

Massive Mideast Nuclear Program Projected

SPECIAL REPORT

The following statement was released on July 6, 1977, by Lyndon H. LaRouche, Jr., U.S. Labor Party Chairman and Presidential Candidate:

The July 10 issue of the West German weekly newspaper *Neue Solidarität* will announce the highlights of a special Fusion Energy Foundation report developed for the joint use of Western European and Middle Eastern governments. The proposal, which projects 200 gigawatts of new energy generation for the Middle East by 1985 emphasizing nuclear installations, is also being presented as an example of the policies to be followed for Third World industrial development generally.

The report was prepared at this writer's request, during the course of continuing discussions with both representatives of the European electrical industry and Arab governments, as well as with other industries and political figures. Given the large probability that the essential recommendations of the report will be followed by a number of governments and industrialists, the implementation of this program for the Middle East and similar programs for other regions means that Western Europe, in particular, is on the verge of the largest and most sustained economic boom in history.

I devote this article to a summary of the conceptions used for developing the project.

The genesis of the report was in ongoing work for establishing a new international central bank modeled upon my party's International Development Bank proposal.

The new bank, which will replace inclusively the nominal functions of the bankrupt World Bank, has three principal divisions: a regular banking division, an economic intelligence and management division, and an engineering division. In addition to providing a regulated market-place for international credit transactions on a gold-reserve, hard-commodity basis, the bank will determine its financial policies through development-oriented economic studies. The third division, the engineering division, will coordinate the nuts and bolts of projects being financed.

In short, it is excellent and necessary to have economic and credit policies through which to get the world out of its present monetary collapse and depression: economic policies can't work in fact until real wheels of industry begin to turn to produce specific products for specific uses.

The problem of managing world development is simplified by the fact that the combined costs of new energy generation and energy-distribution networks

(grids) will most probably run to about 20 to 30 percent of the total industrial long-term capital flow into the developing sector. Since no industrial and little agricultural development can occur without the added energy to move things, the obvious strategic approach to development is to build the entire development project package around the 20 to 30 percent investment represented by the generating stations and grids.

The Western European Economic Community has a natural potential for approaching the problem in this way. On the continent itself, the French electrical and nuclear industries are well integrated and advanced; Italy's electrical and nuclear industries are also well coordinated, as are those of West Germany and the Benelux countries. By coordinating their resources, and by cooperation with Japan and the Comecon, to achieve maximum capability, European nuclear plant and grid export programs can be scaled-up to meet the kinds of requirements indicated, with ample room and interface for the North American industries to utilize their own similarly-expanded potentials.

Our approach is to make the combined electrical and nuclear industries of Europe the "prime contractor" for Third World development projects. That arrangement, by itself, pulls in a large chunk of specialty steel production potential, the shipyard industry, non-ferrous metals and the machine-tool industry, as well as the kind of engineering capabilities exemplified by Italy's Italstat.

Our overall approach might be described as like that of the charm bracelet worn by teenage American girls in the past. Start with the generating plants and grid as the basic unit, and then attach the other industries, as desired, to that grid.

In general, each project will be developed for a multinational customer — several adjoining Third World countries, along the following lines.

In selected locations, we shall construct two adjoining nuclear power-generating facilities, each facility preferably of one gigawatt (billion watt) or higher output capacity. The reasons for such paired installations are obvious to any engineer. Around each of these "binaries" we build a "new city," using an amplified application of the Soviet Union's Caspian Sea pilot project. We install a combination of industries, including types which efficiently use waste heat from the reactor, high energy-density desalination and so forth.

We then tie a string of such binaries together with a very high voltage grid. The several binaries on the same grid provide for balanced load-frequency distribution within the grid, and in that way provide a stable base for exporting power to net-consuming points brought into the same grid.

The principal element of judgment in deciding whether to put in gigawatt-plus or smaller-capacity stations will be weight. Wherever possible, binaries should be located

on coasts or inland along major navigable rivers, and, where feasible, reactors placed off-shore. The principal components are monstrous and heavy; vital major parts represent one of the most monstrous transport and materials handling problems presently confronted. By taking advantage of the possibility of prebuilding in European and other shipyard facilities and delivering to an off-shore, coastal or inland riverway location, we gain very large economic and related advantages. Where it is urgent to place plants further inland, we would probably opt for the smaller-capacity units of the type which French industry has coming on line.

