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NUCLEAR REGULATORY COMMISSION

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NUCLEAR REGULATORY COMMISSION

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BRIEFING ON MANAGEMENT PLAN FOR REGULATING  
MEDICAL USE OF BYPRODUCT MATERIAL

- - - -

PUBLIC MEETING

Nuclear Regulatory Commission  
One White Flint North  
Rockville, Maryland

Friday, September 10, 1993

The Commission met in open session,  
pursuant to notice, at 2:00 p.m., Ivan Selin,  
Chairman, presiding.

COMMISSIONERS PRESENT:

IVAN SELIN, Chairman of the Commission  
KENNETH C. ROGERS, Commissioner  
FORREST J. REMICK, Commissioner  
E. GAIL de PLANQUE, Commissioner

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## STAFF SEATED AT THE COMMISSION TABLE:

SAMUEL J. CHILK, Secretary

MARTIN G. MALSCH, Office of the General Counsel

JAMES TAYLOR, Executive Director for Operations

ROBERT BERNERO, Director, NMSS

CARL PAPERIELLO, Director, Division of Industrial &  
Medical Nuclear Safety, NMSS

JOHN GLENN, Chief, Medical, Academic & Commercial Use  
Safety Branch, NMSS

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P-R-O-C-E-E-D-I-N-G-S

2:00 p.m.

CHAIRMAN SELIN: Good afternoon, ladies and gentlemen.

The Commission is meeting at this time to receive a briefing from the staff on a proposed staff management plan for the NRC's Medical Use Regulatory Program.

The Commission has been in the process of reviewing this regulatory program for the medical uses of radioactive materials for some time now, at least since the fall of 1992. Since that time, the past scope and implementation of the Medical Use Regulatory Program has received a great deal of Commission attention, as well as congressional and public scrutiny. Today we're going to hear the results of the staff's comprehensive review to identify a plan for major program areas and management direction for the future and the resources necessary to implement the plan.

Copies of the staff management plan should be available here in the conference room.

I would like to stress this is primarily a management plan, not a discussion of the substantive issues. But, of course, these are interconnected.

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1 This is the second major presentation to the  
2 Commission on management. We got an interim report  
3 from Doctor Paperiello before he started in his  
4 current operations. We are vitally interested in  
5 establishing what needs to be done to enhance  
6 implementation of an effective regulatory program for  
7 radiation medicine.

8 Any of the Commissioners care to remark?  
9 Mr. Taylor?

10 MR. TAYLOR: Good afternoon. With me at  
11 the table at Bob Bernero and Doctor John Glenn and  
12 Carl Paperiello from NMSS. Bob Bernero will start the  
13 presentation.

14 MR. BERNERO: (Slide) I'd like to start  
15 with a little bit of the historical background that  
16 goes back on slide number 1 to the time before Carl  
17 Paperiello joined us here at Headquarters.

18 In calendar year 1992, we felt somewhat  
19 numb from the experience of having gone through what  
20 is now called the QM Rule. You may recall there was  
21 a great deal of controversy in this area developing  
22 the rulemaking on quality management in medical uses  
23 of isotopes. We had an NMSS senior management  
24 conference in August of 1992 and we were trying to  
25 look for areas or ways that we could do a management

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1 review or reconsideration of what we were doing in  
2 this particular arena. We settled on the medical uses  
3 as the scope of it and to develop a management plan  
4 for how we conduct our regulation of medical uses.  
5 That led to the development of this medical issues  
6 paper that's mentioned here in September of 1992, with  
7 the intent that we would discuss this matter or these  
8 matters with the agreement states and with others and  
9 work toward a reappraisal of what we were doing and  
10 how we should manage it and come to the Commission.

11 In the process though events overtook us.  
12 I'm sure you're all aware -- I mentioned here the  
13 Indiana, Pennsylvania therapy misadministration and  
14 the IIT which Carl Paperiello led. That was just one  
15 of the events that overtook this activity. So, what  
16 we had to do then was go into another agonizing  
17 reappraisal of the medical management plan itself.  
18 That led to the master agenda that we sent forward in  
19 May which is that whole body of tasks where we put  
20 them altogether, tried to organize them in some  
21 coherent way, get an idea of what the priorities are,  
22 what's going on, how we can use the resources.

23 Then in parallel with that, Carl had been  
24 directed to do a senior management review, an  
25 independent review and he has reported on that to you.

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1 You mentioned it, Mr. Chairman, in your opening  
2 remarks. So, Doctor Paperiello was then left with the  
3 independent appraisal of the medical management and  
4 now, as of July 1st, he is left with the  
5 responsibility to conduct the program.

6 CHAIRMAN SELIN: He's not independent  
7 anymore.

8 MR. BERNERO: No, he lost it. He spoke to  
9 himself. So now, on the other side of the date, he  
10 has the full responsibility. I think in this context  
11 I think he has excellent credentials and experience  
12 already for doing it.

13 So, Carl, why don't you take over from  
14 here.

15 DOCTOR PAPERIELLO: Okay.

16 Good afternoon. Today's presentation on  
17 the Medical Management Program is intended to provide  
18 the Commission with the staff plan for completion of  
19 a significant number of actions identified in earlier  
20 communications with the Commission. I don't believe  
21 there are going to be any new activities really  
22 identified. Some of these are staff initiatives,  
23 while others are Commission initiatives. I see the  
24 staff as requesting Commission endorsement of the  
25 planned activities, although some of these things are

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1 already underway in conjunction with earlier  
2 direction. Considerable resources are involved in  
3 these activities and some of the proposed rulemakings  
4 may take several years.

5 We show the plan for the purpose of  
6 budgeting, starting on October 1 of this year.  
7 However, a number of actions are underway and some  
8 actions, such as the FDA MOU have already been  
9 complete. In fact, one of the actions was my own  
10 earlier report and that's been complete. Some are  
11 expected to be closed very soon. For example, one of  
12 the actions is the final analysis of why the Omnitron  
13 wire broke when we just this week got the report from  
14 Southwest Research. Their conclusion is the same as  
15 presented in my original IIT report and that was  
16 environment embrittlement caused by the radiation  
17 attack on the Teflon and the release in the hydrogen  
18 fluoride.

19 The staff presented the Commission with a  
20 master agenda in a memorandum dated May 19th, 1993.  
21 In my subsequent medical program review, I recommended  
22 several ways in which some of the issues could be  
23 combined and addressed through one action. One of  
24 these would be the development of a management  
25 directive on misadministration follow-up.

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1 By the time my staff abstracted a number  
2 of additional actions from my report, we were up to 90  
3 items. To the greatest extent possible in preparing  
4 the report that you received today, we consolidated  
5 issues into single action items. Since many of the  
6 actions that we are proposing involve coordination  
7 with the Office of Research, the Office of General  
8 Counsel, AEOD, Office of Enforcement and the Office of  
9 State Programs, these offices were involved in the  
10 time frame projections and the resource allocations  
11 you'll find in the paper.

12 (Slide) Can I have the next slide?

13 CHAIRMAN SELIN: Doctor Paperiello, I just  
14 like to --

15 DOCTOR PAPERIELLO: Yes?

16 CHAIRMAN SELIN: In comparing this  
17 document with your previous study, the one loop that  
18 I think is missing -- the previous study said we had  
19 a number of problems. Here are a bunch of steps.  
20 What I think we'd appreciate you do at the end is say,  
21 "If all these steps are taken, do we solve all the  
22 problems, half the problems?" In other words, how far  
23 do the steps go in solving the problems that you  
24 identified in the earlier report? I mean, it's  
25 something that you just might touch on as you go

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1 through.

2 DOCTOR PAPERIELLO: Okay.

3 CHAIRMAN SELIN: What gaps will we still  
4 have left even if these are all gone?

5 DOCTOR PAPERIELLO: Sure.

6 We consolidated even these individual  
7 action items. We categorized them into nine major  
8 regulatory program areas. Again, in order to improve  
9 our ability to manage these, we used a -- and attached  
10 to the slides are a time line chart for all these  
11 activities. Enclosure 2 of our report shows how the  
12 90 items were incorporated into the actions presented  
13 in the time line chart.

14 Certain complex actions, such as the  
15 National Academy study, and several proposed  
16 rulemakings are shown with greater structure. Over  
17 the next several months, some of the other actions are  
18 going to gain similar structure, particularly things  
19 that involve changing our inspection program and  
20 guidance and the like. We have a computer program  
21 called Time Line, which turns out to be very nice to  
22 allow you to do this and allocate resources. In fact,  
23 when we originally were allocating resources, we had  
24 to stretch out the program because the program was  
25 showing us that we were just piling too much on the

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1 front end and we just couldn't do the work in the time  
2 allocated.

3 (Slide) Can I have the next slide?

