Lake Catherine, Ark., has progressed so rapidly during the last few weeks that the Defense Plant Corporation expected the first unit to start production this week, Representative Norrell (D., Ark.) said.

Norrell told an interviewer he conferred with interested government officials and representatives of the Aluminum Company of America, which will operate the plant for the government, after receiving information some delays might be expected.

The construction of a companion alumina plant in Saline County has been delayed in all about 30 days, Norrell said he was advised, because of slow delivery of steel "and the fact the while the Arkansas Power & Light Co. had the necessary materials available for construction of a transmission line, it, of course, had to secure in the usual way, the priority ratings necessary to construct the line."

Saline Plant in August.

When the alumina plant (alumina is a powdered substance taken from bauxite from which the aluminum is processed) was projected it was estimated it would start operating and producing this month.

"I am advised that the plant will be practically in full operation in August," the Monticello congressman declared.

"With reference to the aluminum plant at Jones Mill, the first unit was scheduled for production on June 27. This unit will actually start production on July 18, according to my information.

"Rainy weather last winter delayed construction work some six weeks but I am advised that the present program."

New WPB Edict Opens Huge Bauxite Mart

17,000,000 Tons Of Once Worthless Ore Now Will Be Mined.

Plans for the mining and reduction of 17,354,000 tons of once valueless bauxite in Saline and Pulaski counties are being completed this month by miners who heretofore found low grade production impossible because of a lack of a profitable market.

Under the recent order of the War Production Board, issued for the purpose of conserving high grade bauxite for specific war requirements, many industries will have to obtain their alumina from the low grade product heretofore considered valueless.

Under the new order bauxite containing 15 per cent silica, or less, must be used for the production of aluminum, abrasives and aviation gasoline. Producers of other bauxite products must secure their requirements from lower grade bauxite.

Discarded in Past.

In the past, miners say, it has been necessary to abandon mines when the grade started running above a certain per cent silica. This mineral was left in the mines where it remains.

On a rising market resulting from the recent WPB order scrape and strip processes can be invoked to bring forth the 17,000,000 tons once considered of less value than clay or sand.

The influence of the market on the low grade bauxite has already been felt, and paying prices have been established. Miners, feeling assured they will be able to show a profit, are preparing to resume operations on many abandoned properties.

Acting State Geologist J. Anderson said today the state has 27,254,000 tons of bauxite of Grade D or better. He separated the classifications as follows:

Grade A—55 per cent alumina or better, 9,900,000 tons.

Grade B—50 to 55 per cent alumina, 8,443,000 tons.

Grade C—45 to 50 per cent, 7,803,000 tons.

Grade D—30 to 45 per cent, 1,918,000 tons.

Lowest Grades Needed.

Mr. Anderson said that according to a Bureau of Mines statement he has received even all of the Class I bauxite mined will be marketable and is wanted for war industrial needs.

He said more than 95 per cent of the nation's domestic supply of bauxite must come from the Arkansas field.

Miners, however, included one of the largest operating companies of the world located at Bauxite refused to give any figures on either production or market at present. "The will have to work itself out," an official said. But he added, "We are certain we are going to have to mine low grades and that we are not going to lose money on it under the present program."

(Continued From Page 1.)

weeks but I am advised that the work has progressed to such an extent that three weeks of this lost time has been recovered and that actually now the unit is but about three weeks behind schedule.

Norrell said he was told the second unit, scheduled to start July 18, would be completed only about two weeks behind schedule.

Ahead of Schedule.

"The third unit was scheduled to

commence production in October, but will produce ahead of schedule, starting some time in September," Norrell added. "The last unit, originally scheduled to commence production on December 5, will be ahead of schedule, and when the units are averaged up, I am advised that actual production from the plant will be on scheduled time."

The congressman said both the alumina and the aluminum plants, as well as the power plant at Jones Mill, near Lake Catherine, have been inspected during the last two weeks by the War Production Board, the Defense Plant Corporation and the Bureau of the Budget.

"They were all very complimentary of the Aluminum Company, the construction officials and the workers," Norrell said.

