

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

Title: BRIEFING ON U.S. ENRICHMENT CORPORATION
CERTIFICATION - PUBLIC MEETING

Location: Rockville, Maryland

Date: Friday, March 22, 1996

Pages: 1 - 40

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2 NUCLEAR REGULATORY COMMISSION

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4 BRIEFING ON U.S. ENRICHMENT
5 CORPORATION CERTIFICATION

6 - - -

7 PUBLIC MEETING

8
9 Nuclear Regulatory Commission
10 One White Flint North
11 Rockville, Maryland

12
13 Friday, March 22, 1996

14
15 The Commission met in open session, pursuant to
16 notice, at 2:00 p.m., Shirley A. Jackson, Chairman,
17 presiding.

18
19 COMMISSIONERS PRESENT:

20 SHIRLEY A. JACKSON, Chairman of the Commission
21 KENNETH C. ROGERS, Commissioner
22 GRETA J. DICUS, Commissioner

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1 STAFF PRESENT:

2 JOHN C. HOYLE, Secretary of the Commission

3 KAREN D. CYR, General Counsel

4 PRESENTERS:

5 HUGH THOMPSON, Deputy Executive Director, NMSS &
6 Operations Support

7 CARL PAPERIELLO, Director, NMSS

8 ELIZABETH TEN EYCK, Director, Fuel Cycle Safety
9 and Safeguards Division, NMSS

10 CYNTHIA PEDERSON, Director, Division of Radiation
11 Safety & Safeguards, Region III

12 JOHN HICKEY, Chief, Enrichment Branch, NMSS

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P R O C E E D I N G S

CHAIRMAN JACKSON: Good afternoon, ladies and gentlemen. This afternoon the staff will be briefing the Commission on the current status of the certification process for the United States Enrichment Corporation, USEC, gaseous diffusion facilities in Paducah, Kentucky, and Portsmouth, Ohio.

The Energy Policy Act of 1992, which established the U.S. Enrichment Corporation, placed added responsibilities on the NRC. The Act required that we establish standards to govern the gaseous diffusion uranium enrichment facilities in order to protect public health and safety. This requirement was satisfied by the Commission in September of 1994 when we published 10 CFR Part 76 regulations pertaining to the certification of gaseous diffusion plants.

The Act also required that the NRC establish a certification process to ensure that the USEC complies with the standards we established in 10 CFR Part 76.

The USEC submitted an application in September 1995 that the NRC is currently reviewing. Today the staff will be briefing the Commission on the status of that review.

In November of last year I had the opportunity to tour the gaseous diffusion facility at Paducah. So I am

1 particularly interested in hearing from the staff on the
2 status of its review of both the Paducah and the Portsmouth
3 plants.

4 I understand that copies of the staff's paper and
5 charts are available at the entrances to the meeting.

6 I would like to note for the record that
7 Commissioner Dicus has indicated her recusal from actions
8 relative to USEC certification because of her previous
9 service on the board.

10 Commissioner Rogers, do you have anything to add?

11 COMMISSIONER ROGERS: Nothing, thank you.

12 CHAIRMAN JACKSON: Commissioner Dicus?

13 COMMISSIONER DICUS: Nothing.

14 CHAIRMAN JACKSON: Mr. Thompson, you may proceed.

15 MR. THOMPSON: Thank you, Chairman Jackson,
16 Commissioner Rogers, and Commissioner Dicus. I hope that
17 you will be informed of some of the staff actions, because
18 as we do go forward with other potential areas and looking
19 at DOE facilities, there are some lessons learned that we
20 will have here that will be helpful in understanding what
21 potential future challenges the staff and NRC may face.
22 Today we are nearing completion on a really unique and
23 important element in our agency's responsibility.

24 Dr. Paperiello, who is the director of NMSS, and
25 his staff, and Cynthia from Region III are here today. It

1 has been a team effort. We have had a lot of effort on the
2 part of the NMSS staff. The regional staff and the resident
3 inspectors have been working very hard on this area.

4 Some significant areas have been identified. We
5 will give you a discussion of those today. With that, I
6 will turn it over to Dr. Paperiello to introduce the staff
7 and start today's briefing.

8 MR. PAPERIELLO: Thank you. Our presentation
9 today will be made by Elizabeth Ten Eyck, who is the
10 director of the Division of Fuel Cycle Safety and Safeguards
11 in NMSS. I also have Cynthia Pederson, who is the cognizant
12 division director under whom the inspectors at the fuel
13 cycle facilities work in Region III; and John Hickey, who is
14 in charge of our certification people under whom the
15 headquarters staff works.

16 Before Elizabeth Ten Eyck makes her presentation,
17 I would like to reflect on a couple things. This
18 certification frankly has taken longer and has been more
19 difficult than I would have expected. I do plan, after we
20 complete certification, to conduct a lessons learned,
21 eliciting input from USEC to find out in the future when we
22 get these one of a kind type of activities what we do to
23 expedite the process.

24 I will note that had we to do it all over again, I
25 would have provided written expectations to U.S. Enrichment

1 Corporation, because at times some of the material received
2 was either less than expected or differed from our
3 expectations. We had a lot of meetings. I don't think
4 anybody at these meetings attempted to do any
5 miscommunication, but when understandings aren't necessarily
6 in writing, that may have contributed to it. Something like
7 a standard review plan but something we could have given
8 people up front.

9 The second difficulty has been emergent issues,
10 issues that we never expected when we got into this thing,
11 such as the seismic status of Paducah, the fact that the
12 facility really didn't meet DOE's expectations, and the
13 issue noted in the slides that we are going to talk about
14 today, the autoclave testing. There were things that came
15 up which we could not have anticipated.

16 So I think those two things have added to the time
17 that it has taken to do this and the difficulties we have
18 had.

19 Liz, if you would like to make your presentation.

20 MS. TEN EYCK: Good afternoon. Since 1992 staff
21 has been working on the certification process of the gaseous
22 diffusion plants located at Paducah, Kentucky, and
23 Portsmouth, Ohio. We believe that we are nearing the end of
24 the initial certification process, and we are here today to
25 provide you a status on our activities to date and also on

1 the work remaining.

2 [Slide.]

3 MS. TEN EYCK: Our comments today will be grouped
4 in four major areas.

5 We will provide a brief background of how we got
6 into the certification business.

7 Then we will spend the majority of our time
8 discussing the status and significant issues that remain to
9 be resolved.