4 What is the total cost of the program?  
5 It's going to cost about 50 FTE, 30 of these from NMSS  
6 and the regions, and about \$4.24 million. It will run  
7 from fiscal '94 through the first quarter of fiscal  
8 '98. The length of time is mostly things that involve  
9 rulemaking.

10 COMMISSIONER REMICK: Carl, is that 50  
11 full-time equivalent years or 50 full-time equivalents  
12 per year?

13 DOCTOR PAPERIELLO: No, no, total. No,  
14 over -- no, no, no, not per year, no.

15 COMMISSIONER de PLANQUE: Carl, is that  
16 over and above the staff that's currently dealing with  
17 the routine medical issues or does it include them?

18 DOCTOR PAPERIELLO: In the case of NMSS,  
19 that is true.

20 COMMISSIONER de PLANQUE: Which? That was  
21 an "or" question.

22 DOCTOR PAPERIELLO: Dealing with the other  
23 offices, I know that Ed Jordan, for example, just this  
24 past year has transferred two FTE or put them in the  
25 materials area, looking at -- and so, when the other

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1 offices gave me their resources, they indicated they  
2 could do it. Now, whether or not they have  
3 reallocated or how they got to the point they got, I  
4 don't really know.

5 MR. TAYLOR: AEOD wasn't reallocation.

6 MR. BERNERO: Yes. But I think to answer  
7 your question, this is not the entire medical  
8 activities. This is a delta.

9 COMMISSIONER de PLANQUE: Right. This is  
10 over and above --

11 DOCTOR PAPERIELLO: This is over and above  
12 what we would do if we weren't doing all of these  
13 things.

14 CHAIRMAN SELIN: But it's not over and  
15 above the previous budget. Some of it is funded  
16 through reallocations and not doing some --

17 DOCTOR PAPERIELLO: That's exactly right.  
18 That's exactly right.

19 MR. TAYLOR: These numbers are within the  
20 budget projections for '94, '95.

21 COMMISSIONER de PLANQUE: Right. But it's  
22 the incremental extra needed to do -- carry out  
23 what's --

24 MR. TAYLOR: This plan.

25 DOCTOR PAPERIELLO: Right. For example,

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1 we will be transferring FTEs which essentially are  
2 going to come out of regional inspection effort to  
3 this program. We're not going to move the people,  
4 we're going to rotate people into positions and we're  
5 going to delegate the work out in the field because  
6 much of the activity in terms of revising licensing  
7 guidance and inspection guidance is best done by  
8 people who have a lot of experience in using the  
9 procedures. So, that's how some of these resources  
10 are going to be obtained.

11 (Slide) Could I have the next slide?

12 As I mentioned earlier, all of the  
13 affected offices that are involved in this program  
14 have been involved and concurred in this particular  
15 paper. Two of the FTE within NMSS per year have been  
16 reprogrammed from high-level waste and low-level  
17 waste, and as I mentioned earlier the other four are  
18 coming from the regions. We're going to rotate people  
19 in this area.

20 COMMISSIONER de PLANQUE: Can I just make  
21 sure? Is this impact these other programs in any way  
22 that we're going to hear about next week or is this --

23 MR. BERNERO: No. That was done as part  
24 of the budget package you just reviewed a few weeks  
25 ago. That was -- yes, we foresaw that need, made that

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1 impact. All the impacts were presented there.

2 COMMISSIONER de PLANQUE: And this is true  
3 for what you're doing with the regions as well?

4 DOCTOR PAPERIELLO: Yes.

5 (Slide) Can I have the next slide?

6 Let's just talk about some of the program  
7 areas and what's to be accomplished.

8 In the area of what I call medical policy  
9 and coordination, the tasks to be accomplished in this  
10 area include the National Academy of Science external  
11 review is a major activity. The FDA MOU has already  
12 been signed but now has to be implemented. Other  
13 activities in this area is waste collector and  
14 processor guidance. After a meeting with state  
15 representatives and waste processor representatives,  
16 a draft guide has already been prepared. It was  
17 prepared by my division and Low-Level Waste, the Low-  
18 Level Waste people in NMSS and has been sent to the  
19 representatives at the meeting and is currently being  
20 reviewed. So, that's an activity that's actually in  
21 progress.

22 Pending completion of the National Academy  
23 study, we together with Research will look at  
24 establishing some type of interim criteria. So when  
25 you get rulemaking in the future in the medical area,

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1 there will be some kind of comparison and compare what  
2 we're proposing to do with the existing 79 medical  
3 policy statement.

4 COMMISSIONER REMICK: Carl, when I look in  
5 the SECY-93-244, the discussion there, a description  
6 of program area 1, it talks about securing contract  
7 support for a study. I assume that's the National  
8 Academy of Science?

9 DOCTOR PAPERIELLO: Yes. Yes.

10 COMMISSIONER REMICK: It doesn't identify  
11 it as so, but I assumed that was the case.

12 DOCTOR PAPERIELLO: Yes, that's what it  
13 is.

14 COMMISSIONER REMICK: The Commission spent  
15 a lot of time on the statement of work for that study.  
16 The description in the SECY doesn't cover that and I'm  
17 not saying it should. I would just hope that the  
18 staff is keeping in mind the Commission input on that  
19 statement of work for the National Academy of  
20 Sciences.

21 DOCTOR PAPERIELLO: We are and I've  
22 already had an initial personal meeting with the  
23 National Academy and I will be -- even though I will  
24 have a staff person assigned, I will be heavily  
25 involved in any of their activities.

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1 COMMISSIONER REMICK: Fine.

2 DOCTOR PAPERIELLO: (Slide) Can I have  
3 the next slide?

4 The second program area I'd like to talk  
5 about is the issue of misadministration of patient  
6 follow-up. There are actually -- to give you an  
7 example, there are 12 action items out of the 90 that  
8 fall under this particular area. These 12 action  
9 items can be split into two general areas. One is  
10 prevention of misadministrations, which is  
11 implementation of the QM rule and the second general  
12 area is the NRC action in response to once there is a  
13 misadministration.

14 Now, the activities we have in this area  
15 that are ongoing, we have a contractor who has  
16 initiated a review of the licensee's QM plans. We've  
17 issued a draft QM inspection procedure which is going  
18 to be piloted at ten licensees over the next several  
19 weeks and then, based on that pilot program, be  
20 revised and issued to the regions in final form.

21 The path that we're going down in this  
22 area is the contractor will review the plans and the  
23 regions will do an in-depth inspection. We do look at  
24 QM plans when we currently conduct medical  
25 inspections, but the review is relatively shallow in

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1 the sense is there a plan in place and are people  
2 trained in the plan and are they following the plan  
3 without following the various paths down the plan to  
4 make sure all potential therapeutic paths for a  
5 particular licensee are followed.

6 The second major issue that we're working  
7 on is the misadministration management directive. I  
8 have a staff member who is working on that directive  
9 right now and that will cover the topics of how do we  
10 inspect when we receive a misadministration report,  
11 the role of the medical consultant. I have a -- I'm  
12 still working on the paperwork, but I have one of my  
13 staff members who is assigned now as a  
14 misadministration coordinator. How we will manage the  
15 information, and I've had interactions with AEOD on  
16 how they're going to put the information in their  
17 database, the kind of things I need I think they ought  
18 to put in the database, so we want to do a search of  
19 misadministrations, and then what are we going to do  
20 with the report and the consultant's report to ensure  
21 that all the information goes where it's supposed to  
22 and is retrievable, a patient follow-up policy, what  
23 are the trip points for initiating either an AIT or an  
24 IIT for more severe misadministrations, and cover the  
25 issue of what do you do when you think that there's

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1       been a severe impact on a patient and should you  
2       notify a coroner or medical examiner or some  
3       appropriate state or local authority.

4               COMMISSIONER de PLANQUE:   Carl, I sense  
5       some policy issues arising as part of this and we're  
6       looking at a management directive.  How or would you  
7       expect to get Commission input on this?

8               DOCTOR PAPERIELLO:       Well, management  
9       directive is something I can't -- I mean I can draft  
10      it, but somebody else has to approve it because it has  
11      to be coordinated.

12              MR. BERNERO:   Yes.  Let me take over for  
13      a moment here, Carl.

14              In the preparation of this you may be  
15      aware there's a rather lengthy catalogue of questions  
16      that I have given to the General Counsel.  We are  
17      trying to develop this management directive with the  
18      full expectation that there's a great deal of legal as  
19      well as policy involved in it.  It is my intention  
20      that when we get to the point where we have both a  
21      substantive management directive framework, something  
22      that looks like a coherent product, and when we have  
23      answers specific to those questions that we will use  
24      it in some way, have a vehicle to come to the  
25      Commission because it's very clearly the agency's

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1 policy.

