Τ.	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	BRIEFING ON MOX FUEL FABRICATION
5	FACILITY LICENSING
6	***
7	PUBLIC MEETING
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10	Nuclear Regulatory Commission
11	Room 1F-16
12	NRC White Flint Building 1
13	11555 Rockville Pike
14	Rockville, MD
15	Friday, April 3, 1998
	rilday, April 3, 1990
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17	The Commission met in open session, pursuant to
18	notice, at 9:03 a.m., the Honorable SHIRLEY A. JACKSON,
19	Chairman of the Commission, presiding.
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21	COMMISSIONERS PRESENT:
22	SHIRLEY A. JACKSON, Chairman of the Commission
23	GRETA J. DICUS, Member of the Commission
24	NILS J. DIAZ, Member of the Commission
25	EDWARD McGAFFIGAN, JR., Member of the Commission
23	2
1	STAFF AND PRESENTERS:
2	KAREN D. CYR, General Counsel
3	ANNETTE VIETTI-COOK, Assistant Secretary
4	HOWARD CANTER, Department of Energy, Director, Office of
5	Fissile Materials Disposition
6	MR. RHODES, Department of Energy, Office of Fissile
7	Materials Disposition
8	DAVE NULTON, Department of Energy, Office of Fissile
9	Materials Disposition
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1	PROCEEDINGS
2	[9:03 a.m.]
3	CHAIRMAN JACKSON: Good morning. The Commission
4	would like to welcome Mr. Howard Canter, Director of the
5	Department of Energy's Office of Fissile Materials
6	Disposition. The Commission also welcomes Mr. Nulton and
7	Mr. Rhodes from that office.
8	This morning the Commission will be briefed on
9	DOE's most recent plans to implement a program to provide

10 for safe and secure storage of weapons-usable fissile

11 materials, that is, plutonium and highly enriched uranium, and DOE's strategy for the disposition of surplus 12 13 weapons-usable plutonium. 14 In December of 1996, DOE issued its final programmatic environmental impact statement on the storage 15 and disposition of weapons-usable fissile materials. The 16 17 Secretary of Energy announced the record of decision on this matter on January 14th, 1997. Shortly after the Secretary's 18 19 announcement of DOE's record of decision, the Department 20 briefed, on January 17th, 1997, the Commission on its plans. 21 In July of 1997, DOE issued a program acquisition strategy for selecting private sector organizations to 22 23 assist in implementing the MOX fuel alternative. The 2.4 Commission was briefed by DOE on that strategy document in 25 September of last year. 1 Today the Commission will again be briefed by DOE 2 on its most recent plans and schedules. The Commission is extremely interested in the strategies being considered by 3 the Department of Energy on this topic because the program could affect facilities that the NRC already has licensing authority over such as commercial nuclear power reactors and 6 7 the geologic high level radioactive waste repository, and the program potentially could extend NRC's regulatory authority over other facilities, such as the MOX Fuel 9 Fabrication Facility, the subject of today's briefing. 10 11 So we look forward to hearing from you, and unless 12 my colleagues have anything to add, please proceed, Mr. 13 Canter MR. CANTER: Thank you very much, Madame Chairman. 14 15 What I would like to concentrate on today is the 16 Department's approach and thoughts on the regulation of the 17 Mixed Oxide Fuel Fabrication Facility. 18 I would like to discuss a little bit the planned contract structure, to put this in a framework. The 19 proposed contract that we are going to issue a Request for 20 21 Proposal on very shortly is a contract with a consortium that will consist of one of more reactor owners, a fuel 22 fabricator, possibly a nuclear steam supply system supplier 23 2.4 or someone else to design the fuel and, to the extent that 25 it is needed, an architect engineering firm may be part of 1 the consortium. It will consist of four phases, a base contract 3 which will cover the facility design, license application, a 4 lot of planning and preparation of documentation. That base contract would be a cost plus fixed fee or incentive fee type arrangement with the Department. 6 Option 1 is the period of time when the contractor 8 would be defending the license application and reaching a 9 point where construction could start and would cover the 10 facility construction and the cold start-up. Construction 11 would be done by the contractor letting contracts that are fixed price. The remaining work would be cost plus fixed 12 13 14 Option 2 is the operating phase, which could run 15 to in the neighborhood of 15 years. It would include hot start-up and full scale operations. In that particular 16 17 case, since we have borne the cost of creating the asset, the Mixed Oxide Fuel Fabrication Facility, and any other 18 modifications that have to be made even at the reactor 19 sites, the operating phase, we think, would not be paid for 20

> by the government but would be a commercial venture run by this contractor for his utility partners that are part of

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the consortium, and would fabricate the fuel, which could conceivably either be cheaper or very close to the cost of the low enriched uranium fuel that it replaces.

Option 3 is the last phase where the contractor would deactivate the facility, removal all the special nuclear material and place the facility in a cold condition and turn it back to DOE, who would assume responsibility for decontamination and any further decommissioning that is required.

The next viewgraph, please.

8 This is the program schedule which covers the
9 procurement and there is also an environmental impact
10 statement that we have underway specifically to select the
11 sites where the various activities for plutonium disposition
12 would be conducted.

There are three major facilities that we intend to create. One is the mobilization capability. We have already designated the Savannah River site as the preferred site for that. And the other two we have not yet designated a preferred site. One is the Plutonium Pit Conversion Facility which would convert the metal from the plutonium pits into oxide, and the other is the Mixed Oxide Fuel Fabrication Plant, which is the subject really of today's discussion.