10 We will then discuss our activities in working
11 with the public and other government agencies.

12 Finally, discuss our projected schedule for
13 completion and our plans for completing the certification
14 process.

15 [Slide.]

16 MS. TEN EYCK: As the Chairman mentioned, the
17 Energy Policy Act of 1992 established the USEC for the
18 purpose of leasing and operating the gaseous diffusion
19 plants. It also directed the NRC to establish standards
20 which would govern the safety, safeguards, and security of
21 the GDPs within two years and to provide for a certification
22 mechanism to Congress regarding the compliance with those
23 standards.

24 It is important to note that we will be certifying
25 the gaseous diffusion plants and not licensing them, which

1 is the normal NRC process. The certification will be based
2 on an application and a certification plan. The Act
3 actually provided for a compliance plan. It viewed that the
4 GDPs may not be able to come up to NRC standards immediately
5 and provided for a compliance plan.

6 A compliance plan will be developed by the
7 Department of Energy and submitted by the USEC which will
8 identify areas where they are not currently in compliance
9 with our requirements. It will contain a justification for
10 continued operation, including compensatory measures, and it
11 will identify their plan of action for coming into
12 compliance with NRC's requirements.

13 A compliance plan doesn't really have any
14 counterpart in the NRC licensing process where normally NRC
15 would not license facilities unless they met NRC
16 requirements.

17 [Slide.]

18 MS. TEN EYCK: The USEC's initial application was
19 submitted to the NRC in April of 1995, but it was rejected
20 because it did not contain enough information for the staff
21 to make a determination on whether the gaseous diffusion
22 plants met our requirements. The NRC staff then, to include
23 Headquarters, Region III and the four resident inspectors
24 stationed at the two gaseous diffusion plants, worked very
25 hard to communicate with USEC our expectations with regard

1 to certification. The advice and the assistance that were
2 provided by Region III and the resident inspectors proved
3 invaluable to us in this certification process.

4 The USEC then submitted a substantially revised
5 application to NRC in September of 1995. In November of
6 1995 they submitted a compliance plan which contained
7 unanticipated exceptions to the compliance plan.

8 USEC has been operating the facilities since July
9 of 1993 with the assistance of their contractor Lockheed
10 Martin Utility Services. DOE provides the regulatory
11 oversight for the operation of the facilities and will
12 continue to do so until NRC assumes regulatory jurisdiction.

13 [Slide.]

14 MS. TEN EYCK: The first bullet lists some
15 significant issues that have required resolution and have
16 required a lot of staff effort in the recent past. Only the
17 broad worker protection issue has been resolved to date, and
18 we have accepted their submittal in that area.

19 Some of the remaining issues have had many, many
20 meetings to discuss our expectations at many levels of USEC.
21 We have, we believe, come to an understanding on some of
22 them. Others still demand further meetings to reach a
23 resolution.

24 In each case staff will be required to review the
25 final submittals for the application and the compliance

1 plan, which really are complementary documents that support
2 each other, before we can issue a certification.

3 Now let's take a brief look at some of the topical
4 areas where we have had to spend this extra effort in
5 resolution and, as Dr. Paperiello said, could not really
6 have been anticipated prior to the certification effort.

7 [Slide.]

8 MS. TEN EYCK: In the area of worker protection,
9 we are concerned about the hazards to the worker from the
10 large inventory of uranium hexafluoride and also other
11 hazardous chemicals that are part of the enrichment process.

12 The certification process is governed by 10 CFR
13 Part 76 and is based on technical safety requirements, or
14 TSRs as they are commonly called, and they would be very
15 similar to tech specs in our reactor space.

16 The staff supports a comprehensive TSR for worker
17 protection where the worker will be in close proximity to
18 lethal chemicals, hazardous chemicals, I may add, of
19 substantial quantities, and they support very specific TSRs
20 to prevent or mitigate accidents that could result in
21 unplanned releases that far exceed our Part 20 requirements.

22 Although some DOE orders and DOE operating safety
23 requirements had addressed worker safety, the USEC did not
24 think that they had to provide worker safety provisions to
25 us in the NRC TSRs. However, we have subsequently, through

1 meetings, resolved that misunderstanding, and as I mentioned
2 earlier, they have submitted to us a comprehensive worker
3 safety requirement that staff has found acceptable.

4 CHAIRMAN JACKSON: Before you go on from there,
5 let me ask you a question.

6 Does OSHA have a role to play in the evaluation of
7 worker safety? Do we have an MOU with OSHA? Has it been
8 finalized? And how does that affect what we consider to be
9 the acceptability or not in this area of the question of
10 worker protection?

11 Finally, is a final MOU required for
12 certification?

13 MS. TEN EYCK: Let me start by saying that both
14 NRC and OSHA have statutory authority over the UF6 and
15 hazardous chemicals at the plant. Because of this, we felt
16 it was imperative that we have a firm understanding between
17 each agency regarding their role. That coordination has
18 been documented in an MOU which will be forthcoming to the
19 Commission in the very near future. So we have a common
20 understanding between us and OSHA regarding our respective
21 roles.

22 CHAIRMAN JACKSON: Is that a requirement for
23 certification?

24 MS. TEN EYCK: It's not actually a requirement,
25 but we think it's a very important part of our regulatory

1 oversight role and we plan to have it completed well before
2 certification.

3 CHAIRMAN JACKSON: The fact that it is not
4 finalized at this point, will that have any impact on the
5 resolution of the worker protection issues?

6 MS. TEN EYCK: No. Actually, we have a draft that
7 has been reviewed by the staffs of both agencies and it's
8 just a question of getting it up and formally signed at this
9 point.

10 CHAIRMAN JACKSON: Okay.

11 COMMISSIONER ROGERS: Are there any limitations on
12 the extent of our authority with respect to chemical hazards
13 at these plants?

14 MS. TEN EYCK: The authority will really be based
15 on the MOU, because we tend to have overlapping
16 responsibilities. We look at the MOU as the vehicle to
17 clearly specify the roles of each agency. There would be
18 some potential overlap in some areas, but we plan to work
19 very closely with them to minimize any overlap from a
20 negative perspective.