2 It will involve policy issues such as --  
3 right now we have an ad hoc requirement that we have  
4 a medical consultant for every misadministration. But  
5 the instructions for those consultants are not very  
6 clear. What should the consultant do? How far should  
7 the consultant go? What is our objective? What do we  
8 as an agency want to accomplish by that? That whole  
9 thing, that fabric has to be woven to some degree  
10 before you can look at it and see what it is. But  
11 clearly it will come to the Commission.

12 COMMISSIONER de PLANQUE: Okay.

13 CHAIRMAN SELIN: Will it come to the  
14 Commission clearly? That's the question.

15 Doctor Paperiello, as you go through these  
16 pieces, you might point out the implications for the  
17 agreement statement programs, whether we will have to  
18 provide resources out of the agreement state office to  
19 do comparable training or comparable development since  
20 the question of medical programs in agreement states,  
21 of course, is a major issue. For instance, in this  
22 area, we're developing really on an exploratory basis  
23 how to handle a set of things that we've handled on an  
24 ad hoc basis in the past. We're going to obviously  
25 want to communicate our views, whether they're

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1 questions of strict compatibility or just some cases,  
2 other cases, different types of compatibility. We're  
3 going to want to communicate our views with the  
4 agreement state programs. This is a major additional  
5 workload to go to the other 29 states.

6 MR. BERNERO: Yes, it will.

7 CHAIRMAN SELIN: Where will that work be  
8 handled?

9 DOCTOR PAPERIELLO: The paper -- we've  
10 talked to State Programs and they've included  
11 resources and it discussed in the paper will hold a  
12 couple workshops. How much -- currently my division  
13 expends considerable resources supporting the Office  
14 of State Programs. In other words, we do training, we  
15 go out and look at sealed source and devices. I've  
16 had a request today for a considerable amount of  
17 technical assistance. So, I guess I hadn't really,  
18 other than what they gave me, considered any  
19 additional burden on them other than what they gave me  
20 on --

21 CHAIRMAN SELIN: Not in this topic per se,  
22 but when you go through it all and not so much at the  
23 table. We might sit down -- I'm sorry. You might sit  
24 down and say, "Can this be handled within the normal  
25 compatibility and training support or are we talking

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1 about an additional amount of effort which also should  
2 be explicitly budgeted?" Probably any one of these  
3 could be handled within your training allowance, but  
4 as you start adding them up you may not be able to do  
5 that.

6 DOCTOR PAPERIELLO: If we expect the  
7 states to put the same level of effort that we are  
8 proposing to put, and which frankly we have put in the  
9 past year on follow-up on misadministrations, we are  
10 probably going to have to expend resources in training  
11 them and, of course, they're going to have to spend  
12 resources in receiving the training.

13 CHAIRMAN SELIN: QM rule is one of the  
14 highest priority federal/state programs. So, that's  
15 a reasonable assumption.

16 DOCTOR PAPERIELLO: Yes, I think so.

17 CHAIRMAN SELIN: Commissioner de Planque?

18 COMMISSIONER de PLANQUE: I'd like to just  
19 expand upon the Chairman's point in that I think it's  
20 extremely important as to how and when you get  
21 agreement states input on this since it's going to  
22 have such a huge impact on them. How that's woven in  
23 is, I think, extremely important.

24 DOCTOR PAPERIELLO: Well, we would share  
25 what we do. I suspect from the time I complete a

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1 draft, which I plan on probably sometime in December,  
2 there's other pieces that float with this thing in  
3 terms of what the consultants do and how we notify the  
4 public in the case of the same people are working on  
5 it, is probably going to be quite a time before I can  
6 get everybody to agree on the draft and it would be  
7 floated through the agreement states and other offices  
8 for comment.

9 CHAIRMAN SELIN: As you get down to your  
10 second level of planning, which of course is beyond  
11 what is required at this point, you'll need to say,  
12 "Is this a big enough deal to need a special agreement  
13 state workshop? Should the agreement states just be  
14 given drafts, et cetera?"

15 DOCTOR PAPERIELLO: That's already the  
16 feeling on the part of state people, the State Program  
17 people.

18 CHAIRMAN SELIN: If I might just take a  
19 liberty with Commissioner de Planque's point, I think  
20 the point she was trying to make is she believes and  
21 certainly I believe and I'm sure the other  
22 Commissioners do that in topics of this magnitude we  
23 would actually like their input rather than just how  
24 they will implement these things once they're done.

25 COMMISSIONER de PLANQUE: As early as

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1 possible in the process.

2 DOCTOR PAPERIELLO: Yes. But I would say  
3 that we will be addressing many issues that the  
4 Commission itself brought up. So, this is not being  
5 done in a vacuum. We owe you --

6 CHAIRMAN SELIN: That doesn't mean that  
7 they're right.

8 DOCTOR PAPERIELLO: And we do owe you a  
9 report in the Commission early in 1995 on our views on  
10 whether or not the QM rule has been effective in  
11 reducing misadministrations.

12 (Slide) Can I have the next slide?

13 Medical rulemaking is the next area and  
14 this is where we get some long time lines. First,  
15 there are three ongoing rulemakings that I sort of  
16 inherit. One is the pharmacy rule, which will  
17 allow -- which will relieve people of the requirement  
18 to strictly follow the package insert. Another  
19 significant component of that rule will be that board  
20 certified physicians can be selected by licensees to  
21 become authorized users and we will receive  
22 notification rather than us issuing a license  
23 amendment. Actually, from my viewpoint, that's an  
24 extremely important point because as a practical  
25 matter now we spend an enormous amount of resources,

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1       ours and licensees, on something that is really pro  
2       forma. If we get an application in and a physician is  
3       board certified, the technical person deals with it  
4       like ten minutes and it's mostly an administrative  
5       issue. So, this is going to be no decrease in safety  
6       and, frankly, we save everybody a lot of resources.

7               Patient release criteria. Right now there  
8       seems to be -- I'll say there's an apparent  
9       inconsistency between the new Part 20 and existing  
10      Part 35, and the third issue is the exposure of  
11      embryos and neonates. It's one of these things you  
12      would expect that everybody is concerned about. At  
13      least I've been in nuclear medicine departments and  
14      you see big signs about ensuring that the patient is  
15      not pregnant or nursing, but apparently there are  
16      problems out there occasionally. It's not one of  
17      these things that's done universal. When it occurs,  
18      there is nothing in our regulations right now that  
19      makes it a violation or even something reportable to  
20      us.

21              The second major issue, and this is really  
22      long-term, and that is a revision, a complete rewrite  
23      or reorganization of Part 35. I recognized that we  
24      did it. But medical changes, uses are changing fast.  
25      We got in and I saw something about a request for

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1 guidance from one of the regions two weeks ago for a  
2 device that is known as a pulsed HDR unit. Well, we  
3 put out a bulletin and we require people to when you  
4 use this machine be able to intervene. Well, you  
5 can't possibly intervene with a pulsed HDR because the  
6 patient is connected to this thing for several days  
7 and you're not going to have a medical physicist and  
8 a physician standing next to the machine for three  
9 days. So now, how are we going to handle something  
10 like this? Fortunately there aren't that many devices  
11 like this in the country but we are getting requests  
12 to license it.

13 CHAIRMAN SELIN: Doctor Paperiello, I've  
14 spoken to General Counsel about this and this might --  
15 I mean about what I'm about to say, not about Part 35.

16 DOCTOR PAPERIELLO: Sure.

17 CHAIRMAN SELIN: It's very clear that when  
18 we're in as dynamic an area as the medical area, that  
19 we and the agreement states will never be compatible  
20 because we change the rules faster than they can bring  
21 up the previous rules. So, if you're going to propose  
22 rewriting the rule, we need to really change the  
23 structure so that you have a core which is the  
24 fundamental regulatory stable part and then a set of  
25 attachments which obviously will have the same weight,

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1 but can be updated more easily and will not require  
2 new legislation. You're really going to have to do a  
3 survey of what the states need to implement these  
4 pieces so that we can have comments that have the  
5 weight of the rule, but don't require the same delay.  
6 If they're always three years behind and our mean time  
7 between changes is two and a half years, you clearly  
8 have an unstable situation.

9 DOCTOR PAPERIELLO: And the time constant  
10 seems to be shorter than three years.

11 CHAIRMAN SELIN: Exactly.

12 DOCTOR PAPERIELLO: But rather than going  
13 through a couple of the other devices that I'm aware  
14 of that we don't address, the goal is to get it to a  
15 structure that is like that, a core, make it easy to  
16 maintain. I have a slight prejudice. I believe in  
17 the diagnostic nuclear medicine area we've been  
18 entirely too prescriptive, at least in terms of the  
19 number of requirements in the existing Part 35  
20 compared to the risk that's involved.