The candidate sites for those two are the Hanford site, Idaho, Savannah River and the Pantex site. We expect to issue a draft EIS in May and we will design the preferred sites for those two. We will go through a public comment

period through the summer, hold some public meetings.
Finalize the EIS about the end of the year with a record of

3 decision on the sites early next year, probably in the

4 January time frame.

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Regardless of which sites, we plan to proceed with the procurement. We expect very shortly to issue the Request for Proposal and that is going to somewhat -- how fast we can get that out depends to what extent on how much we have to revise it in order to accommodate the regulatory approach, and then allow 90 days for proposals to be prepared and then about 90 days for proposal evaluations to award of contract.

This would result in a contractor being on board and ready to start work late this year, which is early into fiscal 1999. We have money in our budget request for fiscal 1999 for the contractor's work, including money to start Title 1 and Title 2 design of the facility which is needed to prepare any license applications. And, by the way, we also have, we think, allowed sufficient money to pay for any of the regulatory reimbursable activities that the NRC staff would undertake, to cover that. So we don't expect anything is going to be a free ride on this thing.

Next viewgraph.

Our initial approach, which was outlined in a note

25 in our record of decision of January of last year,

1 basically, was based on submitting proposed legislation to
2 the Congress to have the MOX Fuel Fabrication Facility NRC
3 regulated. We had prepared to, and had several meetings
4 with your staff and were planning to work jointly on
5 developing this legislation and submitting it to Congress
6 this month.

We thought that to get started, and to start work

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Understanding in place this year so that people could start
      working on preparations, including revisions to Regulatory
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     Guides or Standard Review Plans -- I know there is also
     going to be a significant revision to 10 CFR 70 -- and so
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      that the various requirements and documents could be updated
      in preparation for this activity starting in fiscal '99.
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               We thought that we could Congressional approval of
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      the legislation in the Defense Authorization Act by the
      beginning or early part of fiscal '99 and to have it in
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     effect probably about the first of next year.
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               The next viewgraph shows a schedule for this, and
      it shows the beginning of NRC regulation, just about January
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      1st or possibly a little earlier, depending on how quick we
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      can all get ready for this.
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               The next viewgraph, please.
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               Based on a great deal of internal discussion in
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      the Department, which has included the Under Secretary and
      the Deputy Secretary, there is one major unresolved issue,
     and it really centers around whether or not we will get
     legislation this year. How do we get going in the event we
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      do not have legislation, and do we need legislation? So
      there are many questions.
              DOE wants to issue this RFP and desires to moves
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      towards NRC regulation and licensing. The Deputy Secretary
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     as very adamant upon this yesterday, that this will be a
     licensed facility. But we are in some difficulty because we
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      can't issue the RFP without reaching some agreement on the
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     NRC regulatory role and how it will start. The RFP has been
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      prepared and it was totally approved, ready to go out the
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      end of February on the basis of NRC being the regulator on
      this. However, we have got to make sure that we allow for
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      this period of transition in the start-up period, so we will
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     have to make some changes to that.
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              CHAIRMAN JACKSON: Well, I quess I am confused
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     here. What caused you to back away? Was it a time issue?
      Some fundamental reconsideration within the DOE of having
19
     the facility regulated by NRC? You didn't feel that you
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21
     could issue a RFP with a contingency clause? I guess,
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      because there seems to have been a major shift, and I think
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      we need to understand.
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               MR. CANTER: All right. The main concern is the
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      Department was concerned about trying to submit proposed
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     legislation this year. We still want this to be NRC
     regulated. We want it to be a licensed facility. And the
     question was, how could we get started and shift to full NRC
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      regulation and licensing without legislation this year?
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               CHAIRMAN JACKSON: Now, was the concern about it a
      time issue or a receptivity in the Congress issue?
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              MR. CANTER: I would say more the latter than the
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      former.
               CHAIRMAN JACKSON: What were the bases for what
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      undergird that?
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               MR. CANTER: Well, there seems to be some
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      difference opinion of which committees would have
      jurisdiction. The thought process originally was it would
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     be in the Defense Authorization Act and that is your Armed
      Services Committee in the Senate and the House National
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      Security Committee, but there are other committees involved,
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      the Commerce Committee and the Environment Committee and so
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     forth. And to what extent this could actually -- we could
     come out of it with what we were asking for, we
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with the NRC staff, that we probably needed a Memorandum of

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collectively, or would we get back legislation that does
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     things that we don't want to do, or wider issues or
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     something on this.
               So I think that it is prudent to say, okay, what
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     happens is we don't get legislation this year, how do we get
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      going on this?
               CHAIRMAN JACKSON: But you talk about you can't
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      issue a RFP in a timely manner without reaching agreement on
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      NRC's regulatory role. So how do you get going?
               MR. CANTER: Well, what we could do is revise the
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     RFP that shows this transition period, and where we start
     off with the NRC in a technical role but, initially, if
     there's no agreement on the authority of the NRC vet to be
      the regulator, with DOE as the regulator, and with a
     transition period.
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               CHAIRMAN JACKSON: Well, I guess, you know, you
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      mentioned a couple of things early on. You mentioned
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     revisions to 10 CFR Part 70. Now, we have a rulemaking
     underway on Part 70. I don't know if you are referring to
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      something beyond that. You mentioned developing Reg. Guides
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     and Standard Review Plans.
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              The point I am making is these are fairly major
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     NRC.
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               MR. CANTER: Dr. Paperiello has explained this to
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activities from a resource expenditure perspective, both human and financial, in addition to any overall technical support. And I guess it may be comfortable for you, but there is an issue from the point of view of comfort for the

me in no uncertain terms. So I am fully aware of that. We 24 go through some of the same problems. I said we would try to assist in any way. We can provide the funds. I have no 25

way of providing the NRC positions or FTE slots. I can 1 2 provide the funds that would cover it.

