UNC WILL MAINTAIN PRODUCTION AWHILE BUT SEES NO PROFIT IN U3O8 AFTER 1983

Although UNC Resources considers itself the nation's largest uranium producer in terms of production capability and reserves, uranium sales are expected to provide less than 20% of the company's revenues in 1982. Current contract commitments will sustain annual production of 1-million pounds for the next two years, the company says, but operations may be suspended if current market conditions prevail.

"We have continued to focus on reduction of our production costs and with production concentrated at our Church Rock, N.M. mine/mill complex, we believe our costs are competitive with those of other producers," UNC tells stockholders in a recent letter.

"Our uranium contract backlog will permit us to continue to operate profitably at the present level for about the next two years," the company says. "However, we are evaluating this situation continually. It could be more profitable for the company to suspend uranium production, fulfilling our contracts by lower cost purchases."

A decision to continue production is a "question of the timetable of the market recovering," according to a company spokesman. "We can't produce at current prices. If the price were to stay at that level ($23.50/lb) we would have to shut down when we run out of contracts. If it looks like we have to shut down at the end of two years, it's better to shut down earlier."

As part of its continuing efforts to cut its dependence on uranium, UNC last month agreed to acquire Swiftships Inc., a leading producer of aluminum marine vessels used in offshore oil and gas support services and in military applications. Swiftships' revenues are projected to be more than $100-million in 1982, compared to about $60-million in 1981.

"This acquisition is a major further step in UNC's transition into a diversified company less dependent on a single market or customer," says UNC president and chief executive officer Keith Cunningham. "Swiftships fits well with our Normco subsidiary, acquired in August, and makes UNC a substantial factor in the rapidly growing offshore oil and gas support business." That business is expected to provide revenues of about $130-million in 1982, growing to $230-million over the next three years. Revenues from Normco, formerly Normco Contractors and Hamer Industries, should be about $25-million in 1982, he predicts.

As it moves into 1982, UNC is divided into three groups -- oil and gas support, manufacturing, and an extractive group producing uranium, precious metals, oil and gas. Together, the groups are expected to generate revenues of about $400-million in the coming year, increasing to about $650-million over three years.

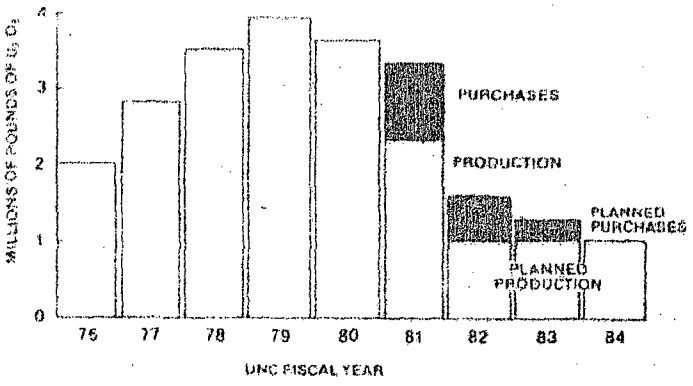
The manufacturing group, consisting of Navy business, a machine tool element, an aerospace-related precision fabrication element, and instrumentation and nuclear services businesses, is expected to provide a volume of $200-million this year, increasing to $320-million in three years. Revenues from the extractive group are expected to increase from $70- to $100-million in that period.

"In the minerals area," says Cunningham, "we have directed our exploration and minerals development programs into precious metals and oil and gas." UNC has an agreement to acquire the Cornucopia gold and silver mine near Baker, Ore., which it projects is capable of profitably producing about 30,000 ounces of gold and 125,000 ounces of silver per year, at current prices.

UNC's subsidiary, Teton Exploration Drilling Co., Inc., is exploring several gold and other mineral prospects as part of a joint venture in Alaska. "We have identified substantial quantities of ore-grade mineralization on one of the prospects," says Cunningham, "but do not yet have enough information on the extent of the deposits to know whether we have a commercial property.

"We are also putting significantly more effort into UNC Texas' oil and gas exploration program. The results to date

UNC URANIUM PRODUCTION AND SALES



have been quite favorable, although the operation is still too small to be a significant factor in UNC's operating results," he says.

Additionally, the Paraguayan congress recently approved a minerals exploration concession for Teton, "amounting to the western three-fifths of the country or almost 100,000 square miles," Cunningham says. "Our preliminary survey, using satellite data, some meager existing oil exploration data and very limited broad-brush geological evaluation, indicates the potential of uranium, brine-associated with minerals, aluminum ore and precious metal resources. We are seeking joint venture partners to finance the ongoing exploration program."

Teton also is involved in a joint venture exploration program in Australia with North Kalgurli Mines Ltd., an Australian gold producer.

While UNC develops its extractive operations "our intent is to build on the technological and management skills of our Naval Products Division, UNC Nuclear Industries and now Natco (National Automatic Tool Co., acquired in May), to put together a manufacturing segment with near-term revenues of $200- to $250-million per year, in product areas that can command above-average profit margins," says Cunningham.

As part of that effort, UNC Nuclear Industries developed and is marketing a metals detector which uses X-ray fluorescence to give a direct quantitative measurement of the concentration of a metal in ore. In the case of uranium, the Metals Analysis Probe (MAP) measures only the uranium metal concentration, and not radon daughters, as do conventional probes, the company says.

Four prototype MAPs have been in use for ore-grade

control at Church Rock for several months "with excellent results," the company says, and one was recently leased to Energy Fuels Nuclear. "We had a target to get one leased by the end of the year (1981)," says a UNC spokesman, "and we did it."

