U. S. DEPARTMENT OF LABOR OFFICE OF THE SOLICITOR

October 25, 1966

MEMORANDUM #70

TO

AGENCIES ADMINISTERING STATUTES REFERRED TO IN 29

CFR SUBTITLE A. PART 5. (harles Jourahum

FROM

: Charles Donahue

Solicitor of Labor

SUBJECT: Opinions on application of the Davis-Bacon and related

Acts.

Reference is made to previous covering memoranda, subject as above, enclosing copies of opinions for your information and guidance in carrying out your responsibilities in the administration of the contract labor standards provisions of the cited Acts.

A copy of a recent opinion is enclosed which we hope will be of further interest and assistance.

Enclosure: DB-52

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U.S. DEPARTMENT OF LABOR OFFICE OF THE SOLICITOR

WASHINGTON 20210

OCT 1 4 1966

Mr. H. T. Herrick, Director Office of Industrial Relations U. S. Atomic Energy Commission Washington, D. C. 20025

Dear Mr. Herrick:

The International Brotherhood of Electrical Workers (IBEW) and the Building and Construction Trades Department of the AFL-CIO have requested us to review the matter of whether the Davis-Bacon Act applies to the assembly and erection of a nuclear reactor to be employed in connection with the Loss of Fluid Test Facility Experiment (LOFT) at AEC's Nuclear Reactor Test Facility in Arco, Idaho. After meeting with the interested parties and after carefully considering all the facts and circumstances, we have concluded that this assembly and erection work, for the reasons set forth below, constitutes "construction" within the meaning of the Davis-Bacon Act.

The purpose of the LOFT project is to destroy a nuclear reactor under controlled conditions by purposely withdrawing the coolant fluid from the reactor in order to determine the consequences of an accidental occurrence of this nature. To conduct the project AEC will require, in addition to its existing facilities at Arco, (1) a "containment facility" to house the reactor during the tests and (2) a mobile reactor upon which the tests will be conducted.

The "containment facility" will consist of a containment building, a remote control room, and 1,300 feet of additional four-track railroad leading into the containment building. This building will be a large enclosed structure capable of withstanding the pressures associated with coolant expulsion and of preventing fission product leakage to uncontrolled atmosphere. There will be a considerable amount of structural steel framing and concrete foundation work in its construction. Utilities will be provided to the building, and the railroad track will be laid from a take-off point of an existing track. The remote control room will be a modification of a portion of an existing building. The construction of the "containment facility", with estimated direct labor costs of \$3.1 million, will be carried out over the next three years under an existing contract which AEC has with the M. W. Kellog Company.

The AEC area manager at Arco found, and we agree, that the construction of the containment building and trackage and the modification for the control room are all work subject to the Davis-Bacon Act.

The question of coverage relates to the mobile reactor which, when assembled, will be a fifty megawatt thermal vessel that will operate on 2500 pounds per square inch pressure and will have 1,000,000 pounds of thrust. It will weigh 40 tons. Its component parts will come from the vendor and will be assembled, together with the installation of primary and secondary piping, steam generator, purification system and pressure vessel, instrumentation, shielding, and associated components, in an existing AEC building one and one-quarter miles from the "containment facility". When the reactor system is assembled, it will be moved on a railroad dolly the one and a quarter (1-1/4) miles into the containment building where it will be plugged into utilities and instrumentation contained in the remote control building. The estimated direct labor costs of the assembly work are \$200,000.

From these facts the area manager of AEC concluded that the shop fabrication and assembly of the nuclear reactor are not covered by the Davis-Bacon Act.

The on-site assembly of manufactured components and their subsequent installation as a portion of a public work of the United States have long been considered subject to the Davis-Bacon Act. Thus, the erection of a \$3 million concrete building together with the on-site assembly and permanent installation therein of a "conventional" 40-ton nuclear reactor ordinarily would constitute the construction of a public work of the United States within the meaning of that Act.

The mere fact that the reactor in this case is a part of a mobile system to be used for experimental purposes does not remove, in our judgment, its assembly and fabrication from the ambit of the Act. This conclusion is supported, we believe, by the AEC procurement regulations.

These regulations provide that "normally" the experimental development of equipment, processes and devices (41 CFR 9-12.402-52 (a)(5)) and experimental work in connection with peaceful uses of nuclear energy

(41 CFR 9-12.402-52(a)(6)) are to be classified as noncovered work. These same regulations, however, recognize that these criteria use "general language" and that "in some cases the application of the criteria to a particular situation may not be clear". (41 CFR 9-12.450-1). Accordingly, the regulations, in clarification of the general language, set forth as an example of covered work the erection at ARGO, Idaho of the SPERT reactors. The latter reactors, like the subject reactor, were assembled and adapted for experimental purposes.

"Illustrative of reactor facilities erected for such experimental purposes are the special power excursion test reactors (SPERT) at the National Reactor Test Site, which are designed for studying reactor behavior and performance characteristics of certain reactor components. Such a facility may consist of a reactor vessel, pressurizing tank, coolant loops, pumps, heat exchangers, and other auxiliary equipment as needed. The facility also may include sufficient shielding to permit work on the reactor to proceed following a short period of power operation and buildings as needed to house the reactor and its auxiliary equipment. The erection and on-site assembly of such a reactor facility is covered work, but the components whose characteristics are under study are excluded from coverage." [41 CFR 9-12.450-2(h)(3)]

The description which we have been furnished of the reactor in question reveals no significant differences, for purposes of the application of the Davis-Bacon Act, between it and the SPERT reactor the assembly of which was admittedly covered work. Both reactors are assembled for use in an experiment and, accordingly, are designed to accommodate control assemblies and measuring instruments to facilitate their employment in various tests. We are persuaded that these accommodations in design do not render the subject reactor of such an experimental character as to exclude coverage of its assembly under the considerations stated in AECPR 9-12.402-52(a)(5) and (6).

The evidence we have been furnished also shows that of the 25 reactors assembled as of December 31, 1965 at the Nuclear Reactor Test Site at Arco, 19 have been considered construction work subject to the Davis-Bacon Act. The remaining 6 were either small (five-gallon) reactors employed on "work bench" projects or, because of tight security precautions, were assembled without the knowledge of the local Building Trades Council.

In applying AEC's criteria to the assembly of this reactor, we are guided by the fact that the Davis-Bacon Act and related statutes are minimum wage laws designed for the benefit of construction workers. Since they are remedial in nature, general criteria of a contracting agency which limit their application are to be strictly construed.

Finally, the fact that the assembly of the reactor is to take place in an existing AEC facility (Building 607) a little over a mile from the containment building is not decisive of coverage. The reactor itself is a public work of the United States. No argument is made to the contrary. Its major components will be procured from manufacturing firms throughout the country and will be fabricated and assembled in Arco, we are informed, by two large independent contractors under existing AEC contracts. The place of its assembly and fabrication in Building 607 is its own job site. That unrelated AEC work may be performed there by others contemporaneous with its assembly is, under these circums tances, immaterial.

For these reasons, we have concluded that the assembly of the subject reactor constitutes "construction" within the meaning of the Davis-Bacon Act.

Yours sincerely,

Charles Donahue
Solicitor of Labor