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**Planning for a Program Design for Energy
Environmental Analysis**

Progress Report

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MASTER

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Abstract

The work reported in this progress report is focussed on determining the proper scope of a regional assessment study program suitable for BER/ERDA. Within the tentative scope selected, a tentative set of purposes, goals, and objectives is identified for a preliminary specification of a geographical region. The initial specification of the region includes the states of Pennsylvania, New Jersey, Delaware, Maryland, and Virginia. The tentative scope of considerations for the regional assessment study program encompasses the interacting facets of environment, energy, and economic well-being of the region with the overarching goal of reconciling these facets within the decision framework of the region.

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ACTIVITY TO BE PERFORMED

The scope of activity is unclassified and shall consist of the Contractor's assisting BER/ERDA in program planning. In furtherance thereof, the Contractor shall prepare a final report on a regional assessment study program which shall include the following items:

1. Describe and discuss how one scopes, sets purposes, goals, and objectives for and initiates a regional assessment study program suitable for BER/ERDA.
2. Analyze, describe, and discuss whether and how operational gaming might play a key and central, and perhaps unique, role either within a regional assessment study program or in the management and direction of one.
3. Describe, discuss, and analyze how a regional assessment program with or without the methods of operational gaming might affect the achievement of a higher level of public understanding with respect to the environmental and health and safety problems of nuclear energy in the context of alternative energy systems. Note that "safety" as used here does not refer to nuclear reactor accidents.
4. Describe, discuss, and analyze how a regional assessment study program with or without the methods of operational gaming might relate to the possibly serious needs that ERDA might discover for adequately trained manpower, nuclear and nonnuclear.
5. Describe and discuss any special requirements that a regional assessment study program and possibly operational gaming places with respect to such areas as computerized information systems, computerized data management systems and file management systems; computerized display systems, including graphics systems; etc.
6. Discuss and analyze the role of computer simulation in a regional assessment program with due attention to the current state of the art.

The Contractor shall also consult with BER/ERDA within the general area of scope of work as otherwise described above, and as set forth in the Contractor's informal budget to the Administration.

Time Horizons

III. Methodology for Regional Energy Environment Game (REEG)

PHASE I -

1. Reference Scenario Description
2. Decision Scenario Construction
3. Ident. and Class. of Actors, Relationships, and Policies
4. Future Scenario Description and Quantification
5. Development and Application of Weighting Methodology to REEG

PHASE II -

1. Impact Model Synthesis
2. Refinement and Quantification of State Variables
3. Model of Interaction
4. Quantification of Decision Scenario
5. Model Implementation, Testing and Refinement

Phase I completed