21 MR. THOMPSON: You may recall, Commissioner
22 Rogers, the regulatory gap that had been identified
23 sometimes with the fuel cycle facilities. The approach had
24 been to have an MOU where we have the NRC inspectors undergo
25 some OSHA training so that we would have the ability to

1 identify to OSHA those hazards that we may not have a
2 regulatory responsibility for and be able to make sure that
3 the USEC would be aware of something we identified as well
4 as to make sure OSHA, who would have the enforcement
5 authority for those activities, would be notified of those
6 and take action if they deemed that to be appropriate.

7 As Elizabeth said, there are areas where we have
8 dual jurisdiction and there are areas for which OSHA has the
9 only responsibility, and that's why we have an MOU approach
10 to how we communicate when we identify those regulatory
11 gaps.

12 MS. TEN EYCK: I also understand that our resident
13 inspectors have received some OSHA training already.

14 COMMISSIONER ROGERS: Thank you.

15 [Slide.]

16 MS. TEN EYCK: Here the quality assurance issue is
17 limited to what is necessary as quality assurance to assure
18 safety. Items relied on for safety must be available and
19 reliable when needed.

20 USEC's initial application did not provide
21 adequate quality assurance for UF6 confinement, criticality
22 prevention, or fire protection.

23 One QA issue that needs to be resolved is defining
24 safety boundaries. Just as safety systems are required to
25 be available and reliable, they often depend upon support

1 systems such as electricity and compressed air, which also
2 must be equally available and reliable.

3 Resolution of these issues means coming to
4 agreement on what is actually appropriate safety boundaries
5 and also the level of QA that is appropriate commensurate
6 with the risk of the safety systems.

7 COMMISSIONER ROGERS: QA has several different
8 aspects. One of them is the documentation aspect that is so
9 important to actually provide some way of identifying that
10 certain things are in place, certain procedures have been
11 followed. It's a documentation aspect as well as quality
12 control aspect. To what extent are the issues here more in
13 the area of documentation, providing adequate assurance
14 through appropriate documents that all the bases have been
15 covered?

16 MS. TEN EYCK: I can assure you that it's not just
17 the documentation area. To give you an example. For a fire
18 protection system it would be very important to provide
19 quality assurance to, say, the sprinkler heads when the
20 system depends on deluge of water to eliminate the problem.
21 But we feel it's also appropriate that they provide
22 reliability of the water source, the piping that delivers
23 the water, and the pumps that would be used in the sprinkler
24 system. We have seen indications at the facilities where
25 all of that equipment is not in appropriate condition to

1 assure a reliable system. So it's definitely not just a
2 documentation issue.

3 CHAIRMAN JACKSON: What role does an integrated
4 safety assessment play?

5 MS. TEN EYCK: They are doing something similar to
6 that, looking over the plant and determining where the risks
7 are and then identifying what equipment is necessary to
8 assure the availability and reliability to preclude that
9 risk from happening. We are talking about the quality
10 assurance on that equipment that has been identified as
11 critical to providing adequate controls.

12 CHAIRMAN JACKSON: Okay.

13 [Slide.]

14 MS. TEN EYCK: TSRs, or technical safety
15 requirements, define the conditions, the safe boundaries and
16 the administrative or management controls necessary to
17 ensure the safe operation of the plant. As such, they are
18 really the operating safety envelope.

19 Many TSRs initially submitted by the USEC were not
20 adequate because either they were unclear, uninspectable, or
21 in some cases didn't appropriately address very important
22 systems. We would like to give you an example of such a
23 situation, which regards autoclave testing.

24 The tests rely on extrapolating low pressure data
25 to accident pressures. We found that the tests had not been

1 validated using actual autoclaves that are installed at the
2 facility. We depend upon an autoclave to confine any UF6
3 that might accidentally be released while heating the
4 cylinders. It is our understanding that none of the
5 autoclaves at either of the GDPs had actually been tested to
6 accident conditions. We expressed this concern to USEC, and
7 we understand now that such testing is underway.

8 CHAIRMAN JACKSON: When do you expect this testing
9 to be completed?

10 MS. TEN EYCK: Mr. Hickey.

11 MR. HICKEY: At least some of it will be completed
12 in a few weeks. Depending on the results of that, they may
13 need to continue to do some more testing after that.

14 CHAIRMAN JACKSON: The intention is that it would
15 be completely done before certification?

16 MS. TEN EYCK: Definitely.

17 CHAIRMAN JACKSON: Are there any other issues of
18 this magnitude or other projects or tests that would be
19 required to be completed before certification is issued?
20 Are there other things out there? That's really the
21 question.

22 MR. HICKEY: There is one other that comes to
23 mind. There are some UF6 detectors that they test, and they
24 have not really validated or quantified that test, in our
25 view. That would tell them if there is a big UF6 leak.

1 They are also working on a method to improve and validate
2 that test.

3 CHAIRMAN JACKSON: Again, the expectation would be
4 that that would have to be completed before certification?

5 MR. HICKEY: Yes.

6 CHAIRMAN JACKSON: Okay.

7 MS. TEN EYCK: Staff is working very closely on
8 all of these TSRs and we will continue to do that before we
9 can reach initial certification.

10 [Slide.]

11 MS. TEN EYCK: Another area of significant concern
12 is the DOE-owned contaminated material and equipment that is
13 stored in many locations at both Portsmouth and Paducah.
14 Some of this material has not been characterized or
15 quantified.

16 NRC requires that any material that is stored in
17 USEC space needs to be characterized and treated
18 commensurate with the risk that it presents. Details on how
19 USEC and DOE will provide adequate accountability and
20 physical protection of this material has yet to be resolved
21 or provided to NRC. So this is another outstanding issue.
22 We are waiting for resolution.

23 CHAIRMAN JACKSON: This is one again that would be
24 resolved before a certification decision?

25 MS. TEN EYCK: Yes. All of these will have to be

1 resolved before a certification decision.

2 COMMISSIONER ROGERS: What is the mechanism for
3 resolution?

4 MS. TEN EYCK: There could be a number of ways.
5 That is something that is being discussed between USEC and
6 DOE right now. We feel that if the material remains in USEC
7 leased space and it is under USEC control, then they need to
8 know what is in there, what the quantity is, and to provide
9 appropriate containment of the material.

10 If DOE should maintain custody of the material,
11 then we feel that it needs to be appropriately isolated from
12 USEC space so that it does not provide ready access to all
13 of the employees.

14 There are various solutions somewhere between the
15 two, I think. At this point we are looking to USEC and DOE
16 to provide a solution that they feel acceptable and then
17 come to us and see if it meets our requirements.