The MAP "is a direct assaying, in-situ instrument that we think is a technological breakthrough for the metals mining industry," says Cunningham. "Our initial application is to uranium, and we have found that the MAP assays uranium ore quickly and accurately without the disequilibrium problem inherent in the conventional radiometric assay. . . . In many uranium deposits, groundwater movement has physically separated uranium from its daughter products, so that radiometric logging can give completely erroneous indications. . . .

"The MAP is useful for exploration as well as mine control. In exploration applications, it can eliminate the need for highly expensive core drilling. It also gives immediate on-the-spot analyses, making exploration programs much more efficient."

The instrument is applicable to other metals, such as molybdenum, tungsten and silver, but limited to metals of relatively high atomic number and would "not be useful for iron, nickel, copper and the like," Cunningham says.

LATE BIDDER CHIDES DOE FOR ITS FAILURE TO SELECT A CAST-IRON SPENT FUEL CASK

West Germany's Gesellschaft fuer Nuklear-Service (GNS) offered DOE a cask for storing spent fuel for less than the $780,000 winning bid by Ridihalgh, Eggers & Associates (NF, 18 Jan., 2). But the GNS proposal missed a connecting flight between Amsterdam and Atlanta, arrived a day after the bidding deadline, and was ruled "nonresponsive" by DOE, according to Jack Rollins, U.S. representative for GNS. Having thereby missed out on the best cask available, Rollins said, DOE compounded its error by choosing REA's lead model rather than a competitive cast-iron version.

Rollins said he wanted to clear up the mystery that has developed about why the company was late. "There were no surreptitious reasons," Rollins said, acknowledging industry speculation that GNS might have deliberately missed the deadline to have avoided focusing attention on its foreign ownership or the alleged higher cost of its cast-iron casks.

Rollins said his bid was "considerably less than" REA's and that GNS offered to furnish one smaller cask within four months instead of the eight months DOE allowed. "We offered a family of casks," allowing DOE to select the size, he said. "I gave them full flexibility to choose schedule and capacity," he added. The largest cask, a 10-tonne model, would have been available in eight months, he said.

GNS engineers prepared a "10-inch-thick" proposal in collaboration with Rollins and allowed themselves a three-day cushion to get the package from Dusseldorf to DOE, he said. The package was lost in Amsterdam, later found, and placed on a flight that arrived in Atlanta past the deadline, he explained. The package was delivered to DOE but returned to GNS unopened because of the missed deadline. "I tried to emphasize to DOE that we wouldn't have any extra time to work on the proposal and the airline was willing to provide written confirmation of the problem, but DOE said they had to stick to the rules. A lot of the competition would have given them a hard time."

"I think they missed out on the best cask," he said. "Not only does it compete today, but it has the most potential for future savings. The future in cost reduction is cast iron. . . . Lead goes up. The lead cask is a thing of the past. What DOE has done is make REA a competitor. . . . I'd much rather have seen Transnuclear get it," Rollins said. Transnuclear also bid to supply a cast-iron cask.

Rollins saw irony in bidding to sell a cask to DOE, because "we tried to give them one free." That cask would have been tested at the Nevada Test Site much like the cask GNS is providing free to TVA for testing at Browns Ferry. The TVA cask, he said, will be shipped to the U.S. in a few months for a dry run at Barnwell. It will be capable of holding 16 BWR assemblies. "It will handle fuel that has cooled one year. It's a twin sister to the jumbo (GNS model) in terms of the questions NRC will ask me" in licensing.

GNS was to submit a topical report seeking a storage license from NRC on Jan. 29, he said. A few months later, GNS will submit an application to license the cask for transport. Rollins said that, because of efforts to license the storage-transport cask in West Germany, he could submit both applications simultaneously; but "I want to keep it pure for the storage site purists. We'll put the storage (application) in and wait a couple of months and put the transport in."

Rollins said the casks offered for sale to DOE would have been produced in Europe but would have overcome "buy American" sentiment because of the cheaper price. While he was not specific about the GNS bid, Rollins said the casks can now be offered in the U.S. to store unconsolidated fuel at a cost of around $50/kgU.

Rollins added that GNS has chosen the name General Nuclear Service for its U.S. operations and will probably announce U.S. incorporation when it delivers the TVA cask. The company has held discussions with six manufacturers about fabricating the cask in the U.S., he said.

WESTINGHOUSE SPENT-FUEL PROPOSAL DELIGHTS DOE OFFICIALS BUT MAY TAKE TIME TO ACCEPT

A Westinghouse proposal to consolidate and ship spent fuel from Florida Power & Light Co.'s Turkey Point-3 and -4 to the Nevada Test Site for dry storage has buoyed the spirits of DOE officials who expect it to accelerate and add shape to their somewhat amorphous spent-fuel program. Delighted as those officials are about the proposal, however, it may be as long as six months before they accept it because the agency's lawyers concluded it must be subjected to normal federal procurement procedures.

The proposal would afford Westinghouse an opportunity to demonstrate its rod consolidation technology while it decides whether to pursue legal channels necessary to overturn a federal judge's decision holding it responsible for FP&L's spent fuel (NF, 3 Aug. '81, 5). "They aren't doing it from the goodness of their hearts," said a source knowledgeable of the proposal. "It's something that works out well for both sides."

Under the proposal, 32 FP&L assemblies would be consolidated into cans in the fuel basin. The cans would be loaded into a licensed transport cask and shipped from the reactor to