21 Another issue that we need to address that  
22 we've discussed with the ACMUI is training of  
23 experience for RSOs and authorized users in the  
24 medical area. As an approach on this thing, whatever  
25 we do, what I'm proposing to do is I do want to go out

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1 with advanced notice of proposed rulemaking. I do  
2 want heavy medical community and state input on  
3 whatever we propose to do to get to where we want to  
4 be. That's one of the reasons why this is such a long  
5 time on this one.

6 COMMISSIONER REMICK: Carl, you mentioned  
7 the apparent inconsistency between Part 20 and Part 35  
8 on the patient release. I have an interest not only  
9 in the medical area but in a broader area of do we  
10 have inconsistencies when the new Part 20 goes into  
11 effect with other regulations. I bring this up  
12 because I have some very important ears there to the  
13 left of you. But in other areas -- from time to time  
14 I've brought it up and we've talked about moving the  
15 dose limits from Part 100 to Part 50, raising the  
16 question that the ratio we have there between whole  
17 body dose and thyroid doses to me does not seem  
18 consistent with what we're saying the organ waiting  
19 doses are in Part 20 or ICRP is saying.

20 So, I ask you in the medical area, but I  
21 ask Mr. Taylor and Mr. Bernero in the broader area,  
22 are we doing anything to look at making sure that we  
23 do have consistency with our new Part 20 and our other  
24 regulations where we have doses?

25 MR. BERNERO: Yes. The one with the

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1 patient release criteria is a relatively simple one.  
2 I think you're aware of it. But yes, that's true. We  
3 have it in the waste area, we have it in the reactor  
4 area. I think that what we're going to have to do, at  
5 least this is the perception I have, is we're going to  
6 have to modernize all of our regulations to get away  
7 from this old whole body thyroid and get to the  
8 effective dose equivalent rationally. I mean we have  
9 this problem in waste, we have it in the reactor arena  
10 and we have it here.

11 CHAIRMAN SELIN: But you're also going to  
12 have to change the structure so that we reference some  
13 other rules or other documents. We can't continue to  
14 write all these numbers explicitly into each rule.  
15 When we change one, we want to change them all. We  
16 need to set up a database structure, a reference  
17 structure. I think Part 35, if you really are serious  
18 about that, would be a very good place to start.

19 MR. BERNERO: Yes. But I'd just like to  
20 add one more thing about the inconsistency of dose.  
21 The significance of the change in Part 20 from the old  
22 version to the new version, the philosophical basis of  
23 that being so different, it is not a simple task to be  
24 rational. If you go back to our old material  
25 regulations, 10 CFR 30.70, exempt quantities and

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1 things like that, there are many areas of the  
2 regulations that were developed with criteria that  
3 were developed on the old philosophy. It's not a  
4 simple conversion to effective dose equivalent to take  
5 care of that. It will take a major activity of  
6 modeling and analysis. So, it's not as simple as I  
7 would like, but it's necessary. There's no question.

8 CHAIRMAN SELIN: It will be when you  
9 finish.

10 Doctor Paperiello, please.

11 DOCTOR PAPERIELLO: (Slide) Could I have  
12 the next slide?

13 The next program areas 4, 5 and 6 deal  
14 with licensing, inspection guidance and enforcement  
15 policy. These are not what I'd call immediate safety  
16 issues. They're more of a matter of efficiency and  
17 effectiveness and also an effort to minimize license  
18 conditions. What we do, we have licensing guides.  
19 The licensing guides have not been maintained and kept  
20 up to date. So, what we do to get around that is we  
21 issue policy guidance and directives to the regions  
22 which are an easier thing to get out. However,  
23 licensees don't get to comment on these, nor do they  
24 generally have an explicit knowledge, but various  
25 regions, of course, will send copies of these things

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1 out to licensees to explain what they have to do in  
2 order to get a license for a certain activity. Then  
3 on top of that, the regions on specific issues, when  
4 they're not covered in either the licensing guides or  
5 in the policy guidance and directives, send requests  
6 into Headquarters. We call these technical assistance  
7 requests, but most of them are not technical  
8 assistance, most of them are matters of policy and law  
9 for specific guidance.

10 I started a few weeks ago ensuring that  
11 all of them came through me and didn't come to my  
12 branch chiefs. I farm them out but I wanted to see  
13 what sort of things were being asked. Frankly, if we  
14 had better guidance out to staff, we would probably  
15 save both our licensees and ourselves time and money  
16 over the long run.

17 In the inspection area, we need to focus  
18 more on primary safety issues, including the  
19 management of the Radiation Safety Program versus  
20 things which are easy to inspect but what I call  
21 conventional requirements, the fact that a committee  
22 has to meet once a quarter, the fact that you might  
23 have to calibrate something on a quarterly basis. As  
24 important that equipment be calibrated and records  
25 being maintained, but many of these things are not

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1 fundamental safety. They deal with conventions and  
2 ways of achieving safety and we really need -- we only  
3 have so much time to inspect and we keep multiplying  
4 our regulations. We can't just keep -- we have to cut  
5 somewhere, but we need to concentrate on the primary  
6 safety indicators in issues of exposures, of people's  
7 training, of control over material.

8 Event response. We need to place more  
9 emphasis on event response, the small events. The big  
10 ones get IITs, they get AITs. But I look at too many  
11 inspection reports that concentrate on violations and  
12 not understanding why the licensee got into trouble.  
13 In the regulatory impact survey that I conducted,  
14 licensees complained about that and frankly if we want  
15 to -- it's when a licensee has a mistake or an error  
16 that we get an insight into systems failure, including  
17 management systems failure. We need to understand why  
18 these events occur so we can do something or teach  
19 people what they need to do to prevent them from  
20 occurring.

21 (Slide) Can I have the next slide?

22 COMMISSIONER de PLANQUE: Carl, before you  
23 go ahead to the next area, if my understanding is  
24 correct I think some of the agreement states, or some  
25 of the states may have some of these guidance

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1 documents are there. Are we setting up a mechanism to  
2 look at those?

3 DOCTOR PAPERIELLO: I'm going to -- we  
4 should have copies. We've asked them at least to  
5 provide copies of what they use and I do want to take  
6 a look at everything they use. I've talked to them at  
7 meetings about this. I don't intend to do any of  
8 this, conduct any of these activities in a vacuum. I  
9 want everything -- I don't want to rediscover the  
10 wheel and if I have an industry document, I'll use it.

11 CHAIRMAN SELIN: As long as Commissioner  
12 de Planque brought up this question, I would just like  
13 you to consider something. I'm not sure it's a good  
14 idea. But I think you might be, after you've been all  
15 through this, ready to have a workshop with the  
16 agreement states, not on any particular set of things,  
17 but saying, "Look, we're talking about changing in a  
18 major way the way we do business and this obviously is  
19 going to be a moving target for you 29 folks also,"  
20 and see if you can talk about a process to shorten the  
21 time constant and to, at least for those that care to,  
22 to come more directly into concordance with where  
23 you're heading and therefore where we're heading.

24 DOCTOR PAPERIELLO: I'm already scheduled  
25 to attend the all agreement states meeting in October.

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1 I do intend to interact. I've met with some of the  
2 states at the Radiation Control Program Directors  
3 meeting in May and some of these ideas have already  
4 been explored with them.

5 In the enforcement area -- I don't know  
6 how to describe this, but it's not clear if I look at  
7 the statistics that I can see we're getting results  
8 from enforcement. It's clear that you need it and  
9 there are some significant problems out there. But  
10 let's put it this way. A typical civil penalty in the  
11 medical area might be somewhere between \$2,000.00 and  
12 \$5,000.00. Not too many of the licensees are doing  
13 things deliberately. They sometimes stumble into  
14 things. My feedback I get from at least a sample of  
15 people which are very big licensees in the regulatory  
16 impact survey, they're primarily concerned with bad  
17 publicity. But most of these licensees want to do the  
18 right thing. They're not trying to do the wrong  
19 thing. But one way of looking at this financially in  
20 perspective is that a gamma knife installation cost \$4  
21 million, an HDR costs a quarter of a million dollars  
22 plus -- that's for the machine, not counting the  
23 shielded installation. I'm told that the cost of  
24 getting into a nuclear medicine clinic is in the order  
25 of \$1 million. So, it's not clear that the size of

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1 the fines are a deterrent. I do know the publicity is  
2 a deterrent.

3 On the other hand, I don't see a lot of  
4 positive incentives other than you don't get fined as  
5 a reward for good performance. One of the things I'm  
6 considering is to look at our inspection frequency and  
7 see whether or not there is something we can do -- in  
8 other words, if we come out to you and we're there --  
9 you know, the last couple of times we've been there,  
10 there have been no problems. Can we extend the  
11 frequency of inspection, save you the fee, do  
12 something to recognize the fact of your good  
13 performance? Most of our licensees do good.