I suggested to him that if the first step is to sit down with OMB, that we could certainly go with your 4 staff to OMB and support the case on this and, hopefully, work something out. Because there is no free lunch on this 6 7 thing, I understand that.

CHAIRMAN JACKSON: Well, are you looking for NRC 8 to help DOE create a regulatory framework that looks like ours that DOE would implement? Or are you looking for NRC 1.0 11 to help DOE create a regulatory framework in a pre-licensing 12 sense? That's a very important issue.

13 MR. CANTER: It's in the pre-licensing sense, it's 14 the latter.

CHAIRMAN JACKSON: And then there are any number of issues related to linkages in the larger foreign policy arena which I am sure Commission McGaffigan may wish to --COMMISSIONER McGAFFIGAN: I am not even going to

19 touch on those.

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[Laughter.]

COMMISSIONER McGAFFIGAN: But could I just --

22 CHAIRMAN JACKSON: Please.

COMMISSIONER McGAFFIGAN: The issue of the 23

multi-committee jurisdiction is always going to be there.

25 It's at the center of some of the discussions we have had

with others in DOE about external regulation, because 1

whenever external regulation goes forward, I think there's

at least three House committees, perhaps four, four House

committees, I think, and three Senate committees that will

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want to kibitz.
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              So if there's -- how does that problem ever get
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      solved? And the second part of my question is, if it isn't
     going to get solved, or the prospects aren't 100 percent,
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     let's say, do you have to, in your RFP, include options that
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     DOE will be the external regulator permanently? Even though
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     you have the desire that is the opposite, if you see less
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     than 100 percent chance of the Congress approving that, do
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     you have to lay out in your RFP there are two options, one
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      this transition plan you are about to present to us, and the
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      other we never transition and we remain the regulator?
               MR. CANTER: I think --
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               COMMISSIONER McGAFFIGAN: We being DOE.
               MR. CANTER: -- well, can do almost anything you
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      want to with a Request for Proposal. What you need is
     something spelled out so that all offerers have a level
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     playing field that they can make a proposal against. It is
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     not desirable, but you could, once you have the contract in
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     place, if the rules change, you could always negotiate a
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      change. I am not in favor of that, because I would prefer
      that they understood up-front, when they are preparing their
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      proposals, what they are going to be faced with. And I
     think they would propose that also, if we want responsible
     contractors on this.
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               There will never been 100 percent probability that
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      we are going to get exactly the legislation that we may
     desire. Nobody can quarantee that.
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              COMMISSIONER McGAFFIGAN: Right.
              MR. CANTER: So one of the questions, and I am not
8
     an attorney, so I am just a stupid engineer, is to what
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      extent do we really need legislation? And this resulted in
      a rather lengthy session yesterday. I think one of the
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     things we have to do is get both of our offices of General
     Counsel together with some people with some creative
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     thought, to possibly think out of the box a little bit and
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     take a look at what is there so we can reach agreement.
               COMMISSIONER McGAFFIGAN: I have a comment on
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     that.
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              MR. CANTER: I am sure there will be plenty of
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     comment on it.
              COMMISSIONER McGAFFIGAN: No, just the idea. I
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21
      don't think you do something this significant --
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               MR. CANTER: Yes.
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               COMMISSIONER McGAFFIGAN: -- by creatively trying
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      to get around the Congress. I mean I think you -- some of
     these provisions, like 42 USC 7272, are potentially
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     ambiguous. But as a former Congressional staffer, --
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              MR. CANTER: I understand.
               COMMISSIONER McGAFFIGAN: -- my advice to you
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      would be to take the Congressional interpretation of those
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     provisions and not try to get an out of the box
     interpretation because --
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               CHAIRMAN JACKSON: I agree.
               COMMISSIONER DIAZ: And also being engineers, we
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     are kind of on equal terms in here.
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             [Laughter.]
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               COMMISSIONER DIAZ: I kind of fail to see how,
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     after we prepare to really be very, very prompt and
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     responsive to DOE positions, we have all this work, how it
     can be said that timeliness might be better when we no
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     longer can use the base where we were going. And also, if
     we look at what Commissioner McGaffigan was saying, which it
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does not mean that it is going to have be an inscrutable

18 process, all of a sudden, by changing around, we might put

the entire program in a different light. And I don't see

 $20\,$ $\,$ how we are going to make things more expedient by changing

21 at the very last minute, or make it more scrutable.

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22 MR. CANTER: Well, we are in the process of, and

23 we have identified significant changes to this Request for a

Proposal to show this process where we start off with DOE

25 and NRC in a technical assistance role, and a review role,

and a transition to full NRC regulation. I think we have to inform the industry of the fact that that is the reality here, because there won't be, by the time they start, a full process in place for NRC regulation.

The Department does want to go to NRC regulation on this. And the other things is we don't want to mix it up with the much wider issue of external regulation of DOE. It is not -- this is not a pilot project or something having to do with that program, although there will be a lot that is learned out of this from that program.

There are significant differences. Some of the reasons are that it is a private contractor, not a M and O contractor. We have even looked at such issues as who would own the facility. We have some options there. We can even consider the idea of leasing the facility, once it is created, back to the contractor, and a number of things to make this very clear how this would work, and very clear who has the NRC authority.

I agree with Commission McGaffigan that we do not want to end run the Congress on this thing. There is significant interest in the Congress. A number of the staff members have contacted me and they may be off writing their own legislation on this. In fact, I know, I think, of one case on the Senate side where they may be doing that right

COMMISSIONER McGAFFIGAN: Could I follow?