"They are highly pleased with the progress that has been made—in fact this has constituted a tremendous construction job—the largest ever

undertaken in Arkansas and probably one of the largest in the United States.

"And to think that all the units are being produced and that the entire plant is being completed in such a short time certainly shows that not only the Aluminum Company and the construction companies, but all of the men who actually did the work have rendered very efficient and patriotic service.

"The government is highly pleased so I am advised, with the accomplishments."

EXPANSION OF SALINE ALUMINA PLANT FAVORED

Gazette 7-14-42

WPB for Enlarging Capacity.

Washington, July 13 (AP).—Representative Norrell (Dem., Ark.) said he was advised today the War Production Board was recommending an expansion of the Defense Plant Corporation's alumina plant in Saline county, Arkansas, to cost in the neighborhood of \$12,000,000.

Alumina is the powdered substance, processed from bauxite, from which the government will manufacture aluminum at another plant which Norrell said would be in operation soon at nearby Lake Catherine, Ark.

Norrell conferred with officials of the Aluminum Section of WPB today and was told of the recommendations they were making for changes in the Saline county plant that would permit a maximum utilization of bauxite.

"I don't have all of the details for publication," Norrell said, "but much of the money will involve installation of additional machinery for processing of the bauxite into alumina, permitting a more thorough use of even the lowest-grade bauxite."

The addition, he said, would give the plant an annual capacity of 1,300,000,000 pounds of alumina, sufficient to provide 650,000,000 pounds of aluminum.

300 Million Pounds Of Alumina Involved.

The expansion announced by Representative Norrell will mean an increase in production of 300,000,000 pounds of alumina annually, officials of the plant said last night. The original capacity of the plant was 1,000,000,000 pounds a year.

Aluminum Company of America officials declared the stepped-up production will be a help to the company in reaching its production quota of 2,100,000 pounds of alumina per year. They said that the additions would mean an increase in employment in Arkansas and would make the state's plants one of the most valuable assets in the war effort.

ALUMINUM MAY BE PROCESSED CHEAPLY FROM KANSAS CLAY

July 16, 1942

(Wide World News Service.)
Lawrence, Kan., July 15.—University of Kansas scientists believe they have found a cheap new way of producing aluminum.

If large scale production develops as successfully as laboratory tests on the campus, Dr. R. C. Moore, director of the Kansas Geological Survey, predicts the door will be opened to many new processors who have been unable to compete with the established method of getting the precious metal from bauxite.

The new process uses clay from Kansas deposits containing quantities so large they never have been measured but which Dr. Moore estimates at tens of millions of tons. The amount of high grade bauxite ore in the United States has been estimated as sufficient for only a few years of production, and about 50 per cent of the nation's needs are imported.

Its scarcity is the reason scientists have been developing feasible methods for extracting aluminum from the many clays which contain it in smaller quantities.

Keep Costs Low.

Dr. Moore credits the research of E. D. Kinney for developing the new process of getting aluminum from clay. He is a mining and metallurgical engineer at the University of Kansas and metallurgist for the Kansas Geological Survey. Collaborating with him were Norman Plummer and John Romary, ceramists of the survey, and Ray Thompson, chemist. They worked out a method which Dr. Moore de-

scribes as relatively low in cost and simple in operation.

Details cannot be disclosed, but the materials they mixed with the abundant Kansas clay are plentiful and cheap. The mixture is heated until a cinder is formed containing a soluble aluminate and this soluble chemical is removed merely by application of hot water.

Laboratory tests have shown 70 per cent of the alumina in the clay can be recovered in this way. Still more may be obtained by further leaching with a caustic alkali, but this added step makes the process more expensive.

Use Present Method.

Alumina is a combination of aluminum and oxygen. Once it is obtained, the method of getting aluminum in its metallic form is the same as used in extracting aluminum from bauxite—by an electrolytic process.

Although exact figures cannot be determined without large-scale production, scientists say their tests indicate costs under the Kinney process compare favorably with the costs of present production methods using bauxite.

Adding to the promise of the new development is the discovery by Plummer of a simple way to concentrate the alumina-rich part of Kansas clays.