18 CHAIRMAN JACKSON: In your opinion, how far from
19 resolution is this?

20 MS. TEN EYCK: It has been an issue that we have
21 been discussing for a long time. They knew from the very
22 beginning -- we haven't changed our position on any of these
23 issues as such -- that they were going to have to address
24 it. They have tossed many alternatives back and forth
25 between them. I am confident that we will come to a

1 resolution on this and that it will not impact on the
2 initial certification.

3 MR. HICKEY: Could I make a clarification? When
4 we say that it will resolve it prior to certification
5 consistent with the compliance plan, there may be a
6 corrective action where we have agreed on a schedule that
7 may carry past the certification date. So we are not saying
8 all the corrective actions will necessarily be taken before
9 certification, but we will agree on what the corrective
10 action is and the schedule for anything that is not carried
11 out.

12 MR. THOMPSON: If compensating measures need to be
13 taken to assure assurance, those will be put in place.

14 CHAIRMAN JACKSON: This one is a little bit of an
15 issue in the following sense. Presumably you have a
16 methodology for resolution that then gets put into the
17 compliance plan, which then is part of the schedule, but you
18 are talking about something that has not yet been
19 characterized nor quantified. At a certain point there is a
20 lack of knowledge relative to the potential for resolution
21 within some specified time frame. So I guess I am somewhat
22 confused as to how much of a methodology for resolution has
23 to be in place and does it include characterization and/or
24 quantification of this material in order to have something
25 realistic put into the compliance plan.

1 MS. TEN EYCK: There could be solutions that would
2 not require them to characterize the material. That would
3 be either DOE moves it off site or collocates it all in one
4 area and then provides protection for it under DOE
5 authority. Even if it's not moved out, if DOE could isolate
6 that material so that there would not be ready access by
7 USEC employees, then they would maintain custody of the
8 material and they wouldn't necessarily have to characterize
9 it to NRC.

10 CHAIRMAN JACKSON: Without characterization at a
11 certain level, you don't know the degree of hazard.

12 MS. TEN EYCK: Exactly.

13 MR. PAPERIELLO: You would then have to create
14 margin. In other words, make assumptions on how bad it
15 could be and then make sure there was enough margin. The
16 material could be, at least from a first principles
17 viewpoint, something that is flammable, something that is
18 chemically reactive, an oxidizer, or reactive criticality,
19 depending upon enrichment and how much and all that. You
20 would have to create enough margin in your system so if it
21 did burn you could put it out; that you kept enough other
22 uranium away from it so you couldn't create a critical
23 configuration. You would have to create that kind of margin
24 around it.

25 CHAIRMAN JACKSON: You are basically saying, to

1 the degree that it's not characterized, that also determines
2 the degree of stringency in terms of the margin.

3 MR. PAPERIELLO: That's what it would appear to
4 me, yes.

5 MS. TEN EYCK: I would also like to note that the
6 majority of this material is really low level waste.

7 CHAIRMAN JACKSON: I appreciate that. The real
8 issue has to do with having some assessment of what the
9 significance of it is relative to what you put into place in
10 a compliance plan. That's all it is. It is not implying
11 that it is all on the order of spent fuel.

12 MR. PAPERIELLO: Yes. That's exactly right.

13 CHAIRMAN JACKSON: You would tend to put margins
14 in that would have extra stringency built in. So to the
15 degree that you don't have the characterization, you could
16 be overly stringent for that.

17 MR. THOMPSON: Right.

18 MR. PAPERIELLO: That's right.

19 CHAIRMAN JACKSON: Okay.

20 [Slide.]

21 MS. TEN EYCK: USEC requested certification to
22 enrich uranium to 10 percent or less and thus has avoided
23 more stringent NRC requirements that would apply to higher
24 enrichments. Recently it has been determined that at
25 Portsmouth there is material that is enriched to more than

1 10 percent but less than 20 percent in the cascade.

2 Contributing factors are believed to be both plant
3 configuration and the fact that DOE has been re-feeding high
4 enriched uranium into the cascade, although we are led to
5 believe that even if DOE was not re-feeding HEU at this
6 time, there still could possibly be material that would be
7 enriched to greater than 10 percent.

8 DOE and USEC are working on this issue and have
9 indicated to us that they believe they will be able to come
10 to some resolution of it before initial certification.
11 However, if that is not accomplished before the initial
12 certification, more stringent NRC requirements would be
13 appropriate.

14 COMMISSIONER ROGERS: Was this an unanticipated
15 event here?

16 MS. TEN EYCK: It's material that they are finding
17 that before we took over and had to be below 10 percent was
18 not a real issue, but apparently above the area where they
19 would withdraw product there is an area of purgery, as they
20 call it, which has lights and other contaminants. This is,
21 I believe, where we have been told that they are finding the
22 higher enrichments. Prior to NRC taking over regulatory
23 authority it wasn't a real issue, and now they are looking
24 to see how they can resolve it.

25 [Slide.]

1 MS. TEN EYCK: The safety analysis reports provide
2 the safety basis for the certification process. They
3 analyze the accidents, estimate the consequences, and
4 actually are the basis for the TSRs to maintain the
5 operation of the facility within safe boundaries.

6 The SARs that currently govern the certification
7 process were issued by the DOE in 1985. DOE is now
8 preparing an upgrade of that safety analysis report, and
9 they expect to have it completed by February of 1997.

10 The USEC will then have six months to propose for
11 NRC approval any corrections that would address weaknesses
12 that might be identified in the updated SAR. However, the
13 new SAR is a compliance plan issue that is part of the
14 initial certification process, and as such, we feel that any
15 corrective actions that are necessary as a result of the
16 1997 SAR will not come under the backfit provision.

17 CHAIRMAN JACKSON: Let me ask this question. This
18 is more one of tracking in terms of where things stand, in
19 terms of how far along the SAR is. I note that you will be
20 talking about your calendar soon, but it does anticipate the
21 NRC assuming regulatory jurisdiction over the plants before
22 this new SAR will be in place. I guess I am trying to get
23 some understanding. In regulatory space, how do we come to
24 closure in terms of once we've assumed regulatory
25 jurisdiction that we get a satisfactory SAR?