CHAIRMAN JACKSON: Please.

COMMISSIONER McGAFFIGAN: Every time you say something, it rings another questions. If somebody in the Congress is writing their own legislation and planning to tuck it in the Defense Authorization Bill, do we need to continue the discussions that have now been laid aside, as I understand it, on the legislative proposal so that we have jointly something to react with? Should it -- I mean Congress can make things viable that you all -- that we all think aren't viable, by just stepping out and doing it.

MR. CANTER: I think we need to go ahead and develop what we would want. And I think that is very important because sooner or later, even if it is initiated from the Hill, there will be some draft language that we are asked to comment on, informally, in many different methods. It would be good that we had a joint approach so that any comments that are provided back to the writers -- we are often asked for writing assistance on legislation, so that there is no fundamental disagreement between the NRC and DOE.

22 CHAIRMAN JACKSON: Right. Except the one thing
23 that I note that is missing in the revised approach is any
24 reference to draft legislation. In seems to be one wants to
25 get started with activity without also at least

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putative legislation. I mean I don't see how one can come
      around it. I mean you have heard from all of us in that
               So the issue is, what is the meaning of the fact
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      -- the revised approach? One sees no reference to that, but
     yet there is discussion about phasing in NRC regulation.
     The plan -- is embodied in that plan, the development of
     draft legislation? I am looking at the next viewgraph, I
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     have jumped ahead, actually.
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               MR. CANTER: Well, if you look at the subtext, it
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      is under there, and that was to resolve the uncertainties on
     the scope of existing authorities, and that is to reach
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     agreement on to what extent, and exactly what is needed for
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      additional legislation to resolve the issues.
               CHAIRMAN JACKSON: Have there been discussions? I
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     mean has your General Counsel contacted -- Karen, have you
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     been contacted?
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              MS. CYR: No.
               MR. CANTER: I think there's probably considerable
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      disagreement internally in the Department of Energy on what
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     is needed. So we are really not ready to rush out and try
     to pull something together to be submitted this month.
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     That's really one of the problems here.
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               CHAIRMAN JACKSON: Well, I think there are two
     pieces here. I think one has to do with, as you are
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      outlining, activity. The other piece is what undergirds
     that activity. And while one is not necessarily looking to
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     rush out, because it is not something that one can rush out
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     and do, I agree with my colleagues here that the process has
     to be scrutable, and part of that scrutability is kind of an
      up-front dealing with what the legislative issues would seem
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      to be.
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               If there is any hope, if one wants to pursue this
      line, of having it go through the Congress and having it
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     supported even in budget space, then it has to be done on
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      the basis of having a clean approach, it seems to me.
               MR. CANTER: Yes, I agree with you.
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               Since we are on that sheet, what we would be doing
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     here is, initially, DOE would be starting out with the NRC
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     in this, though a MOU, providing a lot of technical support,
     and review and assistance.
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               One of the things that we are concerned about is
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      dual regulation and dual oversight. In fact, there is even
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     the potential for triple oversight here if we are not
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     careful and plan this out properly between DOE exercising \boldsymbol{a}
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     degree of oversight, the NRC staff providing some oversight,
      and maybe even the Defense Board. And I think that would be
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      a lot of confusion and, essentially, a disaster if we had
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      that.
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               So we want to plan this out properly. We want to
      apply NRC standards. And we want to only supplement that
     with any DOE requirements if there is a gap in the NRC
      standards or something that isn't covered.
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               CHAIRMAN JACKSON: Would NRC standards be applied
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      at the very beginning of the project?
               MR. NULTON: Yes.
               MR. CANTER: Yes.
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               CHAIRMAN JACKSON: And would DOE apply the new
     Part 70 to the facility?
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               MR. CANTER: Yes. That's our plan.
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               COMMISSIONER DIAZ: But how is that consistent
     with your first statement? Your first statement appears to
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be that we would only provide advice, technical review and
      assistance. How is that consistent with, you know, we being
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      the regulator? That's the bottom line.
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               MR. CANTER: Well, it would set it up so that we
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      could transition to DOE pulling out of any regulatory role
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      and the NRC being the regulator. We would like to make this
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      so that the transition is seamless whenever it occurs, if
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      possible.
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               I don't want to do things that then have to be
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      undone or done over. I think that would be very wasteful.
               We will -- DOE can apply the NRC standards, even
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      if DOE starts out as the regulator. In fact, the Congress
      gave us a little help on that last year when they, in the
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      Conference Report on the Appropriations, said any facility
      constructed after the year 2000 will be designed and built
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 4
      to NRC licensing standards. They didn't say to be NRC
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               COMMISSIONER DIAZ: And do you intend to comply
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 7
      with that directive?
               MR. CANTER: Yes.
               COMMISSIONER DIAZ: Including the MOX Facility?
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1.0
               MR. CANTER: Yes. In fact, one of the things that
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      would be very helpful is we are not familiar with what the
      revisions to 10 CFR 70 are and if we could have that made
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      available to us, it would help us plan.
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               CHAIRMAN JACKSON: Yes?
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               COMMISSIONER McGAFFIGAN: Just as disclosure for
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      you on that, I think all of us routinely have an industry
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     group led by NEI come in and see us about their concerns
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     with where the staff may be headed on the Part 70 revision.
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      So it may not be an absolutely straightforward process. The
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      last meeting I had, the word train wreck came up.
               The other point is that the industry group, this
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     NEI-led group, wants MOX treated separately, as maybe a
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      subpart of Part 70, but they don't want to mix the MOX with
      their facilities. They want whatever is going to apply to
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      MOX to be off on the side.
               I don't know what the staff's view is, I am sure
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      they have heard this from the industry. So the Part 70
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     rewrite, as just a matter of disclosure, is not going to be
      a straightforward process. There will be a lot of comment
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      on the staff proposal, a lot of negative comment if it is as
      the industry understands it at the current time. So just so
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 7
      you understand that.
               MR. CANTER: I understand that, and I think we --
               CHAIRMAN JACKSON: Well, I have slightly revised
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      point of view, I call it just part of the rulemaking
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               MR. CANTER: Yes. And we had assumed, based on
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      the brief discussions we have had with your staff, that this
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      Part 70 rulemaking is going to be at least a year. Right.
      And you start off with what you have and then, when it gets
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      revised, you shift over to it.
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               I also understand from your staff that you are
      going through the Part 70 rulemaking whether or not the MOX
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      plan was involved, it's not specifically for this.
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               COMMISSIONER McGAFFIGAN: That's right.
               MR. CANTER: So you need it for your other work.
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               The next sheet is just another pictorial and at
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      the bottom is this revised approach where there's --
               CHAIRMAN JACKSON: But I notice there is no
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1 MR. CANTER: Because we don't know when there 2 would be a breakpoint, and so I didn't know where to put it, so I used some creative art work here 3 CHAIRMAN JACKSON: Very creative. MR. CANTER: As a soon as possible, as far as I am 5 6 concerned The features in this are DOE would have initial responsibility for regulation. It does provide more time to 8 9 obtain adequate NRC staffing for, -- you know, to get your -- your rulemaking would proceed, maybe not be totally done, 10 but be substantially down the pike, and for your staff to 11 review, update Regulatory Guides, Standard Review Plans and 12 13 such other documents. We need to establish the regulatory authority 14 15 structure, public involvement and resources. This is one of 16 the interesting aspects. When people talk about DOE 17 regulating, we do not have an established public process to 18 use. So when you start to say what public process would we 19 use, we want a public process. It has got its pros and cons, but we think it is of value. And so, you know, that's 20 21 why we are so anxious to shift it over as quick as possible, 22 so we can, at the appropriate time, have it. I would much rather have that than have some ad 23 hoc process thrown together by DOE without an established 24 25 mechanism and rules and so forth like you have. This 1 Request for a Proposal would be revised to accommodate this. 2 There is one aspect of this that I think is 3 interesting and might enter into some of your thought 4 process. The material will be declared no longer -- in fact, it already has been declared no longer required for 5 6 defense purposes, and it would be transferred to the contractor, title to it, upon delivery. So the question is, is this even a defense activity? 8 COMMISSIONER McGAFFIGAN: As a former Senate Armed 9 Services Committee staffer, if you are getting your money 10 out of the 050 account, which you are, they take a very 11 12 broad definition of Atomic Energy Defense Activities and so 13 I would hang my hat too heavily on an interpretation that 14 this is not a defense activity with defense funds are being 15 used to support it. MR. CANTER: Well, that's true. And so there's a 17 lot of differences of opinion, and this is why, as we got 18 into this, we found out there is no way we could rush this 19 through in this month. CHAIRMAN JACKSON: Please. 20 21 COMMISSIONER DICUS: Yes, I want to ask a question 22 about the public involvement. I think you said that you 23 don't have a mechanism for public involvement, and you 24 didn't want to throw together, I think the terminology was, an ad hoc process. So, can we assume from that, that up 25 until the time NRC would take over as the regulatory agency, there would not be public involvement of any kind? MR. CANTER: If we do this right, that would be in 3 the period of time when design is starting, application for 4 license would be in preparation and you normally don't have a public process on that. The public process usually starts when something is submitted. So I hope we don't go so far as to have things submitted and not be able to say what is 8

