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UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

FOR RELEASE ON DELIVERY  
EXPECTED AT 2:00 P.M.  
WEDNESDAY, DECEMBER 10, 1975

STATEMENT OF  
THE HONORABLE ELMER B. STAATS  
COMPTROLLER GENERAL OF THE UNITED STATES  
BEFORE THE  
JOINT COMMITTEE ON ATOMIC ENERGY  
ON THE EVALUATION OF ~~THE ADMINISTRATION'S~~<sup>9</sup>  
PROPOSAL FOR GOVERNMENT ASSISTANCE TO  
PRIVATE URANIUM ENRICHMENT GROUPS

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MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

OUR INTEREST AND INVOLVEMENT IN THE AREA OF URANIUM ENRICHMENT HAS BEEN QUITE EXTENSIVE OVER THE YEARS. IN JULY 1969, AND AGAIN IN JUNE 1974, WE TESTIFIED BEFORE THIS COMMITTEE ON THE FUTURE STRUCTURE OF THE URANIUM ENRICHMENT INDUSTRY. ALSO IN THE PAST, WE SUBMITTED REPORTS TO THIS COMMITTEE ON THE POSSIBLE TRANSFER OF THE GOVERNMENT'S GASEOUS DIFFUSION PLANTS TO PRIVATE OWNERSHIP, ON THE ISSUES RELATING TO ESTABLISHING A GOVERNMENT URANIUM ENRICHMENT ENTERPRISE, AND ON THE PRICING OF URANIUM ENRICHMENT SERVICES. WE ARE HERE TODAY AT YOUR REQUEST TO DISCUSS OUR EVALUATION OF THE ADMINISTRATION'S PROPOSAL FOR GOVERNMENT ASSISTANCE TO PRIVATE URANIUM ENRICHMENT GROUPS.

THE FEDERAL GOVERNMENT, THROUGH ITS ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION (ERDA), OWNS THREE URANIUM ENRICHMENT PLANTS WHICH REPRESENT THE TOTAL CAPACITY IN THE

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UNITED STATES. IF THE USE OF NUCLEAR POWER TO GENERATE ELECTRICITY IS TO GROW, THEN THE NATION MUST DEVELOP ADDITIONAL ENRICHMENT CAPACITY TO MEET DOMESTIC AND FOREIGN CUSTOMERS' NEEDS. ADDITIONAL CAPACITY COULD BE NEEDED AS SOON AS THE EARLY 1980'S. BECAUSE OF THE LONG TIME IT TAKES TO DESIGN AND CONSTRUCT ENRICHMENT FACILITIES, PROMPT DECISIONS MUST BE MADE REGARDING THE AMOUNT, THE TYPE, AND THE OWNERSHIP OF THAT CAPACITY.

SINCE 1971 THE EXECUTIVE BRANCH HAS ENCOURAGED PRIVATE INDUSTRY INVOLVEMENT IN URANIUM ENRICHMENT. THE LATEST ACTION TOOK PLACE ON JUNE 26, 1975, WHEN THE PRESIDENT PROPOSED TO THE CONGRESS THE NUCLEAR FUEL ASSURANCE ACT OF 1975. THIS LEGISLATION IS INTENDED TO PROVIDE NEEDED ENRICHMENT CAPACITY AND TO CREATE A COMPETITIVE URANIUM ENRICHMENT INDUSTRY.

THE ADMINISTRATION'S PROPOSED LEGISLATION WOULD:

1. AUTHORIZE ERDA TO ENTER INTO COOPERATIVE ARRANGEMENTS WITH AS MANY PRIVATE FIRMS THAT WISH TO BUILD, OWN, AND OPERATE ENRICHMENT PLANTS AS THE ERDA ADMINISTRATOR BELIEVES NECESSARY TO DEVELOP A COMPETITIVE INDUSTRY.
2. AUTHORIZE ERDA TO PROVIDE VARIOUS FORMS OF ASSISTANCE AND ASSURANCES UNDER SUCH ARRANGEMENTS.
3. LIMIT THE GOVERNMENT'S TOTAL POTENTIAL LIABILITY TO \$8 BILLION IN THE EVENT THAT THE PRIVATE VENTURES FAIL AND THE GOVERNMENT HAS TO TAKE THEM OVER.

4. AUTHORIZE ERDA TO START CONSTRUCTION PLANNING AND DESIGN ACTIVITIES FOR EXPANDING ONE OF THE GOVERNMENT'S EXISTING ENRICHMENT PLANTS AS A CONTINGENCY MEASURE.
5. PROVIDE FOR CONGRESSIONAL REVIEW OF THE BASIS FOR THE COOPERATIVE ARRANGEMENTS BY THIS COMMITTEE.