1 MS. TEN EYCK: It would be written into the
2 certification that any items or weaknesses that are
3 identified in the upgrade SAR will have to be resolved. As
4 I said earlier, the USEC would have six months to come to us
5 with their proposed resolution on any of these weaknesses.
6 So we want them to be addressed timely once they are
7 identified.

8 CHAIRMAN JACKSON: Have we laid out what we feel
9 those weaknesses and uncertainties are from the 1985 SAR?

10 MS. TEN EYCK: We certainly have in the 1985 SAR.
11 These are the issues that we are trying to come to
12 resolution on now, but at this point we don't have any idea
13 of any potential problems that may be identified as the
14 Department of Energy finalizes their SARs for the two sites.

15 CHAIRMAN JACKSON: Dr. Paperiello, you were going
16 to make a comment?

17 MR. PAPERIELLO: This is sort like a certification
18 versus licensing. DOE has a facility that is operating and
19 they are in the process of lateralling a football over to
20 us. That is sort of the situation we are in. When we
21 certify, the certification is going to be hedged. The rule
22 recognizes this. It will be conditioned on the compliance
23 plan, and the compliance plan will be the commitment needed
24 to upgrade the facility. That upgrading program was in
25 place before the certification process ever started. So we

1 are sort of taking this moving process and taking it over
2 from DOE. It's not a license; it's a very different sort of
3 thing.

4 CHAIRMAN JACKSON: I'm going to come back to you.

5 MR. PAPERIELLO: Sure.

6 [Slide.]

7 MS. TEN EYCK: This is one of the more contentious
8 issues that we have been dealing with. The Paducah plant is
9 located near the New Madrid fault, which was the epicenter
10 of one of the most intense earthquakes that has ever
11 occurred in the North American Continent. DOE's 1985 SAR
12 established criterion that the ground acceleration rate
13 should not exceed .18g for the remaining 25 year life of the
14 plant. What are the consequences of this?

15 During the 1985 SAR DOE had an occasion to
16 evaluate what the release would be of 64,000 pounds of UF6
17 and determined at that time that there would be no offsite
18 fatalities but there could be renal damage within
19 approximately three miles of the facility.

20 DOE, in upgrading their 1985 SAR, have
21 subsequently identified some structural weaknesses in the
22 supporting structures or the rocker arms for sections of the
23 roof and floor for two of the process buildings. The safety
24 concern here is that portions of these structural components
25 would fall onto the process equipment and breach confinement

1 and thus an uncontrolled release of the material to the
2 environment.

3 Until structural modifications are made, the sites
4 are operating under compensatory measures. They operate at
5 sub-atmospheric condition so that if there should be a
6 breach of confinement, the resulting release of the
7 chemicals of UF6 would be much smaller, and they are also
8 limiting worker access into the areas where structural
9 weaknesses exist.

10 COMMISSIONER ROGERS: Doesn't that assume that the
11 building integrity is not breached?

12 MS. TEN EYCK: Yes.

13 COMMISSIONER ROGERS: You can't maintain negative
14 pressure if the building has been sealed.

15 MS. TEN EYCK: They are maintaining
16 sub-atmospheric pressure in the actual process equipment in
17 the cascade, so that if there should be a breach of that
18 process equipment, it would tend to allow less material to
19 --

20 COMMISSIONER ROGERS: But not the building
21 integrity.

22 MS. TEN EYCK: Not the building itself.

23 MR. HICKEY: It has to do with the amount of
24 energy that is available to force the release.

25 COMMISSIONER ROGERS: I understand.

1 MR. PAPERIELLO: This system is not operated at
2 high pressures. Pressures can go from sub-atmospheric to
3 about 1-1/2 atmospheres. They are keeping it below
4 atmospheric pressure. Physically it is big. It's a big
5 hole. So it's not like air going in through a small hole,
6 but it would tend not to blow the material out. There would
7 be less material in terms of poundage, less material in
8 process.

9 COMMISSIONER ROGERS: I understand. Thank you.
10 [Slide.]

11 MS. TEN EYCK: The staff has formed an in-house
12 review group to evaluate the seismic issue, consisting of
13 representatives from Research, NRR and NMSS, who have been
14 involved in reviewing seismic issues in the past. This
15 group has met with DOE, visited Paducah, and has also
16 reviewed documentation that has been provided by DOE.

17 This review group has identified new information,
18 some of which is as yet unpublished, concerning fault and
19 liquefaction features recently observed in the site vicinity
20 and possibly indications of repeated occurrence of large
21 earthquakes associated with the New Madrid fault zone before
22 the historical 1811-1812 earthquake sequence. The review
23 group feels that this new information could result in a
24 higher ground acceleration estimate for a 250 year
25 earthquake.

1 This information has been provided to DOE as it
2 has become available in two separate packages, and the staff
3 is currently reviewing the DOE response to the first
4 package.

5 CHAIRMAN JACKSON: What kind of effective G value
6 are you talking about?

7 MS. TEN EYCK: They are looking as a solution to
8 protect at the 200 year earthquake more like .2g.

9 CHAIRMAN JACKSON: You were talking about some
10 information having to do with faults and liquefaction, et
11 cetera, that would suggest larger ground motion, and I'm
12 saying what kind of G factor.

13 MS. TEN EYCK: Up in the area from .2 to .24, as
14 compared to the original 250 year earthquake, which was
15 estimated to be apparently a .18g. I understand also under
16 some new calculational methods they feel that maybe .15g is
17 more appropriate for the 250 year earthquake. So we are in
18 a range of somewhere between .15 and .2 to .24.

19 CHAIRMAN JACKSON: How confident is the staff
20 about this new information?

21 MS. TEN EYCK: They have gotten this information
22 through conversations with members of the USGS who have been
23 looking and working in this area and from papers that have
24 been provided at different conferences.

25 Unlike the NRC process of kind of publishing data,

1 apparently it has not had any peer review that we are aware
2 of at this time, and at this point it is being provided to
3 DOE for their understanding and to make sure that they are
4 aware of it when they propose information back to us. I
5 understand that they have people that have been looking at
6 this data and were aware of a lot of it prior to us
7 identifying it to them.

8 Our concern was to make sure as they review and
9 propose to us these modifications to upgrade the building
10 that they were aware of in as current information as is
11 available.

12 CHAIRMAN JACKSON: As things stand, we are
13 comfortable with the .15g for the 250 year earthquake?

14 MS. TEN EYCK: What we would want to do is to
15 propose whatever we felt was appropriate after everyone
16 analyzes it. What we are finding is that one group of
17 analysts might come up with a different number than another
18 group of analysts. So we are going to have to come to a
19 resolution based on the best data that we have in
20 determining what is the appropriate G number.