the public process. If the public process is suitable to

have something, we should have it in place.

11 What we like about your process is it is well established. You have rules that govern it and rules that 12 13 restrain it, to the extent that it needs to be restrained. The only one we have a public proces is NEPA and that is a 14 different process. 15 16 The initial NRC role, the language here may be 17 incorrect on technical advice, review and assistance. It may be greater than that. I don't know, and it depends on 18 19 what we write into this MOU. I think this TWRS, Tank Waste 20 Remediation System, program is a model that we can look at, 21 if that is adequate. But, obviously, we are going to need 22 assistance, and the contractors will, to identify and 23 interpret NRC standards, review technical deliverables and identify any differences with your regulatory approach. 24 25 You are, no matter whether we were here or not, revising 10 CFR 70. I don't know to what extent you were 1 going to revise the Regulatory Guides, and there may be 2 different ones that are applicable because we are dealing 3 with plutonium here, and other regulatory documents. You 4 would have to, obviously, plan on and staff and ramp up to transition to the lead regulatory role. And we need to 6 7 jointly establish this Memorandum of Understanding and the 8 funding mechanism. COMMISSIONER DIAZ: Yes. Would you like to 10 elaborate a little bit what you mean by DOE has, and I am 11 going to take the "initial" out, has responsibility for regulation? Because whether it is initial or a little time. 12 13 you are going to be responsible for what that period of time 14 is. And what does that entail and how will that play out 15 into the potential for NRC then assuming a role? 16 MR. CANTER: Well, --17 COMMISSIONER DIAZ: And it is your responsibility 18 at that point, right? 19 MR. CANTER: That's correct. 20 COMMISSIONER DIAZ: Entirely, 100 percent? MR. CANTER: That's correct. 21 22 COMMISSIONER DIAZ: Okay. And what does that 23 mean? 24 MR. CANTER: Well, if it were like any other DOE 25 facility where DOE is self-regulated, we would have to establish the requirements. Right now we have got people 1 2 looking at what DOE orders would even be applicable. And it is not that clear. This is different. So it is not like 3 4 our other facilities in the complex. What we have to do is work from whatever standards the NRC has as the base, and sort of deal with what else is 6 needed. If integrated safety analysis is not yet required by the NRC standards in 10 CFR 70, and we feel integrated safety assessment is required, then we might add that. 10 There are a number of examples of these things. 11 COMMISSIONER DIAZ: So, in other words, if I may paraphrase you, it is not clear what that responsibility 12 13 entails? 14 MR. CANTER: That's correct. I know Dave has been 15 working with our Environment, Safety and Health people on 16 this. I don't know whether you want to add anything to it. 17 MR. NULTON: Well, one of the things that we have looked at it is a work-smart approach where identify high 18 19 level requirements, 10 CFR 70.75, Part 50, Appendix B, 20 perhaps 20 and then where we feel, where the Department 21 feels there is not adequate coverage of a particular area,