ON OCTOBER 31, 1975, WE SUBMITTED A COMPREHENSIVE REPORT (RED 76-36) TO THIS COMMITTEE EVALUATING THE LEGISLATIVE PROPOSAL AND A RELATED PROPOSAL MADE TO ERDA BY A PRIVATE ORGANIZATION--THE URANIUM ENRICHMENT ASSOCIATES (UEA). I WOULD LIKE TO DISCUSS THE HIGHLIGHTS OF OUR REPORT.

ERDA AND PRIVATE FIRMS INTERESTED IN BUILDING ENRICHMENT PLANTS SAY FEDERAL ASSISTANCE IS NECESSARY TO OVERCOME UNCERTAINTIES ASSOCIATED WITH PRIVATE FIRMS PROVIDING ENRICHMENT CAPACITY. THESE UNCERTAINTIES RELATE TO A GOVERNMENT-CONTROLLED AND CLASSIFIED PROCESS THAT IS UNPROVEN AND UNLICENSED IN A COMMERCIAL ENVIRONMENT, LARGE CAPITAL REQUIREMENTS AND LONG PAYBACK PERIODS, THE THREAT OF A NUCLEAR MORATORIUM, AND THE WEAK FINANCIAL CONDITION OF MANY DOMESTIC ELECTRIC UTILITIES.

TWO DIFFERENT PROCESSES ARE NOW BEING CONSIDERED FOR USE IN FUTURE ENRICHMENT PLANTS--GASEOUS DIFFUSION AND GASEOUS CENTRIFUGE. THE THREE EXISTING ENRICHMENT PLANTS USE THE GASEOUS DIFFUSION PROCESS AND HAVE BEEN OPERATING SUCCESSFULLY FOR OVER 30 YEARS. WHILE IT MIGHT BE POSSIBLE TO USE THE GASEOUS CENTRIFUGE PROCESS FOR THE NEXT INCREMENT

OF CAPACITY, IT IS GENERALLY AGREED THAT THE NEXT INCREMENT SHOULD USE THE PROVEN GASEOUS DIFFUSION TECHNOLOGY. USING THE GASEOUS DIFFUSION PROCESS FOR THE NEXT INCREMENT AND PROBABLY THE CENTRIFUGE PROCESS FOR SUCCEEDING INCREMENTS PERMITS SEPARATE DECISIONS TO BE MADE REGARDING OWNERSHIP OF ALL THE SUCCEEDING INCREMENTS.

ANY NEW GASEOUS DIFFUSION URANIUM ENRICHMENT CAPACITY THAT IS CONSTRUCTED IS LIKELY TO BE THE LAST OF ITS KIND. THE GASEOUS CENTRIFUGE PROCESS OR OTHER ADVANCED ENRICHMENT PROCESSES OFFER POTENTIAL ADVANTAGES OVER THE DIFFUSION TECHNOLOGY IN SUCH AREAS AS TOTAL COST, ENERGY USE, FLEXIBILITY, AND SIMPLICITY. THE POTENTIAL FOR TECHNOLOGICAL OBSOLESCENCE OF THE DIFFUSION PROCESS--TOGETHER WITH OTHER UNCERTAINTIES--MAKES IT UNLIKELY THAT ANY PRIVATE FIRM WOULD CONSTRUCT A LAST OF A KIND GASEOUS DIFFUSION PLANT WITHOUT VERY SUBSTANTIAL GOVERNMENT ASSURANCES AND GUARANTEES OF THE SORT REFLECTED IN THE UEA PROPOSAL.

THE SEPARABILITY OF DECISIONS ON THE NEXT AND SUCCEEDING INCREMENTS OF URANIUM ENRICHMENT CAPACITY IS UNDERLINED BY PRIVATE INDUSTRY'S MIXED RESPONSES TO THE ADMINISTRATION'S PROPOSAL. FOR THE NEXT INCREMENT USING THE PROVEN GASEOUS DIFFUSION PROCESS, ERDA HAS RECEIVED THE SINGLE PROPOSAL FROM UEA. FOR THE MORE ADVANCED GASEOUS CENTRIFUGE TECHNOLOGY, ERDA HAS RECEIVED THREE PROPOSALS. WE BELIEVE THERE SHOULD BE A VERY SERIOUS EFFORT MADE TO "PRIVATIZE" THE CENTRIFUGE PROCESS.

THE SINGLE RESPONSE FOR THE NEXT INCREMENT OF CAPACITY AND THE GOVERNMENT ASSURANCES REQUIRED BY THAT RESPONSE MAKE IT ESSENTIAL TO EXPLORE THE GOVERNMENT'S ALTERNATIVE OF PROVIDING THE NEXT INCREMENT OF CAPACITY.