Dr. Moore estimates a plant to produce 20 tons of alumina a day could be built for \$150,000 and a pilot plant to get the process adapted to large-scale production would cost only \$10,000.

NEW PLANT IS READY TO TURN OUT ALUMINUM

Gazette-8-4-42

Initial Shipment This Week.

By CLOVIS COPELAND.

(Staff Correspondent of the Gazette.)

Malvern, Aug. 4.—The first shipment of aluminum ingots from the huge Jones Mills Works on the banks of Lake Catherine will be on its way to become a part of an army fighting plane before the end of the week, Congressman W. F. Norrell of Monticello said following an inspection of the huge aluminum industry in Saline and Hot Spring counties today.

By the time this plant gets into full operation, it will be turning out enough aluminum for 35 fighting planes each day, while the Hurricane Creek alumina plant will produce enough alumina for five times as many planes. The Jones Mills Works will process about one-fifth of the Hurricane Creek plant's output when both plants get into full production. The other four-fifths will go to reduction plants in the Middle West and East.

Production at both plants represents only a small part of their eventual capacity, but it represents a bitter fight against heavy odds for thousands of workmen who have transformed cars of steel, concrete, machinery and a 1,000-acre tract into the largest alumina processing plant in the world, and one of the largest aluminum ingot units in the United States.

The plants are being constructed and will be operated by the Aluminum Company of America, for the United States government. The completed units will represent an expenditure in excess of \$71,000,000. Construction started about seven months ago.

Arkansans Quickly Become Skilled Workers.

"These plants are a tribute to Arkansas workmen," said Congressman Norrell. He explained that most of the construction workers are Arkansans as will be most of the operators.

An investigation by Mr. Norrell showed that the aluminum company had sent about 200 key men to Arkansas to train operators who previously had been engaged in a score of various occupations.

Harry Slagle, superintendent of the Jones Mills Works pointed with pride to a young man handling a highly technical job connected with the lining of the cooking pots with carbon and fire bricks.

"When I first came here, that boy was washing and greasing my car," Mr. Slagle told the congressman. "He and the others certainly are taking a great interest in their jobs."

About 2,600 men have been employed on the construction projects and about 2,500 will be needed for operation, Mr. Norrell revealed. Total expenditures by the aluminum industry in Arkansas may exceed the pay roll of any other single industry, he said.

Party Inspects Huge Stripping Operations.

Mr. Norrell, accompanied by Thomas C. Jones of Little Rock, in charge of Arkansas operations for the Aluminum Company of America; Raymond Stephenson, Monticello business man and friend of the congressman; Mr. Slagle, John W. Lewellen, acting superintendent of the Republic Mining and Manufacturing Company and L. H. Crudden, superintendent of the Hurricane Creek plant, made a tour of most of the bauxite operations in the two counties.

They viewed the huge stripping operations where Mr. Norrell was told that one concern was removing more than 1,000,000 cubic yards of earth a month, more than was moved by all Arkansas operators in a year before the war. There are many pits, some 100 feet deep and covering many acres.

Most of the raw ore in this section is being shipped to the Hurricane Creek plant for processing.

Under Construction.

Activities have made boom cities of Hot Springs, Malvern and Bauxite. Construction of 850 housing units near the Hurricane Creek plant is expected to relieve a serious housing shortage in that section. Only farm houses have been available to construction workers.

There will be 425 demountable houses, which will have one, two or three bedrooms, a kitchen and living room. There will be 150 "war apartments" for workers and their wives, and 300 dormitories for men only. Dormitories will have four rooms, with two men to a room.

Housing is under construction in two projects known as "Pine Haven" for white workers and "Woodlands" for Negroes. Each project will have a recreation hall, administration building, cafeteria and athletic field.

The influx of workers will require the addition of 13 teachers and additional rooms to the school at Bauxite. School officials said they probably would be forced to hold two sessions of school daily, from 7 a. m. to 12, and 1 p. m. to 6.

Only 75 housing units have been authorized for the Jones Mills Works. This includes 25 staff houses and 50 barracks buildings.

(Continued on Page 18, 6th Col.)