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the extent that we can, we would keep these NRC requirements
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      as the over-arching requirements, and then ask the
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     contractors to assist us in identifying any requirements
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      that we didn't identify adequately up-front.
               That approach, we hope, would allow us to make a
3
      transition over to NRC regulation with a minimal change.
               COMMISSIONER DIAZ: What is the value of the
5
      mixing? What do you gain by mixing your regulations and
 6
      ours? It doesn't seem like -- whatever time you gain at the
      beginning, you are going to lose it midway.
               MR. NULTON: We would hope to have minimal mixing.
8
9
      We would have NRC requirements to the greatest extent
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     possible. As Howard had mentioned, in areas like integrated
      safety assessment or safety management, where there may not
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12
     be coverage right now in the NRC regulations, then we would
13
      probably stipulate something there. And it may require some
14
      change during the transition phase.
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               MR. CANTER: My understanding is that you are
16
      shifting to a more performance-based regulatory regime, this
      is what I have heard in various fora.
17
               DOE's orders are extremely prescriptive down into
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19
     great details, which I don't think is the way to go. So
     what we would like to do is, wherever possible, use the NRC
20
      requirements. We don't know, at least we in DOE don't know
21
22
     yet what your revised 10 CFR 70, even in draft, looks like
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     at this stage, which we want to learn about, and to what
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      extent it is significantly different from the existing 10
25
     CFR 70.
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               CHAIRMAN JACKSON: Yes, Commissioner McGaffigan.
               COMMISSIONER McGAFFIGAN: It sounds a lot like
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      what you are asking us to do is something like what we are
     doing at the Tank Waste Remediation System up in Hanford.
 4
      We have a resident there, we are preparing to license those
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 6
      facilities if Congress someday gives us the authority to do
      it. The people who are involved there are trying to figure
     out how these facilities would be designed to a NRC
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9
      standard, and it is taking -- that has been going, I
10
     believe, for two or three years already and will take some
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     number of years to come, although I think big dollars may be
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      flowing and contracts may be about to be awarded there as
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14
               Have you talked to the folks who are doing the
15
     Tank Waste Remediation thing to see if there is a model
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     there as to how this transition works or has worked?
               MR. CANTER: Yes. And, as I said before, I think
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18
      that is the closest model we can find, although it may have
19
      to be altered.
               COMMISSIONER McGAFFIGAN: Right.
2.0
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               MR. CANTER: Because this is a little different.
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     In the Tank Waste Remediation System, there are doing
      something that really hasn't been done before. And while a
2.3
24
     MOX plant, it is technology exists today and there are a
25
      number of MOX plants in Europe, in fact, a new one where
      construction is completing, I believe, this year in England.
1
     So there are some things that can be looked at.
               That is another thing that I didn't mention here,
3
      because it is a detail of one of the things the NRC would
     have to do during this ramp up period, is do whatever you
      need to do with your staff to become familiar with what the
      French and the Belgians and the British are doing, and their
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we would fill in the gap with a DOE requirement. But, to

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could be used. There may be a lot of lessons learned out of
      some of that. So that we don't tread the same steps.
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               CHAIRMAN JACKSON: There are some initial steps
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     the staff has already taken, but, you know, specifically,
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13
      along that line.
14
               MR. CANTER: Yes.
               CHAIRMAN JACKSON: But as I indicated earlier, the
15
16
     real issue is to have clarity on where we are going or not
17
      going, because that governs how much in the way of resources
18
      we can or are willing to invest and how to plan what our
19
      activities would be.
20
               But Carl Paperiello's folks are well aware of the
21
     French and other programs and have done some initial
      look-sees in that regard.
22
23
               Commission McGaffigan.
               COMMISSIONER McGAFFIGAN: And another question
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25
      that may come from a different direction, you mentioned
     earlier multiple regulators. All the sites you are
1
      considering for the MOX Facility are Defense Nuclear
      Facility Safety Board sites at the moment, and will be for
3
4
      some time because they are not early pilots. Under the
     Grumbly-Berube report, they would be 10 years from the point
 6
      of legislation before most of those facilities would come
      under our regulation, if ever.
               There is a model at Savannah River different from
9
      the model at Hanford, and another vitrification facility
10
     where the Defense Nuclear Facility Safety Board provided the
11
     oversight, and they had some sort of public process, because
12
     I know they had a lot of public meetings on that facility as
13
      it was starting up a couple of years ago.
14
               If you don't get legislation, if this doesn't
     work, have you looked at the Defense Nuclear Facility Safety
15
16
      Board model and seen whether it will work?
17
               MR. CANTER: Well, I am familiar with the process
     that they use for public, they do have public meetings, but
18
      it is not a formalized process like yours is. And plus, the
19
20
     Defense Board is an oversight agency, it is not a regulatory
21
      agency.
22
               COMMISSIONER McGAFFIGAN: I understand.
23
               MR. CANTER: So they never have to quite reach the
     conclusion -- to be a licensed facility, and if you are the
24
25
      regulator, you have to decide at some point, is it
1
      acceptable? The Defense Board is an oversight and
      commenting role and they don't really have to decide it is
2
      acceptable. They can decide that I don't have any more
 3
      significant comments to make. There's little differences,
      some subtle differences there.
               I have discussed this with the Defense Board, and
7
      we made a presentation to them on the program, and we told
     them our intent was to have the MOX plant NRC regulated.
     Conway asked a few brief questions, why? And we explained
10
      the linkage with the reactors and so forth, and that it is a
11
      little different, and he had no objection to it at the time.
               We will go back and brief him and his other board
12
13
     members on this transition period so that they understand
14
     and hopefully have no problem with it, but what we wanted to
     do is reach agreement, hopefully today, so that we can
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16
      proceed with whatever revisions we need to make to this
17
      request for proposal, and I didn't want to do that in write
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in some transition period without the concurrence of the NRC