ERDA MAKES TWO BASIC POINTS IN FAVOR OF ACCEPTING THE UEA PROPOSAL. FIRST, IT WOULD DEMONSTRATE TO THE PRIVATE SECTOR THAT A PRIVATELY OWNED PLANT--WITH GOVERNMENT ASSISTANCE--CAN OPERATE SUCCESSFULLY. SECOND, IT WOULD HAVE A FAVORABLE BUDGETARY IMPACT SINCE THE GOVERNMENT WOULD NOT LIKELY INCUR ANY DIRECT COSTS BUT WOULD RECEIVE ROYALTIES AND TAXES.

REGARDING ERDA'S FIRST POINT WE AGREE THAT BUILDING AND OPERATING THE UEA PLANT WITH GOVERNMENT ASSISTANCE WOULD SERVE TO DEMONSTRATE THAT THE GOVERNMENT IS COMMITTED TO FOSTERING THE "PRIVATIZATION" OF THE ENRICHMENT INDUSTRY. ALSO IT WOULD DEMONSTRATE--IN A TECHNICAL AND INDUSTRIAL SENSE--THAT A PRIVATE GROUP CAN BUILD AND OPERATE A GASEOUS DIFFUSION PLANT. HOWEVER, BECAUSE THE UEA PLANT WOULD LIKELY BE A LAST OF A KIND, SUCH A DEMONSTRATION IS NOT CLOSELY RELATED TO ANTICIPATED PROBLEMS OF OTHER PRIVATE FIRMS PLANNING TO BUILD ENRICHMENT PLANTS USING MORE ADVANCED PROCESSES. IN ADDITION, SINCE UNDER THE ARRANGEMENTS REQUESTED BY UEA, ITS PLANT WOULD OPERATE IN ESSENTIALLY A RISKLESS, NONCOMPETITIVE ENVIRONMENT, LITTLE COULD BE GAINED IN TERMS OF HELPING TO CREATE A VIABLE COMPETITIVE PRIVATE MARKET.

REGARDING THE SECOND POINT, WHILE THE UEA PROPOSAL WOULD REMOVE THE CONSTRUCTION COSTS FROM THE FEDERAL BUDGET, SO WOULD A NUMBER OF OTHER ALTERNATIVE ARRANGEMENTS, INCLUDING FORMS OF GOVERNMENT OWNERSHIP WHICH COULD HAVE SELF-FINANCING AUTHORITY AND THE ABILITY TO BORROW FUNDS FROM THE PUBLIC.

CERTAIN A PRIORI ARGUMENTS CAN BE MADE IN FAVOR OF "PRIVATIZATION" OF THE NEXT INCREMENT OF URANIUM ENRICHMENT CAPACITY. ONE'S POSITION ON SUCH ARGUMENTS, HOWEVER, IS LARGELY A FUNCTION OF ONE'S BELIEF IN THE ABILITY OF THE "MARKET" TO PRODUCE APPROPRIATE SOCIAL RESULTS AND ONE'S VIEW ON WHETHER A "MARKET" ACTUALLY EXISTS. THE SINGLE PROPOSAL FOR THE NEXT INCREMENT OF URANIUM ENRICHMENT CAPACITY IN AND OF ITSELF HARDLY CONSTITUTES A MARKET. WE TAKE NO POSITION ON THE APPROPRIATENESS OF "PRIVATIZATION,"--WHETHER IT IS "GOOD" OR "BAD". WE BELIEVE THAT THE CONSEQUENCES OF "PRIVATIZATION" FOR THE NEXT INCREMENT OF CAPACITY SHOULD BE WEIGHED AGAINST THE CONSEQUENCES OF ALTERNATIVE OPTIONS. CERTAIN BASIC QUESTIONS NEED TO BE ADDRESSED:

--WHICH IS THE LEAST COSTLY?

--WHICH IS MOST LIKELY TO SUCCEED IN PROVIDING NEEDED CAPACITY IN A TIMELY MANNER?

--WHICH IS LIKELY TO ALLOW FOR MAXIMUM FLEXIBILITY IN CAPACITY IN CASE ASSUMPTIONS OR CIRCUMSTANCES CHANGE?

ANALYSIS OF THE OPTIONS LED US TO CONCLUDE THAT THE NEXT INCREMENT OF URANIUM ENRICHMENT CAPACITY SHOULD BE ACHIEVED

BY ADDING ON TO THE EXISTING GOVERNMENT GASEOUS DIFFUSION PLANTS FOR THE FOLLOWING REASONS.