14 CHAIRMAN SELIN: Could I make a suggestion  
15 on that?

16 DOCTOR PAPERIELLO: Sure.

17 CHAIRMAN SELIN: First of all, the  
18 universe almost falls into big licensees and little  
19 licensees. Little licensees, a civil penalty is very  
20 important to -- and these guys can't reasonably be  
21 expected to have a terrific paperwork program, QM,  
22 self-assessment. Big licensees, the amount of the  
23 civil penalty, almost like reactor guys, although on  
24 a small scale, isn't so devastating to them. But even  
25 they might be at a margin if you're talking like a big

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1 city hospital. But nevertheless it's the publicity,  
2 et cetera.

3 On the other hand, a little guy can say,  
4 "I'm a well logger and I've got 80 --" well, medicine.  
5 "I do a few diagnostics, not very much. I get 87  
6 papers from you folks a month. I really can't keep up  
7 with them. You can have some sympathy for that.

8 So, I might suggest that you have a  
9 different approach for the two different worlds and  
10 for the big folks not only stretch out the amount of  
11 frequency but consider going to more self-assessment  
12 where we don't just leave them go but we say, "You do  
13 the audit." I mean, "You do the assessment. You send  
14 it to us and we'll review them on a random basis."  
15 For the little folks, then the money really does mean  
16 something.

17 DOCTOR PAPERIELLO: I agree. Well, we  
18 need to do something to get problems fixed and to give  
19 people an incentive and we ought to concentrate on  
20 safety issues.

21 CHAIRMAN SELIN: One of the things I think  
22 we have to do is follow up soon after for people who  
23 have been assessed the civil penalty because there's  
24 really no credibility if we don't follow up to see if  
25 they've actually fixed the problem.

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1 DOCTOR PAPERIELLO: I agree 100 percent.

2 CHAIRMAN SELIN: I don't believe we do  
3 that consistently. One question you should be able to  
4 answer when all this is at least do the penalties  
5 keep -- we don't know if they're deterrent, but at  
6 least do they keep recurrences from happening in the  
7 same way licensees?

8 DOCTOR PAPERIELLO: Well, when I was  
9 Deputy Regional Administrator, that's sort of the  
10 things I kind of looked at. You know, look at how the  
11 office is running. Several years ago I went through  
12 and I was looking at open items and I found civil  
13 penalties. Actually it was on the reactor side. We  
14 issued a civil penalty and a year later we hadn't  
15 closed it out. We did, but I'm just saying that was  
16 the sort of thing -- you're right, and I agree. You  
17 ought to follow-up an escalated action within six  
18 months after -- generally, I think it's about right.

19 CHAIRMAN SELIN: Just thinking about our  
20 colleagues on the Agreement State Program, one of the  
21 things we're going to come back and ask you, not soon  
22 but thereafter, is does enforcement seem a like a  
23 unique way to accomplish certain objectives or is it  
24 one of several? Because, as you know, we don't  
25 require that the agreement states have an enforcement

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1 program. We do require that in some way or another  
2 they follow up.

3 Mr. Bernero?

4 MR. BERNERO: Yes. I would just add that  
5 there's still a residual question and you just raised  
6 it. Is enforcement a necessary component? Carl, in  
7 the earlier dialogue on this, mentioned the gamma  
8 knife. We're right now looking at the risk of gamma  
9 knife operations and a misadministration that occurred  
10 with one recently. When you look at this \$4 million  
11 device and the labor rate that goes with it, remember  
12 this team of physicians and physicists and nurses and  
13 an enormous effort. Is enforcement a necessary  
14 component or is this perhaps something like airplane  
15 crashes? When you have an event, the principal focus  
16 is on discovery of what went wrong and get back into  
17 the QM side of it and say, "What does it take to avert  
18 that?"

19 CHAIRMAN SELIN: That's a good question.  
20 But the Commission, as a question of policy, is  
21 committed to the importance of enforcement for us.

22 MR. BERNERO: Sure.

23 CHAIRMAN SELIN: I'm really thinking more  
24 of the extension. When you have not just four or five  
25 regional material programs to cover the entire

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1 country, but people who are in the individual states,  
2 are there, say, substitutes for enforcement in terms  
3 of frequent and intimate contact with the programs?  
4 We might at some point take a review of the  
5 enforcement policy. We're already doing that on the  
6 reactor side. But that's a tough -- it's just hard to  
7 say how would you analyze that question.

8 COMMISSIONER REMICK: My personal views  
9 are of course we have to have enforcement because  
10 there are some people who intentionally violate. But  
11 I do agree with you that I think most people want to  
12 do what is right. The important thing is when they're  
13 made aware of a problem, they want to modify it or  
14 change it, mitigate it. If they don't, then I think  
15 enforcement is more important.

16 DOCTOR PAPERIELLO: That's right.

17 COMMISSIONER REMICK: But I think in this  
18 agency we tend to go the civil penalty almost  
19 regardless of the circumstances. That's not quite  
20 true. That's perhaps an overstatement, but the  
21 tendency is to fine, fine, fine. I think the  
22 publicity, getting proper attention and so forth, the  
23 importance of those things are lost and we think that  
24 a fine will accomplish what we're trying to  
25 accomplish. Personal view, long felt.

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1 DOCTOR PAPERIELLO: (Slide) Could I have  
2 the next slide?

3 The Commission raised an issue in one of  
4 the SRMs on the role of the RSO. This is also an  
5 issue the staff had begun to focus on independently on  
6 a somewhat different path. The current issues focus  
7 on medical RSOs, but it probably goes to all  
8 licensees.

9 If you look at our regulations, there is  
10 no across-the-board recognition of the role of the  
11 radiation safety officer. We have a relatively weak  
12 radiation safety officer in Part 33, that's an older  
13 regulation, a somewhat stronger RSO in Part 35 and  
14 I've seen a draft proposed revision of Part 34 on  
15 radiographers which was a still stronger requirement.  
16 Power reactors, I've mentioned this before, have RPMs  
17 and requirements for management control procedures and  
18 audits.

19 We have several things we're doing. We're  
20 working on a NUREG that will basically describe  
21 radiation safety programs at medical facilities with  
22 different sizes. In other words, this is no  
23 requirement, this is just ways it can be done. We're  
24 looking at the training and experience criteria for  
25 physicians, physicists and RSOs for the medical

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1 facilities. We're looking at a goal of a -- a  
2 regulation in Part 30, 40, 70, wherever we need it,  
3 essentially to address the major source material,  
4 byproduct material. I would like to have a  
5 performance based regulation for RSO and management  
6 duties. My goal is to tie in existing regulations.  
7 The new Part 20 requires at least an annual program  
8 review. Part 35 requires annual reviews of the QM  
9 program, and then looking for the industry to develop  
10 guidance, how management can best assure itself that  
11 its program and RSO are functioning properly. To me  
12 that's the root of the problem.

13 I think this will address the concerns  
14 that have been raised in this area. But I think it's  
15 an across-the-board thing. We again propose to do  
16 this through the rulemaking process which will include  
17 advanced notice of proposed rulemaking and get a lot  
18 of the affected people on board to give us ideas on  
19 the best way we can accomplish this.

20 (Slide) Next slide.

21 We have research and information  
22 management. We have a number of research activities  
23 between us and the Office of Research into human  
24 factors and risk assessment. We are also working with  
25 AEOD to expand their materials and misadministration

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1 database and tracking system. I have initiated a  
2 computer-based tracking system for work activities in  
3 my division. This did not exist before I came here.  
4 There's a lot more that can be done on management of  
5 information. I have a meeting in a week with IRM to  
6 deal with how we can use computers more effectively.

7 In the area of risk analysis, it's  
8 interesting. About two weeks ago, Lawrence Livermore  
9 gave a contract report here on risk analysis as  
10 applied to the gamma knife. They identified treatment  
11 planning as the greatest risk path. In particular,  
12 going from the diagnostic imaging of the brain and  
13 translating the parameters into the gamma knife.  
14 Three days later, I heard of a misadministration with  
15 a gamma knife in Colorado caused by the identical  
16 problem that Lawrence Livermore in their study has  
17 identified as the most significant source of  
18 misadministrations for that device. I think that's a  
19 technology that they are working on that we want to  
20 develop because I'd like to apply it to other devices  
21 to try to identify what are the critical things that  
22 ought to be looked at.

23 (Slide) Next slide.

24 Just a brief update. We are actively  
25 implementing the QM rule. We have an enforcement

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1 panel that reviews cases. Enforcement probably,  
2 although that's what they call it, is really to look  
3 at what the regions are finding, have consistency in  
4 application of violations and applying the enforcement  
5 policy and these people involve NMSS, OGC, OE and  
6 regional representatives as well as Doctor Polycove.  
7 In addition, we have contractor review has been  
8 initiated of plans and we are following up these plans  
9 and routine inspections.

10 (Slide) Next slide.