Bauxite to Get Higher Rating For Postoffice

Bauxite, established as a company town by the Republic Mining and Manufacturing Co., will become a first class post office to serve both the Hurricane Creek Alumina Plant and the Jones Mills Aluminum Plant.

Confirmation of this has been received by J. W. Lewellen, acting superintendent for Republic. The first step will be a new classification advancing it from third class where it has been assigned for many years. The present increase in mail, during the construction jobs on the two plants, was sufficient to merit to change of classification.

Heretofore mail has been routed through another post office where it was sorted. Under the changed program it will be sacked in transit and a special mail truck will pick it up and take it direct to Bauxite.

NEW PLANT IS READY TO TURN OUT ALUMINUM

(Continued from Page 1.)

Additional housing units are being sought.

Making of Aluminum A Complicated Process.

The reduction plant on Hurricane creek has all the processes of the Republic Mining and Manufacturing Company since 1909, with the addition of a cryolite plant authorized recently. At the alumina plant, the raw ore will be crushed, washed, screened and dried, then sent to the ore purification section where impurities are removed.

This is done by a chemical process. Under the Bayer process used at the plant, the aluminum oxide is re-precipitated as aluminum hydroxide and calcined to form pure aluminum oxide.

The bauxite ore is ground into a fine powder and stirred into a hot sodium hydroxide solution. The caustic soda dissolves the aluminum oxide out of the ore to form aluminate, but has little effect on the oxides of the other elements which are present in the ore as impurities. These impurities which have not been dissolved, will be eliminated by the filter presses and the filtrate is pumped into gigantic precipitating tanks.

By constantly agitating the solution in these tanks, the aluminum hydroxide, just as salt which has been placed in solution in hot water separates as the solution is cooled. The aluminum hydroxide then will be removed to thickening tanks in which any caustic remaining in the hydroxide is washed out. By heating the hydroxide white hot in massive, rotating brick-lined kilns to drive out all chemically combined water, it is converted into aluminum oxide, or alumina.

Plant Will Have More Than 20 Miles of Pipe.

The Hurricane creek plant will have more than 20 miles of pipe through which the solution of bauxite and chemicals passes during the operations. The mixing tanks look like giant water tanks. They are about 30 feet high and 60 feet across. The reduction tanks are slightly smaller but are about five times as tall and are covered with a funnel-shaped top, which has a

small opening through which the solution enters.

The super-structure for the kilns resembles the framework of a long concrete and steel bridge. The solution must be forced through most of the processes with huge pumps.

The machine shop at the Hurricane creek plant is an enormous building a block long and a quarter-block wide, but is dwarfed by the structures which will house the reduction tanks. A building which houses the stock pile of ore will make all the other units appear small, the congressman said.

However, it will not be necessary to house the entire stock pile. Mr. Norrell pointed out that the ore would suffer no serious damage if it was left in the open, but would absorb some moisture, which would require additional processing to remove.

Mills Works Performs A Complicated Operation.

The Jones Mills Works performs a more complicated operation requiring a large amount of electricity. It requires about two pounds of alumina to produce one pound of aluminum. About 12 kilowatts of electricity is consumed in the manufacture of one pound of aluminum from the alumina stage. This would keep a 40-watt light burning for 12 1-2 days.

The Jones Mills Works at its peak is expected to use more electricity than all domestic users in Arkansas combined. The works includes a large number of electronic cells in which the alumina will be reduced to aluminum. Cells are rectangular in shape and consist of steel shells lined with a suitable refractory material. Inner linings of carbon serve as cathodes, while the current is led into the cells by carbon anodes suspended from overhead busbars.

These cells are complicated units, which have the appearance of saw mill boiler and a washing machine, but much larger.

The cryolite-bath material first is induced into the cell. When it has been fused by the electric current, the alumina is added and as the current is passed, the alumina, which has been dissolved into the cryolite, is broken down into its component parts of aluminum and oxygen. The oxygen liberated in the reaction combines with the carbon of the anodes. Resulting carbon monoxide and carbon dioxide escape through the crust at the top of the cell where the carbon monoxide burns. The molten aluminum is deposited at the carbon bottom of the cell. About every two days, the cells will be tapped into

a large mixing ladle from which it is cast into "pigs."