As for "new cities," it is cheaper to build a "new city" from the ground up than to modernize an old one. Salvaging, modernizing old areas is the most inefficient, wasteful undertaking modern construction and production could be compelled to face. In any case, the existing urban areas of the developing sector are in general not "structurally oriented" for the kinds of economy high-energy technology requires.

This is not an arbitrary rule. The case of Mexico City illustrates the point. By developing areas around the present Mexico City along "new city" lines, and tying the whole together with a high-speed urban transit grid and other service grids, we can gain the advantage of an existing concentration of labor force (ten millions population in the area) and the advantages of that "new city" development strategies. India's Ganges River basin readily indicates comparable adaptations of the "new city" principle of Third World development.

This approach has several correlated further advantages.

In the Middle East study, which centers on the developing of Iran and the Arab states of the Gulf area, the base-line is provided by 200 gigawatts of new energy production to be installed by 1985. Nuclear plants along the Gulf coast are the dominant element. However, the combustion of natural gas in turbines, and massive supplementary use of hydroelectric programs, as for example in Turkey and Pakistan, fill out the total projected production. This means more than 100 nuclear units of the Biblis scale.

Ask any trained American industrialist what these orders of magnitude of installation signify for increased efficiency in production of nuclear stations? Add the requirements for the Rio de La Plata's project to the Fusion Energy Foundation's Mideast study, add India and obvious projects for Africa. (Then, also ask him to calculate fuel requirements, and inform you why a crash breeder program is needed.)

A package of nuclear energy and grid-development projects on this scale mean both massive economies of scale in installation and a concentration of all of the many kinds of technologies involved, with maximum opportunity for balancing out work-loads among the different technologies and skills required for each phase of installation.

Moreover, the skills required for installation of generating plants and grids include many of those construction and other skills required for most other sorts of industrial applications in the same regions.

There are three principal advantages gained from this approach: political, financial and industrial

management. The political advantages are that the exporting and importing nations have exactly the kind of package through which to deliver the optimal results in the most visible way to the electorate and major political forces of their respective nations. Financially, a project of the highest quality of long-term credit-worthiness has been put together in a way which simplifies financial management, including the effective averaging-out of included elements of risk. From an industrial management standpoint, it affords maximum opportunity to benefit from economies of scale, for projecting stable requirements over a long-term production and investment period, and built-in margins for flexibility.

American construction workers, in particular, understand the point of flexibility very well from experience. The worst situation, from the standpoint of industrialists, investors, and workers, is to have a single, tightly-phased — bottleneck-prone — project in one area. If something ties up one such project, everyone suffers. Therefore it is urgent to have a broadly based, correlated set of projects, so that tie-ups in one particular project merely signify shifting labor-forces to available other projects under way.

Problems of this type will be much more significant in Third World development than in the typical case inside the United States. A most significant part of the program will be training of the native labor force. There will be many problems on this and other accounts. We must have flexibility within the overall undertaking such that problems in one aspect can be offset by shifting efforts to accelerate another ongoing project-aspect. We must keep the inefficiencies, as much as possible, within the local economy, so that the imported capital and installation services do not become inefficient in their part of the performance because of local problems.

Although part of the development programs will take advantage of existing Third World labor-force potentialities, the general task in the Third World is a generation's work of upgrading the population to the standards of a modern labor-force. Thus, although there will be accelerating growth in output-rates within Third World economies during the next decades, the full ripening of the benefits of what we do now will not be realized during less than a generation — 20 to 25 years. We are making a quarter-century, long-term investment in the developing sector. We have to ensure that the unavoidably poorer performance on the side of the developing economies does not spill over into the quality of economy of the input made by forces of the industrially developed, capital-exporting sector. We require a project-design which conforms to the reality of the problems we face.

Meanwhile, we shall have the biggest and longest boom in world history. As long as we produce sufficient food, clothing, housing, services, and new plant and equipment to keep the industrially developed sector expanding, we shall have no reason for economic difficulty or hardship in maintaining long-term capital flows into the developing sector in the order of \$200 billions 1975 dollars per year indefinitely. These are the numbers of which we are speaking, as we think of the FEF's Middle East study applied on a broader scale.