11 The staff is looking for your endorsement  
12 or some sort of approval of what we're proposing. As  
13 I noted earlier, there are ongoing efforts to address  
14 many of the actions in here because we received these  
15 as action items from either the IIT or in Commission  
16 SRMs. The management plan is a portion of the whole  
17 medical use program. We have a lot of activities that  
18 are already ongoing in this area.

19 Nominally we're planning on implementing  
20 this for budget purposes as of the beginning of the  
21 next fiscal '94. Just like anything else, if this  
22 thing takes several years to do, we have the National  
23 Academy study which may cause some type of mid-term  
24 correction. Events may cause changes. Obviously  
25 congressional hearings and the like. So, I anticipate

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1 that some things will change. I think some of the  
2 more immediate tasks will get done before there are  
3 any changes, I expect.

4 CHAIRMAN SELIN: Other than the really  
5 large question about how much does it pay to do on AEA  
6 radiation when you have such unequal programs for  
7 linear accelerators, let's set that aside. If we do  
8 all these things, are we 80 percent towards having a  
9 predictable and reasonably secure program or is it  
10 just the tip of the -- well, the tip of 90 icebergs?  
11 What's your assessment of how effective these steps  
12 will be?

13 DOCTOR PAPERIELLO: I believe in the  
14 things that we regulate that we will be in reasonably  
15 good shape. But it's hard to quantify the things. We  
16 don't have a lot of --

17 CHAIRMAN SELIN: Incidents.

18 DOCTOR PAPERIELLO: You know, I don't  
19 believe -- it's not clear that we have a lot of big  
20 problems out there. They're infrequent. I'm working  
21 in an area where nobody has said, "This is a risk  
22 number that I want you to work to." It's sort of,  
23 "Fix things and I'll tell you when they're fixed."  
24 There's some issues that are efficiency. I mean let's  
25 put aside this program. We have in our inspection and

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1       licensing program when I talk about the guidance not  
2       being clear and things like that, there are things  
3       that just as a manager bother me because they're  
4       inefficient and we're spending a lot of time doing  
5       things that we shouldn't be doing. So, whether or not  
6       we have this plan or not, I would -- in this role, in  
7       my job now, I would feel an obligation to fix them.

8               CHAIRMAN SELIN: But we have at least  
9       three things. We have an obligation which is not a  
10      risk number but it's a patient interaction number that  
11      misadministrations should be treated in a consistent  
12      fashion and patients should get a certain amount of  
13      information. We have the feeling that there's an  
14      occasional really awful incident --

15             DOCTOR PAPERIELLO: That's right.

16             CHAIRMAN SELIN: -- and that without being  
17      able to prove things, that with replicable management  
18      and a lot of self-checking in there, the chances of  
19      such a terrible incident as opposed to a  
20      miscalibration that one or two people slip in can be  
21      stopped. And the third thing is we know that we don't  
22      know frequency figures. We're not even confident that  
23      we have good misadministration data and we're very  
24      confident that we don't have good administration data.  
25      Those would be three reasonable program objectives.

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1 The third I don't think is address in your program, is  
2 it, collecting --

3 MR. BERNERO: The administration data?

4 CHAIRMAN SELIN: The administration data.

5 MR. BERNERO: No, it's not addressed in  
6 this program.

7 CHAIRMAN SELIN: But the other two and in  
8 the misadministration rate you have the programs that  
9 seem to be designed to attack them.

10 DOCTOR PAPERIELLO: We have a -- when we  
11 look at changing Part 35, we may consider establishing  
12 a requirement. Now, this is separate -- this is sort  
13 of slightly. We have had a recent correspondence with  
14 the IG on this topic and that deals with collecting  
15 administration data. I believe to collect data like  
16 that we're going to have to have a requirement the  
17 licensees keep it. I'm aware of some large  
18 institutions where several hospitals are covered by  
19 one license. There are a lot of departments, in other  
20 words there are separate therapy and nuclear medicine  
21 and radiation oncology are separate departments. In  
22 other words, I think the IG believes our inspectors  
23 can go out and look in a book and there's a number.  
24 The point is, I don't believe -- we're going to check  
25 that, but I don't believe there's a book that we can

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1 look for a number in that somehow we can compile. I  
2 really believe if we want the information we're going  
3 to have to have licensees maintain it. We're going to  
4 have to tell them what we maintained because I think  
5 there is a distinction in terms of problems between,  
6 say, teletherapy and brachytherapy and pharmacy  
7 therapy and then the information might be retrievable.  
8 But I don't think it's being maintained out there in  
9 a form which is readily collectable.

10 CHAIRMAN SELIN: What I hear you saying,  
11 which you didn't really say, but I was hoping you  
12 meant these things when you said them, first of all  
13 you've got a whole lot of management fixes. Either  
14 they're better management or they're efficiencies and  
15 as long as we're going to run the program we might as  
16 well run it a little more elegantly and a lot more  
17 efficiency.

18 DOCTOR PAPERIELLO: Right.

19 CHAIRMAN SELIN: We have, as I said, at  
20 least these three major areas. If we do these things  
21 right in terms of patient relationships, in terms of  
22 avoiding -- you know, little problems growing into big  
23 problems and just getting good misadministration data,  
24 clearly you have some steps going here and there may  
25 be a couple of others. In other words, it probably is

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1 your opinion that you're not going to come back to us  
2 in five years with a similar program for the next set  
3 of things.

4 I will say one thing that I think you  
5 ought to seriously consider. I think it's important  
6 to collect administration data, but I also think it's  
7 important that we look at things from the physician's  
8 and the facility's point of view and say, "What are  
9 they reporting to different organizations? Do we  
10 really need an NRC administration data? Is there  
11 something that the Centers for Disease Control or some  
12 other group could expand? Does it have to be done on  
13 a comprehensive basis or are there surveys that could  
14 do this?" We shouldn't just say, "Let's write  
15 something into the Part 35."

16 DOCTOR PAPERIELLO: I would hope some of  
17 this information light might be shed by the National  
18 Academy study.

19 CHAIRMAN SELIN: Very good point. Very  
20 good.

21 MR. BERNERO: And also, if we pursue this  
22 as we have in the past run into it, for us to put a  
23 unilateral requirement on licensees would immediately  
24 raise hackles at OMB and it would be a major burden --

25 CHAIRMAN SELIN: Oh, you didn't read the

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1 Vice President's report. It's okay now, as long as  
2 it's voluntary.

3 MR. BERNERO: Yes, an offer they can't  
4 refuse.

5 CHAIRMAN SELIN: Right.

6 Commissioner Rogers?

7 COMMISSIONER ROGERS: Yes. I wondered if  
8 you could say a little bit about how you prioritized  
9 the 90 items on your program. They seem to have come  
10 from all kinds of sources, SRMs. I looked through  
11 them to see what the origin of them was and it seems  
12 to be a very mixed collection of --

13 DOCTOR PAPERIELLO: Well, by and large,  
14 some things were prioritized primarily on what things  
15 were relatively simple to do and we could do. We  
16 merged a lot of things and I don't see a real  
17 distinction of saying one thing as -- I don't know how  
18 to weight whether or not a misadministration  
19 management directive is more important than a rule.  
20 I think there's equivalency there, except I can get a  
21 management directive done in the next three to six  
22 months and have somebody look at it, where rulemaking  
23 has a real long time constant.

24 So, I'm afraid there is not a very  
25 rigorous prioritization in these things. A lot deals

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1 with what is relatively -- you can get a lot done over  
2 a short period of time versus things where to do it  
3 it's going to take a lot longer time to do.

4 COMMISSIONER ROGERS: Well, I was  
5 impressed with your little computer program for  
6 attracting things. It looks like a nice little  
7 program to keep track of things in the way it's been  
8 set up, this time line chart and the software, I  
9 suppose, that goes along with it.

10 And in looking through the SRM of March  
11 31st on these matters, there were a couple of items  
12 that it wasn't clear to me immediately where they were  
13 in your program, but I picked them up as various  
14 tracks in the system.

15 DOCTOR PAPERIELLO: Okay.

16 COMMISSIONER ROGERS: In particular, track  
17 78 was one -- 76 and 78 I had a little trouble  
18 finding, but I did find them and saw that 76 had  
19 already been taken care of. That was consider NRC's  
20 role and scope of responsibilities versus that of FDA  
21 and agreement states in the review and approval of  
22 sealed sources. I think you've said that was  
23 completed. I think 76 was labeled as completed in  
24 here.

25 DOCTOR PAPERIELLO: We do have an MOU now

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1 with the --

2 COMMISSIONER ROGERS: Right.

3 DOCTOR PAPERIELLO: With FDA.

4 COMMISSIONER ROGERS: Right. But item 78,  
5 which -- item 8 in the SRM which was track 78 was  
6 really notifying hospital boards where escalated  
7 enforcement is undertaken by NRC. In looking at your  
8 GANTT charts under enforcement, I see that the single  
9 item that's there, revision of the enforcement policy,  
10 doesn't start until the middle of '95. I was just  
11 curious as to why if you're going to do that kind of  
12 notification you have to wait until the beginning of  
13 '95 to start doing it.