The cryolite bath is not affected by the decomposition of the alumina by the electric current. Alumina is added from time to time, making the process continuous.

One unit of the Lake Catherine plant will be a unit for the manufacture of carbon electrodes, from coke. About three-fourths of a pound of carbon electrode is consumed in the production of one pound of aluminum.

Cells will be housed in long concrete and steel structures, which appear to be more than a block long. The ore will be dropped into the units from the top, by means of a gigantic conveyor system which transports the alumina from railroad cars.

The permanent power plant for the Jones Mills Works will be located about a mile from the plant immediately below Remmel dam on Lake Catherine. This unit, scheduled for completion late in 1943, will use sour gas from the south Arkansas fields, to generate electricity.

In addition to this source, the plant will use a number of huge 10-cylinder gasoline-Diesel motors turning powerful generators. These units will be used upon completion of the plant, along with power obtained from a private utilities power pool and the REA lines from the Grand River dam in Oklahoma.

PROCESSING OF POORER BAUXITE AND CLAY URGED

New Refining Plan Recommended.

(By the Associated Press.)

Washington, Aug. 2.—The Advisory Committee on Metals and Minerals of the National Academy of Scientists recommended to the War Production Board today that alumina—raw material from which aluminum is made—be produced from low-grade bauxite and clay, under a new refining process. The low grade bauxite and clay have never been used in production of aluminum metal.

The new process would enable alumina plants to mix a substantial quantity of clay with high grade bauxite, conserving limited domestic bauxite supplies.

Reporting on results of a year's study of possible new sources of alumina, the committee disclosed that the new process would permit treatment of "red mud" left over after alumina had been removed from high grade bauxite. "Substantial amounts" of additional alumina can be obtained, the report said. The refining process also can be used to extract alumina from low grade bauxite.

U-Boats Threaten to Cut Off Dutch Guiana Source.

WPB officials said the report was highly important because the major source of high grade bauxite is from an overseas source, Dutch Guiana. Arkansas is the principal source of the domestic supply. Officials said increasing submarine warfare represented a serious threat to the continued flow of materials from Dutch Guiana.

The committee report urged continuation and expansion of current pilot plant operations in various sections of the country, such as those being operated by the Bureau of Mines and by Kalumite Incorporated, in Utah.

Bauxite Ore Survey Data Now Available

Democrat 7-26-42

Information concerning the prospect drilling completed and being done by the U. S. Bureau of Mines, in bauxite and other war necessary mineral areas, may now be obtained by bonafide operating companies who are prepared to start mining operations, J. R. Thoenen, district engineer, announced yesterday.

Location of newly discovered ore bodies, as to their location on township plats, will be divulged to landholders and prospective mine operators, Engineer Thoenen stated. Proper precautions, however, will be taken to avoid the exposure of facts to any "in-between" investors or "fly-by-night" speculators who might, instead of speeding the production of bauxite or other war production ores, seek to capitalize on a local boom by investment only.

"I desire to give this information to the proper people who will utilize it to the advantage of the nation in this war effort, and not to speculators," said Mr. Thoenen. "For this reason landholders and mine operators, or those in a position to enter the legitimate mining field will receive the information."

In the case of the bauxite, the plat will show the holes drilled and whether they were reported blank or whether they contained bauxite. Information as to the amount and depth of the ore will be withheld confidentially between the Bureau of Mines and the landholder.

"This special dispensation is made for the purpose of speeding, and not delaying the mining of bauxite ore, and other war requirements," Mr. Thoenen emphasized. "Heretofore the bureau has maintained secrecy with regard to ore locations to protect the landholders. Now the bureau feels it is time to expose such information to the proper parties which will increase and speed ore production for war needs."

"It is well at this time to warn landholders to avoid the tying up of their lands under lease, or otherwise, to speculators who may hold it out for production indefinitely," the engineer stated. "We need production and the landholder needs his income. There will be efforts to tie up the lands by some speculators. This should be avoided. Speculators are after profit for themselves only and are interested in making money through resales of lands and leases."