21 Considering the limited life of the plant, the
22 staff is proposing that we certify the facilities based on a
23 number of items.

24 CHAIRMAN JACKSON: The compensatory measures would
25 track with whatever you settled out to be what the most

1 likely risk is in this particular case. Going back to the
2 seismic issues for the moment.

3 MS. TEN EYCK: What would be the most likely risk?

4 CHAIRMAN JACKSON: You talked about compensatory
5 measures with Commissioner Rogers in terms of
6 sub-atmospheric conditions being maintained, restrictions in
7 terms of worker access. That is predicated on the .15g 250-
8 year earthquake figure. I'm saying that your anticipation
9 would be that as this shifts the compensatory measures
10 shift.

11 MS. TEN EYCK: My anticipation is that once our
12 staff gets a chance to look at their data that we will come
13 to some resolution on what is the appropriate G number that
14 they protect against in making the modifications to the
15 structure of the building.

16 CHAIRMAN JACKSON: Okay.

17 MS. TEN EYCK: As I was saying, what we basically
18 are planning to base our certification on at this point is a
19 firm commitment that they will upgrade the buildings to the
20 250 year earthquake, that they will provide us adequate
21 justification for continued operation, which would include
22 the continuation of the existing compensatory measures, and
23 that we will work closely with them on reviewing their
24 proposed modification information. Also, looking at it from
25 a cost-benefit perspective, if they could achieve upgrading

1 to a higher G number without a significant increase in cost,
2 then we will definitely discuss the pros and cons of doing
3 this with the USEC.

4 MR. PAPERIELLO: It is a compliance plan issue.
5 It was a compliance plan issue even at the place we were a
6 few months ago where we have a facility that was thought to
7 meet a .15g ground motion and didn't; it was at .05g. And
8 it is going to take some time to get the plan upgraded. So
9 that was already known to have been a compliance plan issue.

10 [Slide.]

11 MS. TEN EYCK: Staff has used numerous means to
12 communicate with the public and to publicize the
13 certification process, to solicit comments from the public
14 and also other federal agencies. These means include such
15 things as:

16 Establishing a public document room near each of
17 the facilities.

18 Advertising, conducting and transcribing of a
19 public meeting at each of the sites.

20 Noticing NRC staff technical meetings so that they
21 would be available to be attended by the public.

22 Providing a 45-day comment period which was
23 advertised in the Federal Register for both the application
24 and the compliance plan.

25 Having meetings with labor union representatives

1 and also meetings with representatives from the state and
2 local governments and representatives from the Department of
3 Energy, the Environmental Protection Agency, and also the
4 Occupational Safety and Health Administration.

5 CHAIRMAN JACKSON: The Energy Policy Act of 1992,
6 I understand, requires that the NRC is to consult with the
7 EPA during the certification process.

8 MS. TEN EYCK: Right.

9 CHAIRMAN JACKSON: To your knowledge, is the EPA
10 officially satisfied with our review of the USEC application
11 and with the certification process?

12 MS. TEN EYCK: I was going to address that on the
13 next slide. Yes, we have consulted with them and their
14 comments regarding the application and compliance plan raise
15 no new issues.

16 CHAIRMAN JACKSON: They have said that? I don't
17 know what all is required.

18 MS. TEN EYCK: From all indications from them,
19 they are satisfied that if we address the issues that they
20 raised during their comments, they would be satisfied, and
21 those had already been identified and were being addressed.

22 Also public comments we have received. They
23 identified no new issues that the staff had not already
24 addressed, and we plan to provide responses to their
25 comments, and our compliance evaluation plan will actually

1 be the record and the basis for our recommendation for
2 certification.

3 I talked earlier about our interaction with OSHA
4 and the MOU, so I think we have already addressed those
5 topics.

6 [Slide.]

7 MS. TEN EYCK: As I previously mentioned, NRC, DOE
8 and USEC have all had important roles and interest in the
9 certification process. Coordination among the three groups
10 will become even more important as we near the end of the
11 certification process.

12 It has been necessary to make some assumptions to
13 come up with a meaningful schedule for certification. These
14 assumptions are listed on the viewgraph there.

15 Of particular importance is the last assumption
16 where we assume that USEC and DOE will coordinate very
17 closely on the compliance plan so that it can be submitted
18 to USEC without any exceptions or recommended changes. We
19 feel that that is a very, very important thing if we are
20 going to meet the schedule.

21 Based on the assumptions provided, we feel that we
22 can reach the initial certification by the end of June. NRC
23 would then assume regulatory authority 120 days later, or
24 approximately the end of October.

25 CHAIRMAN JACKSON: This all assumes that the

1 compliance plan is adopted by USEC without any exceptions.

2 MS. TEN EYCK: It really assumes a lot.

3 CHAIRMAN JACKSON: I know it assumes a lot. This
4 one assumption.

5 MS. TEN EYCK: That is just one assumption. It
6 assumes that, as we listed there, the USEC promptly submits
7 the revised versions of the application and the compliance
8 plan. We understand that they had proposed to provide us
9 the application which had slipped from a previous date by
10 about the 5th of April. We now understand that that date is
11 going to slip. So that is kind of a moving target at this
12 point.

13 It also has to be recognized that the staff needs
14 to have both the final application and the final compliance
15 plan side by side, because they really are very supporting
16 documents. We need about four to five weeks after we
17 receive both of those documents to be able to be prepared to
18 have the recommendation for certification.

19 Any delay that would come in a compliance plan
20 where there were exceptions, which is what happened last
21 time on the submittal of the compliance plan, would
22 certainly add a lot more time to the schedule. We are
23 already finding in some cases that the proposed dates were
24 optimistic. Of course, I know USEC has been working very
25 hard to meet these dates, but there has been slippage that

1 we have been notified to anticipate for the upcoming
2 application submittal.

3 CHAIRMAN JACKSON: Is there any interaction or
4 intersection between the privatization of USEC and our
5 certification action?

6 MS. TEN EYCK: We don't view that as having
7 anything to do with it. We will proceed on our initial
8 certification effort as soon as we can, and we don't see
9 that the privatization issue is influencing us at all.