14 DOCTOR PAPERIELLO: Well, when we  
15 discussed this with OE, they kind of -- this was their  
16 input on the project. Up to now we can handle things  
17 like that on a case by case basis. I would raise an  
18 associated issue, although it's not a new issue. In  
19 the last several weeks we have had several escalated  
20 enforcement cases involving VA hospitals. I don't  
21 know what to do about VA hospitals. You know, several  
22 years ago I met -- came into Washington and with some  
23 Headquarters people met with the VA to see if they  
24 could do something about bringing -- you know, could  
25 they self-regulate.

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1 CHAIRMAN SELIN: You enforce until they  
2 come to us with a plan to avoid the enforcements, not  
3 the other way around? I mean sooner or later you'll  
4 get their attention and then they'll pay some  
5 attention to responding.

6 DOCTOR PAPERIELLO: Commissioner, I wish  
7 I had a board there to go to. If there was a case  
8 where that idea is a good idea --

9 CHAIRMAN SELIN: There's a board. There's  
10 a secretary.

11 MR. BERNERO: Yes, they have a  
12 secretariat--

13 CHAIRMAN SELIN: And an assistant  
14 secretary for medical.

15 MR. BERNERO: -- and about two years ago  
16 I think you're referring to the -- from time to time  
17 we have met with VA Washington and we have enforced --  
18 and typically, of course, it's VA in some city like  
19 Houston or somewhere that we've got a major case, and  
20 we're enforcing strongly against them and they come up  
21 with some kind of proposal and --

22 CHAIRMAN SELIN: You've got to treat them  
23 the way we treat TVA. We forget that they're  
24 federally owned and they're an organization we're  
25 dealing with. That means public meetings, et cetera.

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1 MR. BERNERO: We've done it before and we  
2 have to do it again.

3 DOCTOR GLENN: I will mention that the VA  
4 has taken some actions in response to our meeting a  
5 couple of years ago.

6 CHAIRMAN SELIN: Well, this is not a VA  
7 meeting. I didn't mean to get off on that.

8 DOCTOR PAPERIELLO: Commissioner, I  
9 understand --

10 COMMISSIONER ROGERS: The issue is why  
11 we're waiting until the middle of '95 to start this  
12 consistent --

13 DOCTOR PAPERIELLO: And the reason is OE  
14 went and told me, "This is when we're going to do the  
15 next iteration of the policy and we'll put it in  
16 then." That's a very --

17 MR. BERNERO: But that's not to say we  
18 aren't doing it --

19 COMMISSIONER ROGERS: On a case by case  
20 basis.

21 MR. BERNERO: -- in ad hoc fashion, case  
22 by case.

23 COMMISSIONER ROGERS: Yes. Right.

24 Well, I was just curious as to why it  
25 wound up so late in the program.

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1 But I want to commend you for the basic  
2 structure of the program. It looks like it's a very  
3 well thought through organization of the 90 items. I  
4 can't comment on the individual items particularly,  
5 but it does seem to me that the approach that you're  
6 taking here is a systematic one that allows you to  
7 track things pretty well. So, I'd like to compliment  
8 you on that.

9 CHAIRMAN SELIN: Commissioner Remick?

10 COMMISSIONER REMICK: On the question of  
11 the RSO, the qualifications or responsibility and  
12 authority they have are important issues. One thing  
13 I don't understand, do we have different written  
14 expectations for RSO for medical broad scope licenses  
15 than we do for RSOs in broad byproduct material broad  
16 scope licenses in other areas like in the academic  
17 research area, or are we lacking in both areas  
18 guidance or expectations and so forth?

19 DOCTOR PAPERIELLO: Things are scattered.  
20 The regulations -- again, it depends on the age of the  
21 regulation. The RSO requirements for broad scope,  
22 which is Part 33, has a requirement in Part 33 is the  
23 person is there for advice. There is no discipline  
24 that the individual exerts over the program. When you  
25 get into Part 35, there are stronger responsibilities,

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1 but it's not clear, it's not quite clear how firm the  
2 person -- the person has to have procedures, the  
3 person has to follow the program and do things like  
4 that, but you don't talk about authority. You know,  
5 in a reactor, the radiation protection manager has the  
6 absolute authority to stop a job. I mean that's -- we  
7 don't have that quite anywhere for material licensees.  
8 Now, they may do it in the program that we license  
9 through their own procedures, but it's not a  
10 definitive thing there.

11 Now, we always have requirements that you  
12 as a licensee are responsible for your program and you  
13 appoint an RSO, but the problem you have is let's take  
14 a community hospital. We want a nuclear medicine  
15 program. We hire a physician to run the program and  
16 in some cases the administration just defaults to the  
17 physician. You know what has to be done. The  
18 physician will hire a consultant. They'll submit the  
19 license application and it's not clear that the  
20 administration in a hospital has any interaction with  
21 the program beyond that. Of course, it even gets  
22 worse if you find out an inspector has done an  
23 inspection and when they exit they exit with a  
24 physician and don't exit even with the hospital  
25 administrator. Now, we've tried to stop that, but

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1       that's --

2                   MR. BERNERO: I'd just like to add a point  
3       of concern on that. It's almost in contrast. If you  
4       look at an RSO in an institutional education  
5       industrial thing and then go to Part 35, I'm troubled  
6       that the Part 35 basically says it's a worker safety  
7       RSO. Part 35 is essentially silent on patient safety  
8       and RSO responsibilities related thereto. That, I  
9       think, is what leads to the tendency, especially in  
10      smaller institutions, that the doctor is in full  
11      control and the RSO is almost an afterthought. That  
12      causes me more concern than the medical area.

13                   COMMISSIONER REMICK: The reason I ask the  
14      question, I come from a background where the RSO that  
15      I had involvement with had a lot of responsibility,  
16      but he also had a lot of authority which was backed up  
17      by a safety committee and by the administration, that  
18      he had authority to assure safety. But I must admit  
19      I don't know if that's because that's in compliance  
20      with an NRC regulation or it just so happens  
21      historically that's true how it was set up. So, I  
22      didn't know if there was a different regulation in  
23      that other arena than there is from the medical or  
24      just happenstance.

25                   DOCTOR PAPERIELLO: The regulation is

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1 relatively weak. The licensing policy is stronger and  
2 my experience in the Midwest, having been there for a  
3 number of years, at the major land grant universities  
4 in the Midwest, the RSO is strong, but considerably  
5 stronger than the person was 15 years ago. So, it's  
6 been a movement and in part, at least my observation  
7 is that all of the universities have become more  
8 environmentally conscious. It's not just radiation  
9 safety, but it deals with biological safety and  
10 chemical safety and OSHA requirements. So, they have  
11 major departments to deal with that and the radiation  
12 safety officer is part of a department of  
13 environmental affairs or something like that to deal  
14 with all the hazards that appear on campus.

15 So, that is a practical thing. But you  
16 still get some smaller schools and smaller -- it's the  
17 smaller -- mid-size and small institutions where the  
18 disconnects. The major institutions are doing by and  
19 large a good job and I don't want to mess that up  
20 either. That's the other thing. You don't want to  
21 put a lot of more burdens on them when they're already  
22 doing a good job.

23 COMMISSIONER REMICK: One other question.  
24 In the IIT report, in Indiana, Pennsylvania, there was  
25 a finding in there that there was some confusion of

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1 our own inspectors about what was meant in Part 35 by  
2 doing a survey of the patient. Some people thought  
3 that the area radiation monitor was adequate. I look  
4 at the attachment 4 to the SECY document, and you  
5 don't have to refer to it, but it says, "A temporary  
6 instruction has been drafted to provide guidance on  
7 routine inspection of high dose rate afterloaders."  
8 Is clarification of what is meant by Part 35 included  
9 in that or is that being covered under some other  
10 instruction or some other --

11 DOCTOR PAPERIELLO: Well, it's in the TI.  
12 We have also prepared a -- you know, we sent the  
13 bulletin out to all HDR users on the --

14 COMMISSIONER REMICK: Well, this was a  
15 question about our own inspectors.

16 DOCTOR PAPERIELLO: Well, it's clear with  
17 our own inspectors now, but as recently as two or  
18 three weeks ago somebody on my staff, who I won't  
19 name, came to me and said, "Well, we don't license HDR  
20 units under Part 35." I mean this is a year later and  
21 I said, "If I read Part 35, you cannot use radiation  
22 on a human being in medicine unless you're in  
23 compliance with Part 35. Read the statement of  
24 intent."

