

SUPPLEMENTAL AGREEMENT  
BETWEEN  
THE UNIVERSITY OF FLORIDA  
AND  
THE U. S. NUCLEAR REGULATORY COMMISSION

THIS SUPPLEMENTAL AGREEMENT, effective the 1st day of June , 1979, by and between the UNITED STATES OF AMERICA (hereinafter referred to as the "Government"), as represented by the UNITED STATES NUCLEAR REGULATORY COMMISSION (hereinafter referred to as the "Commission"), and THE UNIVERSITY OF FLORIDA (hereinafter referred to as the "Contractor"),

WITNESSETH THAT:

WHEREAS, the parties desire to modify Contract No. NRC-04-77-123 as hereinafter provided, and this supplemental agreement is authorized by law, including the Energy Reorganization Act of 1974, as amended, and the Atomic Energy Act of 1954, as amended.

NOW, THEREFORE, said contract is hereby modified as follows:

1. Appendix A, attached to this supplemental agreement and made a part hereof, provides for the research to be performed by the Contractor during the contract period specified therein.
2. In Article I(b) - The Research to be performed, add the name "John F. Alexander, Jr."
3. In Article II - The Period of Performance, the date "May 31, 1980" is substituted for the date "May 31, 1979."
4. In Article III - Consideration, the sum "\$134,067.00" is substituted for the sum "\$74,067.00."

IN WITNESS WHEREOF, the parties have executed this document.

UNITED STATES OF AMERICA

BY:

Kellogg V. Morton  
Kellogg V. Morton, Chief  
Research Contracts Branch  
(title)

Nuclear Regulatory Commission

THE UNIVERSITY OF FLORIDA

BY:

Patricia L. Schmidt  
PATRICIA L. SCHMIDT, Ph.D.  
ACTING ASSISTANT DIRECTOR  
DIVISION OF SPONSORED RESEARCH  
UNIVERSITY OF FLORIDA

I,

**SEE ATTACHED  
POWER OF ATTORNEY**

\_\_\_\_\_, certify that I am the

\_\_\_\_\_  
(title) of the Contractor named

under this document; that \_\_\_\_\_  
(signatory)

who signed this document on behalf of said Contractor was then

\_\_\_\_\_ of said Contractor; that

this document was duly signed for and on behalf of said Contractor by  
authority of its governing body and is within the scope of its legal  
powers.

IN WITNESS WHEREOF, I have hereunto affixed my hand and the seal of  
said Contractor.

(SEAL)

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POOR  
ORIGINAL

Modification No. 3  
Supplemental Agreement to  
Contract No. NRC-04-77-123

CONTRACTOR: UNIVERSITY OF FLORIDA

APPENDIX A

For the Contract period June 1, 1979 through May 31, 1980

Article A-I RESEARCH TO BE PERFORMED BY CONTRACTOR

- (a) The unclassified scope of work under this contract entitled, "A Manual of Energy Analysis Methodology for Programs Plant Siting: The Energy Value of Land" is as follows:

The contractor will perform further development of the net energy analysis methodology, application of this methodology to a case study, and the compilation of a manual on using the methodology.

The first phase of the project will be to analyze an actual siting case study to be selected by the sponsoring agency utilizing the net energy analysis model developed primarily in earlier stages of the project. The general model will be evaluated by the sponsoring agency and then applied to the actual case study. The resulting analysis and conclusions will be summarized in a report to be submitted to the sponsoring agency.

The second phase of the project will be to assess the net energy analytic method as it compares to other, more traditional methods of evaluation, such as economic cost/benefit analysis. A clear documentation of points of comparison and contrast will be made, especially as related to actual usage in a case study. This phase of the project must include a clear, non-technical explanation of the net energy analysis methodology.

The third phase of the project will be the assembling of information and results obtained during the entire course of the project into a concise user manual suitable for analysis of case studies such as are performed by the sponsoring agency. Every effort will be made to orient this phase of the project to user needs, and the contractor will assist by means of briefings, a seminar, and other methods to ensure clear understanding by the sponsoring agency. A review of the manual by the sponsoring agency will be accommodated so as to incorporate suggestions for change in the manual to improve its utility.

- (b) The Principal Investigator expects to devote the following approximate amount(s) of time to the contract work:

John F. Alexander - 25% of his time for 12 months  
Howard T. Odum - 2% of his time for 12 months

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ARTICLE A-II WAYS AND MEANS OF PERFORMANCE

(a) Items for which support will be provided as indicated in A-III, below

(1) Salaries and Wages \$ 23,366.00

(2) Equipment to be purchased or  
fabricated by the Contractor \$ -0-

(3) Travel  
(i) Domestic \$ 3,500.00

(ii) Foreign \$ -0-

(4) Other direct costs including fringe benefits

(5) Indirect costs based on a predetermined rate of 37 percent applicable  
to salaries and wages and fringe benefits.

(b) Items, if any, significant to the performance of this contract, but  
excluded from computation of Support Cost and from consideration in  
proportioning costs:

NONE

(c) Time or effort of Principal Investigator(s) including indirect costs  
and fringe benefits contributed by Contractor but excluded from com-  
putation of Support Cost and from consideration in proportioning  
costs:

Howard T. Odum - 2% of his time for 12 months

Article A-III

The total estimated cost of items under A-II(a) above for the contract period  
stated in this Appendix A is \$60,000.00 ; the Commission will pay 100 percent  
of the actual costs of these items incurred during the contract period stated  
in this Appendix A, subject to the provisions of Article III and Article  
B-XXVIII. The estimated NRC Support Cost for the contract period stated in  
this Appendix A is \$60,000.00 .

The estimated NRC Support Cost is funded as follows:

(a) Estimated unexpended balance from prior period(s) \$ -0-

(b) New funds for the current period \$ 60,000.00

(c) The new funds being added in A-III(b) constitute the basis for advance  
payments provided under Article B-X.

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