10 CHAIRMAN JACKSON: And vice versa?

11 MS. TEN EYCK: Vice versa, they are very anxious
12 to get the plant certified. We are aware of that. You
13 would have to ask USEC how the privatization would impact on
14 that decision.

15 CHAIRMAN JACKSON: Okay.

16 [Slide.]

17 MS. TEN EYCK: As provided for in 10 CFR Part 76,
18 the decision on the certification will be issued by the
19 director of NMSS. He plans to consult with the Commission
20 prior to that certification decision. That consultation
21 could take many forms. It could be a memorandum to the
22 Commission, a Commission paper, or a Commission briefing.
23 Barring any unforeseen situations, we feel that a full
24 Commission briefing may not be necessary if things proceed
25 along as we anticipate at that time, but we will be looking

1 to the Commission for their preference for follow-up
2 actions.

3 The next three items, the preparation of the
4 compliance evaluation report, the notification in the
5 Federal Register, and the notification of congressional
6 oversight committees, are all normal procedures that take
7 place when the Commission makes an important decision. So
8 we don't see any problem on that.

9 Also provided in Part 76 is a provision for an
10 appeal. Any interested party -- by that we mean any person
11 that has spoken at one of our public meetings or has
12 provided written comments -- will be able to submit a
13 petition to the Commission 15 days after the decision by the
14 director of NMSS regarding certification, and that would be
15 addressed as an appeal.

16 As you can see, the activities that were
17 envisioned by the Energy Policy Act of 1992 are soon to
18 become a reality, and I can assure you that everyone
19 involved is looking forward to reaching that milestone.

20 That concludes my comments this afternoon. Are
21 there any questions?

22 CHAIRMAN JACKSON: Commissioner Rogers?

23 COMMISSIONER ROGERS: Just one. I thought this
24 was an excellent briefing. I appreciate it very much.

25 In the new SAR due in February that is going to

1 correct errors and weaknesses and reduce the uncertainties
2 in the earlier one, have you been able to characterize the
3 problems that you saw with that in such a way as to provide
4 some general guidance to the Enrichment Corporation in
5 dealing with those issues?

6 MS. TEN EYCK: As I mentioned earlier, we have
7 been working very, very closely with them at the staff level
8 and also the management level. Carl has met periodically,
9 every two to three weeks with USEC management. And we've
10 had a very good working relationship with both USEC and DOE.
11 I think they understand all of the concerns that we have. I
12 think they are very sensitive on doing the safety analysis
13 upgrade. In fact, it was underway before NRC actually got
14 involved. So it is something they knew needed to be
15 accomplished. I feel that we will have a SAR that addresses
16 any issues that may remain outstanding.

17 COMMISSIONER ROGERS: You mentioned in your
18 opening remarks, Dr. Paperiello, that written expectations
19 were not really in hand when we started this process. I
20 wonder at the end whether one could develop a set of written
21 expectations from this that would be a useful guide for
22 anything else in the future of this nature.

23 MR. PAPERIELLO: I think you could. I think that
24 is something to look into. I'm not aware that we have
25 looked into it.

1 COMMISSIONER ROGERS: You can deal with it
2 piecemeal, issue by issue, but it might be very helpful to
3 try to reduce that to some more general statements of our
4 expectations that then might come in handy in the future.

5 MR. PAPERIELLO: Yes.

6 CHAIRMAN JACKSON: Commissioner Rogers,
7 Dr. Paperiello and I have talked in the past about the need
8 for trying to come up with a more generalized approach for
9 developing or having in hand appropriate standards or
10 criteria even in these cases where there are special
11 facilities that are going to be certified, or whatever the
12 regulatory action is, so as to avoid this going forward.

13 COMMISSIONER ROGERS: Thank you.

14 CHAIRMAN JACKSON: The Commission would like to
15 thank the staff for what has been an excellent briefing on
16 the certification process for the USEC's gaseous diffusion
17 facilities. We are pleased to see the progress that has
18 been made in the past six months. We would like to see that
19 progress continue and we would like to see things resolved
20 in as timely a manner as they can be consistent with
21 appropriate safety standards and requirements.

22 In closing, I would like to stress two points to
23 the staff.

24 First, as I have said, the staff should move ahead
25 with the certification process in as expedient a manner as

1 possible. However, in moving ahead the staff should ensure
2 themselves that they have not overlooked any significant
3 safety issues, that there aren't other emergent issues out
4 there that could reach up that need to be resolved before
5 granting certification. Because this is a certification, as
6 you have pointed out, and not a licensing, the methodology
7 for the resolution of significant safety issues and how it
8 is to be folded into the compliance plan needs to be clearly
9 delineated and documented.

10 Secondly, the staff indicated that in several
11 areas discussions between the staff and the USEC is still
12 ongoing. If significant new information becomes available
13 or new safety issues are identified that could affect the
14 certification process, the Commission should be informed as
15 soon as possible. As you said, the certification schedule
16 assumes many things, and given that, we will leave open the
17 issue of what the follow-on consultation mechanism should
18 be. Instead, I will confer with my fellow commissioners for
19 the appropriate consultation mechanism.

20 Again I would like to thank you for today's
21 briefing.

22 Commissioners, do you have anything to add?

23 COMMISSIONER ROGERS: Nothing more, thank you.

24 COMMISSIONER DICUS: Nothing.

25 CHAIRMAN JACKSON: We stand adjourned.

1 [Whereupon, at 2:57 p.m., the meeting was
2 adjourned.]
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CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON U.S. ENRICHMENT
CORPORATION CERTIFICATION - PUBLIC
MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Friday, March 22, 1996

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: Michael Paulus

Reporter: Michael Paulus



U.S. ENRICHMENT CORPORATION GASEOUS DIFFUSION PLANTS CERTIFICATION: CURRENT STATUS

**Staff Presentation to the Commissioners
March 19, 1996**

OVERVIEW

- **Background**
- **Current status of certification/significant issues**
- **Public comments and coordination with other government agencies**
- **Certification schedule**

BACKGROUND

- **Energy Policy Act of 1992**
 - **Established the U.S. Enrichment Corporation to lease and operate DOE gaseous diffusion plants (GDPs)**
 - **Directed NRC to issue standards and regulate USEC through annual certification**
- **Certification Process**
 - **NRC issued Part 76 in September 1994**
 - **Part 76 requires USEC to submit an application and a DOE-prepared compliance plan**

BACKGROUND (CONTINUED)