1. THE UEA PROPOSAL IS NOT ACCEPTABLE. ITS FUNDAMENTAL SHORTCOMING IS THAT IT SHIFTS MOST OF THE RISKS TO THE GOVERNMENT DURING THE CONSTRUCTION AND BREAK-IN PERIOD. IN PARTICULAR, THE PROPOSAL GIVES THE PRIVATE GROUP THE OPTION TO TURN THE PROJECT OVER TO THE GOVERNMENT IF LONG-TERM FINANCING CANNOT BE ARRANGED, OR IF THE PLANT DOES NOT HAVE ASSURED CUSTOMERS, OR UNDER CERTAIN OTHER CONDITIONS. THESE PROVISIONS SEEM EXCESSIVELY GENEROUS. ALSO, CONTRACTS THAT UEA WILL REQUIRE CUSTOMERS TO SIGN BEFORE IT ACCEPTS RESPONSIBILITY FOR THE PROJECT ESSENTIALLY ASSURES IT A STATED RATE OF RETURN.
2. A DECISION IS NEEDED NOW, AT LEAST ON THE NEXT INCREMENT OF URANIUM ENRICHMENT CAPACITY, IF IT IS TO COME ONLINE IN THE EARLY 1980'S WHEN NEEDED. BECAUSE OF THE TECHNOLOGICAL OBSOLESCENCE FACTORS ASSOCIATED WITH THE NEXT INCREMENT BEING THE LAST OF ITS KIND, IT IS DOUBTFUL THAT UEA WOULD ACCEPT MUCH LESS IN THE WAY OF GOVERNMENT ASSURANCES AND GUARANTEES THAN THOSE INCLUDED IN ITS PROPOSAL. PROLONGED NEGOTIATIONS ON THIS UEA PROPOSAL COULD BE DIFFICULT AND DELAY FURTHER THE DECISION ON THE NEXT INCREMENT.

3. THERE IS A GREATER POTENTIAL FOR SLIPPAGE IN UEA'S SCHEDULE FOR BRINGING ADDITIONAL CAPACITY ONLINE. ON BALANCE, WE BELIEVE THAT PROBLEMS WHICH COULD OCCUR IN LICENSING THE NEW FACILITY--OBTAINING ELECTRIC POWER FOR THE FACILITY AND OBTAINING THE REQUIRED CAPITAL INVESTMENT--OUTWEIGH ANY SIMILAR PROBLEMS WHICH WOULD BE FACED IN ADDING CAPACITY TO AN EXISTING GOVERNMENT PLANT.
4. ADDING TO AN EXISTING PLANT CAN BE DONE AT AN ESTIMATED CONSTRUCTION COST OF \$2.1 BILLION AS COMPARED TO THE ESTIMATED COST OF UEA CONSTRUCTING A STAND-ALONE PLANT OF \$2.7 BILLION.
5. AN ADD ON CAN BE BUILT IN INCREMENTS THEREBY KEEPING ADDITIONAL GASEOUS DIFFUSION CAPACITY AT THE MINIMUM CONSISTENT WITH THE DEVELOPMENT OF CENTRIFUGE TECHNOLOGY, AND MAXIMIZING FLEXIBILITY TO DEAL WITH PROBLEMS OF CHANGING DEMANDS OR POOR PROJECTIONS.
6. MANAGEMENT OF THE GOVERNMENT ENRICHMENT FACILITIES COULD BE ACCOMPLISHED MORE EFFECTIVELY BY A CORPORATION HAVING SELF-FINANCING AUTHORITY TO BORROW FUNDS FROM THE TREASURY OR THE PUBLIC. A SELF-FINANCING PROPOSAL WOULD FREE THE CORPORATION FROM THE BUDGETARY REQUIREMENTS TO SEEK CONGRESSIONAL APPROVAL OF APPROPRIATIONS, THEREBY ACHIEVING A MAJOR GOAL SOUGHT BY THE PRESENT LEGISLATIVE PROPOSAL.

WE DELIBERATELY SEPARATED THE ISSUE OF THE NEXT INCREMENT FROM THE QUESTION SURROUNDING ADDITIONAL, SUCCEEDING CAPACITY. WHILE THE ISSUES ARE PRESENTED IN THE ADMINISTRATION'S LEGISLATIVE PROPOSAL AS A PACKAGE, THEY ARE CLEARLY SEPARABLE. OUR ANALYSIS YIELDED NO AREAS IN WHICH A DECISION NOT TO PROCEED WITH PRIVATIZATION OF THE NEXT INCREMENT WOULD PRECLUDE ACTIONS TO ENCOURAGE A COMPETITIVE PRIVATE INDUSTRY FOR FUTURE CAPACITY USING GASEOUS CENTRIFUGE AND OTHER ADVANCED TECHNOLOGIES. WE BELIEVE THE GREATER INDUSTRY INTEREST IN CENTRIFUGE OPERATIONS IS AN ENCOURAGING SIGN.