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regulatory processes. There may be some models there that

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     Commission because we are sort of obligating you to do
     things and I don't think I have the right to do that.
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21
              The next chart is just the schedule for the
22
     procurement and it shows hopefully getting this request for
     proposal out in May and then receipt of the proposals 90
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24
25
               CHAIRMAN JACKSON: Do you have a target date for
      the contract award? It's not on there.
               MR. CANTER: We are looking to see whether we can
3
      shorten up the evaluation period, but it will be in the
      October-November timeframe.
 4
               CHAIRMAN JACKSON: Okay.
5
6
               MR. CANTER: And the last chart is just the next
      steps. We would like to have your agreement on the general
8
      approach to this phased-in process. We want to work with
9
     your staff to develop the detailed regulatory framework,
10
     resolve any uncertainties, and we want to issue this RFP
11
     because we are staring at a delay, and so that is all there
12
      is to my prepared presentation at this point.
13
               CHAIRMAN JACKSON: Thank you, Mr. Canter.
               You know, the soil seems to be shifting and have
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15
      shifted quite a bit even within the last 24 to 48 hours, and
16
     so the real question that naturally occurs is how firm is
     DOE with the strategies and plans that you have presented
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     today, because you are asking for the Commission to make a
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19
     Commission decision but within the last 48 hours, you know,
     the shifting sands, so how firm are you here, and how far up
20
21
     does that firmness go within DOE?
22
               MR. CANTER: Well, in a --
               CHAIRMAN JACKSON: Is the Secretary on board?
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24
               MR. CANTER: I think the Secretary is on board to
25
     the extent that he knows we want this to be an NRC licensed
1
     facility.
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               CHAIRMAN JACKSON: Does he agree with that?
               MR. CANTER: Yes. The Deputy Secretary reviewed
3
      this whole thing yesterday and was very strong in her
4
     approach that, one, she wants it NRC licensed, and in no
5
6
      uncertain terms. She did not like any concept where there
      is no license and it may be appropriate that you have a
      conversation with her.
8
               CHAIRMAN JACKSON: I will.
10
               MR. CANTER: I assumed you would, and that you can
      judge for yourself on that, but she was very adamant about
11
12
     this yesterday, and unfortunately I think what confused
13
     things for a few weeks was people interpreting what they
     thought she meant, and that wasn't what she thought she
14
15
      meant at all.
16
               CHAIRMAN JACKSON: I see.
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               MR. CANTER: So I was very pleased to hear what I
18
     heard from her yesterday.
19
              CHAIRMAN JACKSON: Okay. Commissioner Diaz.
               COMMISSIONER DIAZ: If I may piggyback on the
2.0
21
     Chairman's questioning, I look at your page 5 and trying to
22
      see from words what commitment is.
2.3
               You know, that very first line in there really to
      me is not what I will call a commitment or -- it says we
24
      "want" to issue an RFP and "desires" -- now my problem is
25
      this, like the Chairman said, is that there is a difference
     between desiring something and having a structural plan that
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is actually fixed, because we thought we had one and we

worked to it, and now, you know, it has changed.

