SUBJECT: CONSULTANT TO DLAR, GRAPHITE FOR GAS COOLED REACTORS

Dates Required: Part time from Nov. 1, 1963 to Nov. 1, 1964 (Estimated)

Functions: (1) Review the applications of graphite in HTGR (Peach Bottom) and EGCR (Oak Ridge) to be assured that types and uses are compatible with existing graphite technology.

(2) Serve as an advisor to the technical staff of the DLAR on the technology and uses of graphite for nuclear reactor applications.

(3) Be prepared to serve as an expert witness for DLAR at a public hearing or at a regularly scheduled meeting of the ACRS in the unlikely event that a major technical question still exists following final DLAR review.

Time Required: Broken down by the three main functions the following represent what is considered to be reasonable estimates: Item (1), two months; Item (2), one month; Item (3), one month.

Note: These estimates include the preparation of reports, testimonies, etc.

Estimated Cost: At $100/day for four man-months (20 days/month) plus 25% contingency to include travel expenses, etc., the estimated cost would be $10,000.00.

Possible People: Based on a review of the current literature and on the attendance of selected meetings, the following names were investigated. (Remarks after the "---" are the results of my preliminary investigation.)

1. E. P. Batherly, Assistant Director Research, National Carbon Company --- believed to be too heavily involved in administrative activities to be useful as a technical expert.

2. Dr. J. E. Hove, Group Leader, Atomics International --- unable to obtain any additional information.

3. Dr. R. E. Nightingale, Supervisor, General Electric, Hanford --- authored only textbook in field entitled "Nuclear Graphite"; considered to be THE expert in the field.

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4. Dr. H. H. Gatzinsky, Metallurgy Division Head, Brookhaven National Laboratory --- probably gotten many from details in present capacity and would have Schweitzer do the work (See No. 5).

5. Dr. D. G. Schweitzer, Supervisor, Graphite Section, Brookhaven National Laboratory --- considered to be good theoretical man; however, may have no interest in practical applications.

6. Dr. G. H. Beaudie, Chemist, Argonne National Laboratory --- probably THE expert on basic research, etc., on graphites; however, of questionable usefulness for an applied applications review.

7. William Greenstreet, Oak Ridge National Laboratory --- unable to obtain any information to date; he was recommended by Nightingale and, thus, appears to merit consideration.