RESEARCH AND DEVELOPMENT EFFORTS IN ADVANCED ENRICHMENT TECHNOLOGIES SUCH AS GASEOUS CENTRIFUGE AND LASER ISOTOPE SEPARATION OFFER POTENTIAL FOR MORE EFFICIENT ENRICHMENT OF URANIUM. GASEOUS CENTRIFUGE ALSO OFFERS THE POTENTIAL FOR INVOLVEMENT OF MORE PRIVATE FIRMS BECAUSE IT CAN BE BUILT IN SMALLER INCREMENTS REQUIRING LESS CAPITAL. EVEN WITH USING ADVANCED TECHNOLOGIES, HOWEVER, COMPETITION WILL BE LIMITED BECAUSE THE CAPITAL INVESTMENT REQUIRED IS STILL LARGE (ABOUT \$1 BILLION), THE GOVERNMENT WILL LIKELY CONTINUE TO CONTROL THE TECHNOLOGY, AND THE FIRMS WHICH HAVE INDICATED AN INTEREST IN THE PROCESS HAVE ALSO INDICATED THAT CUSTOMERS ARE REQUIRED TO TAKE A SET AMOUNT OF PRODUCTION.

WE BELIEVE THAT ERDA SHOULD SEEK AND ENCOURAGE PRIVATE INDUSTRY TO CONTINUE EFFORTS IN ADVANCED TECHNOLOGIES THROUGH EXPLICIT PROGRAMS. WE RECOGNIZE THAT GOVERNMENT ASSISTANCE

AND ASSURANCES WILL BE REQUIRED. IN WORKING TO THIS END, HOWEVER, THE GOVERNMENT SHOULD SEEK A MORE EQUITABLE SHARING OF RISK BY THE PRIVATE ENRICHERS AND THE GOVERNMENT.

ERDA'S ADMINISTRATOR, IN TESTIMONY BEFORE THIS COMMITTEE ON DECEMBER 2, 1975, CITED AREAS OF DISAGREEMENT WITH OUR REPORT. I WOULD LIKE TO BRIEFLY ADDRESS THESE AREAS.

COST OF THE ADD-ON VERSUS COST OF UEA PLANT

ERDA MAINTAINS THAT THERE IS NO SOLID BASIS TO CONTEND THAT AN ADD-ON PLANT WILL PRODUCE A LESS COSTLY PRODUCT THAN THE UEA PLANT. ERDA CONTEMPLATES USING A COAL PLANT--RATHER THAN A NUCLEAR PLANT TO SUPPLY THE ELECTRICITY NEEDED TO POWER AN ADD-ON AT PORTSMOUTH. ERDA ESTIMATES THAT USING A COAL PLANT WOULD ADD MORE THAN \$100 MILLION A YEAR IN OPERATING COSTS. THE UEA PLANT PROPOSES TO USE NUCLEAR POWER TO SUPPLY THE NEEDED ELECTRICITY.

THE QUESTION OF WHETHER NUCLEAR PLANTS CAN GENERATE ELECTRICITY CHEAPER THAN COAL OR OTHER FOSSIL FUEL PLANTS IS BEING DEBATED IN THIS COUNTRY TODAY. BECAUSE OF CHANGING MARKET CONDITIONS AND THE LONG LEAD TIMES INVOLVED IN CONSTRUCTING ELECTRICAL GENERATING FACILITIES, ESTIMATES OF ELECTRICAL POWER COSTS ARE SUBJECT TO MANY UNCERTAINTIES. IN OUR VIEW QUANTIFYING SUCH COSTS BEFORE FIRM COMMITMENTS FOR ELECTRICAL POWER HAVE BEEN ENTERED INTO COULD BE MISLEADING AND SHOULD NOT BE RELIED ON HEAVILY IN DECIDING THE ECONOMICS OF A GOVERNMENT ADD-ON VERSUS THE PROPOSED UEA PLANT. ALONG THESE LINES, IT SHOULD BE RECOGNIZED THAT DELAYS IN GETTING THE

NUCLEAR POWER PLANTS ON LINE TO SUPPORT THE PROPOSED UEA PLANT COULD INCREASE UEA'S COST FOR ELECTRICAL POWER.