- **USEC submitted application in April 1995, and staff rejected it in May 1995**
- **USEC submitted revised application in September 1995 and DOE-prepared compliance plan in November 1995, with USEC exceptions**
- **DOE currently regulates plants and will continue to do so until NRC assumes jurisdiction**

CURRENT STATUS OF CERTIFICATION/SIGNIFICANT ISSUES

- **Significant issues that required resolution**
 - **Worker protection**
 - **Quality assurance**
 - **Technical safety requirements**
 - **DOE-owned material in USEC space**
 - **Elevated enrichment levels**
 - **Safety analysis upgrade**
 - **Seismic safety**
- **All issues have been thoroughly discussed in meetings; some issues will require further discussion to reach resolution**
- **Staff must review final written USEC submittals to verify acceptability before making certification decision**

SIGNIFICANT ISSUES: WORKER PROTECTION

- **USEC did not provide adequate technical safety requirements (TSRs) for worker protection**
- **USEC submittals did not provide adequate commitments to continue worker protection requirements imposed by DOE**
- **Specific TSRs required to assure protection of workers from uranium hexafluoride (UF₆) and other chemical hazards**
- **USEC has submitted an acceptable revision**

SIGNIFICANT ISSUES: QUALITY ASSURANCE (QA)

- **USEC's initial application did not provide adequate QA for certain safety systems, e.g.**
 - **UF6 containment**
 - **Criticality prevention**
 - **Fire protection**
- **Resolution still being discussed by USEC and NRC staff**
 - **Adequate definition of safety system boundaries**
 - **Adequate QA for criticality safety**
 - **Treatment of commercial grade items**

SIGNIFICANT ISSUES: TECHNICAL SAFETY REQUIREMENTS (TSRs)

- **Many TSRs initially submitted by USEC inadequate because:**
 - **Commitments not clear or inspectable**
 - **Some safety topics not addressed**
- **Example: Autoclave testing at accident pressures**
 - **Test needs to be properly validated**
 - **Test relied on extrapolation from low pressure to accident pressure**
 - **No accident pressure tests since autoclaves initially installed**
 - **After numerous discussions, USEC initiated testing at accident pressures**
 - **Tests currently in progress**
- **Proposed revisions to TSRs still under review by staff**

SIGNIFICANT ISSUES: DOE MATERIAL IN USEC-LEASED SPACE

- **DOE-owned contaminated material and equipment stored in process buildings now leased by USEC**
- **Some material not characterized or quantified**
- **Details of roles of USEC and DOE are still unresolved with respect to providing adequate accountability and physical protection**

SIGNIFICANT ISSUES: ELEVATED ENRICHMENT LEVELS

- **USEC requested certification at 10% maximum enrichment**
- **Enrichment in small quantities between 10% and 20% has been noted recently at Portsmouth**
- **Contributing factors are both plant configuration and refeed of DOE-owned high enriched uranium**
- **Issue being worked by DOE and USEC; expected to be resolved prior to certification**
- **If issue continues after certification, USEC may be subject to more stringent NRC requirements**

SIGNIFICANT ISSUES: UPGRADE OF SAFETY ANALYSIS REPORT (SAR)

- **DOE preparing new SAR, due February 1997**
- **Will correct errors, address weaknesses, reduce uncertainties in earlier 1985 SAR**
- **NRC requiring USEC to review and submit any proposed resolution of SAR findings or any needed certificate amendments for NRC approval within six months after SAR issuance by DOE**
- **Staff considers this to be part of initial certification and the backfit procedure rule (§76.76) would not apply**

SIGNIFICANT ISSUE: SEISMIC SAFETY AT PADUCAH PLANT

- **DOE's 1985 evaluation based on 237-year earthquake, 0.18g -- equivalent to 90% confidence that ground acceleration will not exceed 0.18g during the remaining 25-year plant life**
- **DOE has identified structural weakness, with failure possible at 0.05g (80-year earthquake)**
- **Unreviewed safety question: A large earthquake might cause a UF6 release large enough to cause offsite injuries**
- **DOE has ordered modifications to provide seismic capacity for 250-year earthquake (currently estimated at 0.15g) and interim compensatory measures**

SEISMIC SAFETY AT THE PADUCAH PLANT (CONTINUED)

- **NRC staff has reviewed DOE's analysis and DOE's proposed modifications**
- **Staff intends to certify based on:**
 - **Firm commitment to upgrade to withstand 250-year event (500-year earthquake would be appropriate for a new plant)**
 - **Adequate justification for continued operation**
 - **Continuation of compensatory measures**
 - **Reevaluation during future certification reviews**

PUBLIC COMMENTS AND COORDINATION WITH OTHER AGENCIES

- **Staff has publicized certification process and coordinated with other agencies**
 - **Public, both general and local to plants**
 - **State**
 - **EPA and OSHA**
- **10 comment letters received. Issues included:**
 - **Seismic safety**
 - **Emergency planning**
 - **Worker protection**
 - **Waste management**
 - **Performance vs. prescriptive regulation**

PUBLIC COMMENTS AND COORDINATION ... (CONTINUED)

- **Issues had already been considered by staff; responses to be in staff "Compliance Evaluation Report"**
- **Coordinated with EPA as required by law; no significant issues from EPA**
- **Coordinated with OSHA**
 - **Working to avoid unnecessary duplication of effort at plants**
 - **Draft Memorandum of Understanding completed with OSHA**
 - **Separate Commission paper on finalizing MOU to be provided in near future**

CERTIFICATION SCHEDULE

- **Assumptions**

- **Remaining issues promptly resolved**
- **USEC promptly submits acceptable final revisions to application**
- **USEC submits DOE-prepared compliance plan within 45 days after revised application**
- **USEC adopts compliance plan without proposed modifications**

- **Milestones**

- **04/05/96 USEC submits final application revisions**
- **05/17/96 USEC submits final DOE-prepared compliance plan**
- **06/21/96 NRC staff issues certification decision**
- **10/25/96 NRC assumes regulatory jurisdiction over plants**

CERTIFICATION SCHEDULE (CONTINUED)

- **Decision Process**

- **Decision issued by NMSS Director, following consultation with Commission**
- **Decision basis documented in staff Compliance Evaluation Report**
- **Federal Register Notice published**
- **Congressional committees notified**
- **Decision can be appealed by interested parties to Commission by petition within 15 days**