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intentions, but I do not see a commitment to do things in a
 6
      certain way, and maybe that commitment is not at your
      disposal, but I think the Commission needs to make decisions
      based on information that it can be relied upon -- you know
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10
      what I'm saving?
11
               MR. CANTER: Let me comment on that. This may
12
      just be a poor choice of words here on this slide, to use
13
      the word "desire" -- as far as I am concerned, and I think
14
     you can verify this from the Deputy Secretary, we want to
     move ahead with NRC regulation and licensing in no uncertain
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16
17
               What we don't have is all the plans and the
     details and the steps on how we get there planned out at
18
19
     this point, and we have to work on them and we have to work
20
     with your staff on them because we can't do it in a vacuum.
21
               CHAIRMAN JACKSON: Excuse me. Karen?
22
               MS. CYR: And you may need to work with Congress
23
     on this.
24
               MR. CANTER: Yes, ma'am.
25
               CHAIRMAN JACKSON: Commissioner?
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               COMMISSIONER McGAFFIGAN: I am on Slide 5 as well.
      I think our staff was trying to work with you on the
2
      legislative proposal, and I don't know whether -- about the
3
      disagreements within DOE, but I actually thought that there
      was an awful lot of pretty good work going on that could
      lead in a reasonable time period to a legislative proposal
 6
7
      that even if it is only a backup, to respond to Congress in
      a coherent way, and I would urge you to think about
     continuing that work and see if we could have a legislative
10
     proposal that was ripe, because that is one thing.
11
               On the other hand, I don't know how we ever --
12
     that legislative proposal ever became a pacing item for your
13
      RFP because it was always clear when we were talking about
14
      this, when you did the record of decision that the earliest
      legislation we'd pass would be late -- you know, September,
15
      October of this year, and it was always a question as to
16
17
      whether Congress would approve it, so you always needed a
18
     backup plan of some sort that would maintain you in the
19
     regulatory role and perhaps us in an assistance role.
20
               I think I asked the question last time we had a
     briefing about whether you could make that work, and I think
21
22
      your answer was yes, if that happened, you know, we would
23
     have to worry about the interface when the fuel got to your
2.4
      licensees, NRC, but you could make a DOE licensing or a DOE
      self-regulation work, so as I say, if I had been the
25
1
      procurement officer, I probably would have been suggesting
      to you that we have to open up both options -- tell the
 3
      bidder that there's both options and to the extent that
 4
      there are costs associated with, that are outside the
      control of the bidder we'll cover them, and then you could
      go ahead with the RFP without having it all tied down,
 6
      because to the extent it requires legislation it is not
8
     going to be tied down, so I am struggling with the
9
     chicken-and-egg issue here, I guess.
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               \ensuremath{\mathsf{MR}}\xspace . CANTER: Well, that is exactly what we are
11
     doing with the RFP at this juncture, and maybe we
      incorrectly had it drafted with a statement that the
12
13
      department intended to seek legislation, but the RFP was
14
      based upon successfully getting that legislation, and that
15
      was probably a tactical error at the time, although we
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So throughout these things I can see good

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thought we had everybody's agreement on that approach
16
      internally, so we are working on revising it at this point,
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      but didn't want to go ahead and revise it and go ahead and
18
      issue it when it commits the Commission or your staff to do
19
     certain things without having gotten at least some
20
21
      concurrence from you on even doing that, because even this
22
     transition period with DOE regulation, there is a
      substantial role for the NRC. Okay?
23
24
               CHAIRMAN JACKSON: Commissioner McGaffigan?
               COMMISSIONER McGAFFIGAN: Well, again my reaction
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     is that to the extent that you are paying the bills and we
1
     can get whatever relief we need from OMB for the
2
3
      non-business-like FTEs I think is what they are called these
 4
      days, then just as we went into external regulation in order
5
      to honorably respond to the Grumbly-Berube report, we should
6
     probably honorably try to deal with you on whichever --
               CHAIRMAN JACKSON: We already have.
               COMMISSIONER McGAFFIGAN: And we have been, and we
8
9
     have been -- and we are not, as I say, we are not the pacing
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      item in this, at least as I understand it.
               CHAIRMAN JACKSON: No, we're not, and in fact we
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12
      are out ahead in general.
13
              Commissioner, any further comments?
               COMMISSIONER DIAZ: Yes. Let me make one more
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15
      comment, because I am trying to put things together as an
16
      engineer from almost your same class.
               You know, you're expressing that you want to have
17
18
     the NRC as a regulator for MOX and obviously you have a very
19
     sharp group of lawyers, and Karen, I am going to find out
20
     how sharp they are, that you believe you can proceed with
21
     this process without Congress.
22
               It should be very easy for you lawyers to
2.3
      establish NRC as a regulatory authority from the first time.
24
              MR. CANTER: No comment.
25
               [Laughter.]
1
               COMMISSIONER DIAZ: And a second comment -- you
     know, just for the record -- there is probably, you know,
2
3
      one regulatory structure that can be created that is more
      cumbersome and more complex than the DOE and the NRC, and
      that is a mix -- DOE and NRC.
5
               [Laughter.]
               MR. CANTER: That is my recurring nightmare and so
      I want to get out of that as quickly as possible, because I
8
9
      think that will make it a very difficult environment.
10
               CHAIRMAN JACKSON: Well, thank you very much, Mr.
     Canter. This has been an interesting briefing that
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12
      obviously has both national and international security and
13
      economic significance.
               As you have heard, the Commission recognizes the
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15
     Administration's view of the importance of this program to
     this country as well as other nations around the world and
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17
     the need to successfully address the broad objectives and
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19
               The issues involved, as we have all discussed, are
2.0
      complex, but the NRC is ready to carry out the
      responsibilities within its authority.
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               That are necessary to insure the success of the
      program. However, having said that, there are a number of
2.3
24
      technical, and in some ways those are easier, funding and
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legal issues, that need to be addressed, including the issue

proceed on the technical and regulatory and other issues, we need a commitment from DOE to concurrently work on the legislation and with the Congress. So that's number one. 4 And that commitment has to come from the highest levels 6 within DOE. And then the follow on to that is that stability at the highest policy levels within DOE, of its overall -with respect to its overall commitment to this, is something that we absolutely must have. Because we can't operate on 10 11 the basis of shifting land. This is too important from a 12 national security and international security point of view. 13 And our whole -- the whole premise of how we do our 14 business, whether people think we do it perfectly or not, is scrutability and that has to be a fundamental element. 15 But we need these commitments at the highest 17 levels, and if the commitments are going to shift, then they 18 ought to be communicated at the highest levels. And so, 19 with that, we are adjourned. 20 [Whereupon, at 10:10 a.m., the briefing was 21 concluded.] 22 23 24

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