TIMELINESS OF THE ADD-ON VERSUS THE UEA PLANT

ERDA MAINTAINS THAT THERE IS NO SOLID BASIS TO CONTEND THAT AN ADD-ON PLANT COULD BE CONSTRUCTED IN A MORE TIMELY MANNER THAN THE UEA PLANT. NEITHER THE ADD-ON PLANT NOR THE PROPOSED UEA PLANT CAN BE SCHEDULED WITH ABSOLUTE CERTAINTY TO BE COMPLETED AHEAD OF THE OTHER. ERDA MAY ALSO ENCOUNTER DIFFICULTIES IN OBTAINING THE NEEDED ELECTRICAL POWER FOR AN ADD-ON PLANT. SEVERAL FACTORS STRONGLY SUGGEST, HOWEVER, A GREATER POTENTIAL FOR SLIPPAGE IN THE UEA SCHEDULE. ACCORDING TO ERDA AND ERDA CONTRACTOR OFFICIALS, UEA HAS MADE INSUFFICIENT ALLOWANCE IN ITS SCHEDULE FOR CONTINGENCY FACTORS AND TESTING OF CERTAIN COMPONENTS. THESE OFFICIALS TOLD US THAT THE UEA SCHEDULE, ALTHOUGH POSSIBLE TO ACHIEVE, COULD BE OPTIMISTIC BY AS MUCH AS ONE TO TWO YEARS.

UEA ANTICIPATES OBTAINING 60 PERCENT OF THE FINANCING FOR THE PROJECT FROM FOREIGN COUNTRIES. ALTHOUGH A NUMBER OF FOREIGN COUNTRIES HAVE EXPRESSED INTEREST IN PARTICIPATING IN THE PROJECT, IT IS SIGNIFICANT TO NOTE THAT NONE HAS MADE STRONG COMMITMENTS SUCH AS LETTERS OF INTENT. CONSEQUENTLY, DELAYS IN THE SCHEDULE BECAUSE OF FINANCING DIFFICULTIES ARE POSSIBLE.

AS PREVIOUSLY STATED, ON BALANCE WE BELIEVE THE PROBLEMS WHICH COULD OCCUR IN (1) LICENSING THE UEA PLANT, (2) OBTAINING ELECTRICAL POWER TO RUN THE UEA PLANT AND THE RELATED

LICENSE OF ANY REQUIRED NUCLEAR POWER PLANTS, AND (3) OBTAINING THE REQUIRED CAPITAL INVESTMENT, OUTWEIGH THE PROBLEMS LIKELY TO BE FACED IN ADDING CAPACITY TO EXISTING PLANTS.

FLEXIBILITY OF THE ADD-ON TO MEET CHANING MARKET NEEDS

ERDA MAINTAINS THAT THE BEST WAY TO PROVIDE FLEXIBILITY TO MEET CHANGING MARKET NEEDS IS TO PROCEED WITH BOTH A FULL-SIZE DIFFUSION PLANT AND THE CENTRIFUGE PROCESS IN A COMMERCIAL ENVIRONMENT. ERDA INDICATED THAT SUCH FLEXIBILITY IS NEEDED BECAUSE OF URANIUM AND PLUTONIUM RECYCLE DELAYS AND THE POSSIBILITY THAT ENRICHMENT PLANTS MIGHT OPERATE AT LOWER TAILS ASSAYS. WE AGREE THAT SUCH FACTORS SUPPORT THE NEED FOR ADDITIONAL URANIUM ENRICHMENT CAPACITY. HOWEVER, RECENT CANCELLATIONS IN NUCLEAR POWER PLANT ORDERS AND SLIPPAGES IN PLANT ON-LINE DATES WOULD TEND TO REDUCE THAT NEED AND THEREBY KEEPING ADDITIONAL GASEOUS DIFFUSION CAPACITY AT THE MINIMUM CONSISTENT WITH THE DEVELOPMENT OF CENTRIFUGE TECHNOLOGY, AND MAXIMIZING FLEXIBILITY TO DEAL WITH PROBLEMS OF CHANGING DEMANDS OR POOR PROJECTIONS.

IMPACT ON THE FEDERAL BUDGET ON THE ADD-ON AND THE UEA PLANT

ERDA POINTS OUT THAT THE UEA PROPOSAL WOULD REMOVE THE COSTS OF CONSTRUCTION FROM THE FEDERAL BUDGET THUS ELIMINATING A COST TO THE TAXPAYER. AS MENTIONED EARLIER, SO WOULD A NUMBER OF OTHER ALTERNATIVE ARRANGEMENTS, INCLUDING FORMS OF GOVERNMENT OWNERSHIP WHICH WOULD HAVE SELF-FINANCING AUTHORITY AND THE ABILITY TO BORROW FUNDS FROM THE PUBLIC.

PROJECTIONS OF COSTS AND REVENUES TO THE YEAR 1990 NECESSARILY INVOLVE PREDICTIONS OF FUTURE MARKET CONDITIONS AND ARE SUBJECT TO MUCH UNCERTAINTY. THE CREDITABILITY OF SUCH PROJECTIONS DECREASE AS THE PERIOD OF TIME OVER WHICH THEY ARE MADE INCREASES. WE DO NOT PLACE GREAT IMPORTANCE ON THE ABSOLUTE AMOUNT OF REVENUES ERDA HAS ESTIMATED WILL BE GENERATED BY 1990 OR WHEN COSTS INCURRED IN BUILDING THE ADD-ON WILL BE RECOUPED. HOWEVER, WE DO FEEL IT IS IMPORTANT TO POINT OUT THAT, ACCORDING TO ERDA ESTIMATES, CUMULATIVE REVENUES FROM THE THREE EXISTING GOVERNMENT PLANTS AND THE PROPOSED ADD-ON WILL EXCEED CUMULATIVE COSTS BY 1981.

RISKS TO THE UEA PLANT OWNERS

ERDA MAINTAINS THAT THE UEA DOMESTIC OWNERS RISK LOSING THEIR EQUITY IN THE PROJECT AND RETURN ON THAT EQUITY. UNDER ITS PROPOSAL, UEA RISKS LOSING ITS DOMESTIC EQUITY TO THE GOVERNMENT IN THE EVENT OF GROSS MISMANAGEMENT, GROSS NEGLIGENCE, OR WILLFUL MISCONDUCT. THE BURDEN OF PROOF WILL BE ON THE GOVERNMENT. IT IS DIFFICULT FOR US TO VISUALIZE ANY CIRCUMSTANCES WHERE THE GOVERNMENT COULD PROVE GROSS MISMANAGEMENT, GROSS NEGLIGENCE, OR WILLFUL MISCONDUCT, BECAUSE THE GOVERNMENT WILL BE INVOLVED IN PROVIDING UEA WITH TECHNICAL ASSISTANCE, DESIGN ASSISTANCE, PERSONNEL TRAINING, ENRICHMENT PROCESS REVIEW, POTENTIAL SUPPLIER EVALUATION, AND COMPONENT TESTING.

THE GOVERNMENT TAKE-OVER PROVISION WILL EXPIRE ABOUT ONE YEAR AFTER SUCCESSFUL COMMERCIAL OPERATION AND UEA ACCESS TO

ERDA'S STOCKPILE OF SWU EXPIRES AFTER FIVE YEARS. WITH THE EXCEPTION OF THESE ASSURANCES, UEA WILL BE ASSUMING THE RISKS ASSOCIATED WITH OPERATING THE PLANT. HOWEVER, THE GREATEST RISKS IN A PLANT OF THIS NATURE OCCUR DURING THE CONSTRUCTION AND INITIAL OPERATING PERIOD.

IN TESTIMONY BEFORE THIS COMMITTEE, ERDA ACKNOWLEDGED THAT, AS IT CURRENTLY STANDS, THE UEA PROPOSAL DOES NOT REFLECT AN EQUITABLE SHARING OF RISK.

DESIRABILITY OF A GOVERNMENT CORPORATION

ERDA MAINTAINS, WITH RESPECT TO OUR SUGGESTION TO CONSIDER ESTABLISHING A GOVERNMENT CORPORATION TO MANAGE THE GOVERNMENT'S ENRICHMENT FACILITIES, THAT

--THERE IS NO NEED TO SEPARATE THESE ACTIVITIES

FROM ERDA,

--REVENUES FROM ENRICHMENT SERVICES WOULD BE REMOVED FROM THE FEDERAL BUDGET, AND

--SUCH AN UNDERTAKING WOULD LEAVE THE IMPRESSION THAT THE FEDERAL GOVERNMENT IS NOT SERIOUSLY CONSIDERING COMMERCIALIZING URANIUM ENRICHMENT.

OVER THE YEARS WE HAVE EXPRESSED CONCERN THAT THE USE OF GOVERNMENT OWNED CORPORATIONS INSTEAD OF GOVERNMENT AGENCIES TO CARRY OUT PROGRAMS TENDS TO DIMINISH CONGRESSIONAL CONTROL. SUCH CONTROL NORMALLY IS ACHIEVED THROUGH CONGRESSIONAL OVERSIGHT HEARINGS AND THROUGH ACTION ON REQUESTS FOR APPROPRIATIONS.

THE APPROPRIATION CYCLE IS DESIRABLE AND PROPER FOR THOSE FEDERAL AGENCIES THAT PERFORM CONVENTIONAL GOVERNMENTAL FUNCTIONS. THIS CYCLE CAN BE INAPPROPRIATE, HOWEVER, FOR A BUSINESS-TYPE ENTERPRISE

--IF IT IS OBLIGED TO CHARGE RATES FOR ITS SERVICES SUFFICIENT TO PAY ITS OWN WAY; AND

--IF IT MUST PLAN AND OPERATE IN CLEAR HARMONY WITH PRIVATE INTEREST.

ERDA'S URANIUM ENRICHMENT ACTIVITY CLEARLY IS A BUSINESS-TYPE ENTERPRISE. ITS CONTRACTUAL COMMITMENTS WITH PRIVATE DOMESTIC AND FOREIGN USERS OF ENRICHED URANIUM REPRESENTS ALMOST ALL OF ITS TOTAL COMMITMENTS FOR FURNISHING ENRICHMENT SERVICES.

WE BELIEVE THE MANAGEMENT OF THE URANIUM ENRICHMENT ACTIVITY SHOULD BE PROVIDED WITH SUFFICIENT FLEXIBILITY TO ENABLE IT TO OPERATE THE ACTIVITY AS A BUSINESS-TYPE ENTERPRISE. A GOVERNMENT CORPORATION IS ONE WAY TO PROVIDE THIS FLEXIBILITY.

WITH RESPECT TO PRIVATIZATION OF ENRICHMENT FACILITIES, WE FULLY SUPPORT ENACTMENT OF LEGISLATION, SIMILAR TO THE NUCLEAR FUEL ASSURANCE ACT, WHICH WOULD PROVIDE SOME FORM OF GOVERNMENT ASSURANCE AND GUARANTEE TO PRIVATE FIRMS WISHING TO BUILD ENRICHMENT PLANTS USING THE CENTRIFUGE OR OTHER ADVANCED TECHNOLOGIES. WE FEEL THAT ENACTMENT OF SUCH LEGISLATION WOULD SUFFICIENTLY ENCOURAGE PRIVATE INDUSTRY TO BUILD ENRICHMENT PLANTS USING CENTRIFUGE OR OTHER ADVANCED TECHNOLOGIES AND THAT CONVERSION OF THE GOVERNMENT'S ENRICHMENT OPERATIONS TO

A MORE BUSINESSLIKE BASIS WOULD NOT DETER FUTURE PRIVATIZATION OF ADVANCED TECHNOLOGIES.

MR. CHAIRMAN, IN CLOSING WE WISH TO REITERATE THOSE MATTERS DISCUSSED IN THE REPORT WHICH WE BELIEVE YOUR COMMITTEE MAY WISH TO CONSIDER. THESE ARE:

- AUTHORIZING ERDA TO CONSTRUCT THE NEXT INCREMENT OF THE ENRICHMENT CAPACITY UTILIZING THE PROVEN ENRICHMENT PROCESS.
- ESTABLISHING A GOVERNMENT CORPORATION WITH SELF-FINANCING AUTHORITY TO MANAGE THE GOVERNMENT'S URANIUM ENRICHMENT FACILITIES.
- DEVELOPING LEGISLATION WITH PROVISIONS SIMILAR TO THOSE IN THE PROPOSED NUCLEAR FUEL ASSURANCE ACT AUTHORIZING ERDA TO ENTER INTO COOPERATIVE AGREEMENTS WITH PRIVATE ENRICHERS USING ADVANCED TECHNOLOGIES.

MR. CHAIRMAN, THIS CONCLUDES MY PREPARED STATEMENT. WE WILL BE GLAD TO RESPOND TO QUESTIONS.

NOTICE OF HEARINGS

Committee : Joint Committee on Atomic Energy  
Subject : Evaluation of the Administration's proposal for  
Government assistance to private uranium enrichment  
groups  
Date : Tuesday, December 9, 1975  
Time : GAO to be third witness - hearing begins at 10 a.m.  
Room : S.407 - Capitol  
Membership : Senator John O. Pastore (D.-R.I.), Chairman  
Representative Melvin Price (D.-Ill.), Vice Chairman

SENATE MEMBERS

Majority : (5 D.) Senators Pastore (R.I.), Jackson (Wash.),  
Symington (Mo.), Montoya (N. Mex.), and  
Tunney (Calif.)  
Minority : (4 R.) Senators Baker (Tenn.), Case (N.J.), Pearson (Kan.),  
and Buckley (N.Y.)

HOUSE MEMBERS

Majority : (5 D.) Representatives Price (Ill.), Young (Tex.),  
Roncalio (Wyo.), McCormack (Wash.), and Moss (Calif.)  
Minority : (4 R.) Representatives Anderson (Ill.), Lujan (N. Mex.),  
Horton (N.Y.), and Hinshaw (Calif.)  
Principal Staff: George Murphy, Executive Director  
GAO Witness : Elmer B. Staats, Comptroller General  
Accompanied By: Richard W. Kelley, Associate Director, REDD  
Ralph V. Carlone, Assistant Director, REDD  
Monte E. Canfield, Director, OSP  
Peter J. McGough, Legislative Adviser, OCR

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Legislative Adviser, OCR