25 COMMISSIONER REMICK: But clarification to

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1 our inspectors is being taken care of by that  
2 technical --

3 DOCTOR PAPERIELLO: Yes, at this point the  
4 inspectors that are in the field today. This person  
5 wasn't an inspector. But anyway --

6 COMMISSIONER REMICK: Okay. By joining  
7 Commissioner Rogers in his comments on the report, I  
8 found it very concise and I thought a very thorough  
9 and good job and I thank you.

10 COMMISSIONER de PLANQUE: Yes, just a  
11 couple of questions.

12 Carl, a very general one. Are there any  
13 FACA constraints that you're facing in terms of  
14 carrying out any of this if you want to get task  
15 groups together or bring in people from the outside?  
16 Do you have this problem at all?

17 DOCTOR PAPERIELLO: In what?

18 COMMISSIONER de PLANQUE: The FACA  
19 constraints.

20 MR. TAYLOR: FACA, the Federal Advisory  
21 Committee Act.

22 COMMISSIONER de PLANQUE: Is that  
23 hampering you in any way?

24 DOCTOR PAPERIELLO: I was told -- I just  
25 received information that we may have -- we have to

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1 consider that with the task group that we have on the  
2 NUREG on RSO and managerial responsibility. We have  
3 been using -- we have agreement state regulators as  
4 part of that and I think the initial view was if we  
5 had other state regulators we didn't come under that  
6 act. But we have just received information from the  
7 Office of General Counsel that we have to -- you know,  
8 it depends how we use them. If we use them for  
9 advice, then we're all right. Well, I guess we're all  
10 right. It depends how you handle the law and whether  
11 your meetings are open and noticed and all that. If  
12 we expect them to agree, a consensus, then we do.

13 MR. TAYLOR: And that's a FACA.

14 COMMISSIONER de PLANQUE: Okay.

15 DOCTOR PAPERIELLO: So, I'm working with  
16 our attorneys. Whatever we do, we are legal.

17 COMMISSIONER de PLANQUE: Well, I would  
18 hope that we can interpret things in a way that will  
19 not constrain you anymore than is necessary.

20 DOCTOR PAPERIELLO: Yes.

21 MR. TAYLOR: We've learned how to do that  
22 in the agency in a couple of ways.

23 COMMISSIONER de PLANQUE: Okay. All  
24 right.

25 MR. BERNERO: You'll have to speak to my

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1 attorney.

2 COMMISSIONER de PLANQUE: Yes, right.

3 A question on the human factors research  
4 part of it, looking at your GANTT chart again.

5 DOCTOR PAPERIELLO: Right.

6 COMMISSIONER de PLANQUE: In so many of  
7 these cases it seems like human error is involved in  
8 the misadministrations, yet I see that's not coming in  
9 until '96. Are we expecting any interim progress on  
10 that?

11 DOCTOR PAPERIELLO: We have interim  
12 reports. I have a report coming in on -- Research has  
13 a report that is -- they may have received, I've seen  
14 early drafts of it, on HDR. I have a report that I  
15 have a draft report from Lawrence Livermore on the  
16 gamma knife. They're my contractor. The others are  
17 Research. So, this is a combination. We are going to  
18 be looking at some of the other technologies. I'm  
19 very much interested in Lawrence Livermore's  
20 technology because basically what they've developed is  
21 a process and a computer code that ought to be  
22 applicable to devices in general and different  
23 technologies. We need to know what is the weak point  
24 in a given technology. In other words, a patient  
25 getting stuck in the gamma knife is not a source of

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1 misadministration. That's some things you don't have  
2 to worry about.

3 COMMISSIONER de PLANQUE: Okay. And just  
4 a general comment. There's always a concern with  
5 moving resources into an area if you haven't really  
6 established there's a real problem and a real need, as  
7 the Chairman was alluding to before. We've got to  
8 keep in mind that the resources are spent with the  
9 ultimate goal of adequate protection, health and  
10 safety.

11 But that gets me to your comments about  
12 efficiency. I would applaud your efforts in making  
13 things more efficient for the staff but also for the  
14 licensees because indirectly if you free up resources  
15 that are spent unnecessarily on unnecessary rules and  
16 regulations and paperwork, then you're freeing up  
17 those resources for presumably time and effort on the  
18 real health and safety issues.

19 DOCTOR PAPERIELLO: I understand. In the  
20 ideal world, I would like to have a licensing guide  
21 like a driver's license manual. I mean I come into  
22 Maryland, I have to get a Maryland driver's license.  
23 But I go to the license bureau, they give me a booklet  
24 and it tells me what I have to do as a passenger car  
25 driver in the State of Maryland. I don't have to go

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1 through the code and take out truck drivers and livery  
2 and all that.

3 In the ideal world, if I'm a radiographer,  
4 I ought to be able to go a licensing guide that tells  
5 me how to apply for a license and I would like to have  
6 a checklist in the back that they can go down. You  
7 want to know whether you're in compliance? Here's a  
8 self-checklist. Did you do this, this, this, and  
9 would walk you through that and therefore the --  
10 again, I say ideal. If the radiographer knows what's  
11 in that manual and does it, they're okay and that way  
12 they don't have to -- right now there's a certain  
13 amount of spaghetti logic that you have to go -- the  
14 computerese is spaghetti logic in 10 CFR trying to  
15 figure out if I'm a small entity what I have to do to  
16 stay in compliance.

17 So, therefore, it will help us, but it  
18 will also help the licensees and save them money and  
19 help keep them in compliance. Like I said, most  
20 licensees, I believe, want to do the right thing.  
21 It's just they have to know what to do.

22 COMMISSIONER de PLANQUE: Yes. And I  
23 would just join my colleagues in saying it's an  
24 extremely well done report. Thank you.

25 DOCTOR PAPERIELLO: Thank you.

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1 COMMISSIONER REMICK: Carl, excuse me just  
2 a minute. When you get all those guides done, would  
3 you please put it in CD ROM and then the Commissioners  
4 can see what our expectations are on our licensees?

5 DOCTOR PAPERIELLO: More than that, and  
6 this is what I want to talk to IRM. We ought to have  
7 a bulletin board that a licensee can call in and  
8 download it. That makes it easier for us to maintain  
9 on the thing. So, yes.

10 COMMISSIONER de PLANQUE: I forgot one  
11 more item. On the enforcement issue, if you haven't  
12 seen a letter in the Health Physics Newsletter last  
13 month on this issue, you ought to take a look at it.

14 DOCTOR PAPERIELLO: I know. I have it  
15 myself.

16 CHAIRMAN SELIN: Has this program been  
17 presented to our Advisory Committee on the Medical Use  
18 of Isotopes?

19 DOCTOR PAPERIELLO: As this, no.

20 CHAIRMAN SELIN: Do you plan to do --

21 DOCTOR PAPERIELLO: We do.

22 CHAIRMAN SELIN: I think it's a terrific  
23 job. It seems to be responsive but not foolishly so  
24 to the various amount of conflicting guidance that  
25 you've gotten in the past and at least that the first

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1 cut does seem to coincide with some priorities.

2 I would just like to emphasize the three  
3 points that have come up.

4 Number one, please think about agreement  
5 state implications of these pieces. Number two, take  
6 a look at some point, different points, and see how  
7 much of the stuff, other than the efficiency pieces,  
8 attack real problems as opposed to fill out logical,  
9 concise pieces. Then the third point, if you do  
10 decide to try to tackle the question of total numbers  
11 of administrations head on -- well, first of all, I  
12 would suggest that that's a proper topic for the  
13 National Academy review to look at. I think you  
14 suggested that anyway. But we are not the only  
15 players in the field --

16 DOCTOR PAPERIELLO: I know.

17 CHAIRMAN SELIN: -- and at some point we  
18 have to put ourselves in the shoes of the licensed  
19 community and the different people that are asking  
20 them for comparable information. But it is something  
21 we're going to have to get sooner or later. There's  
22 just no question at all. It may not be efficient from  
23 a health and safety point of view, but we're going to  
24 be on the Hill all the time saying, "Sorry, sir, we  
25 don't know the answer to that question." That's also

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1 a legitimate objective of any program, is to give us  
2 a good answer when we get the same question three  
3 years in a row.

4 So, thank you very much for an excellent  
5 presentation.

6 DOCTOR PAPERIELLO: Thank you.

7 (Whereupon, at 3:21 p.m., the above-  
8 entitled matter was concluded.)  
9  
10  
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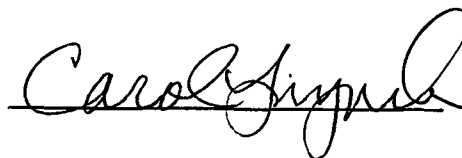
This is to certify that the attached events of a meeting  
of the United States Nuclear Regulatory Commission entitled:

TITLE OF MEETING: BRIEFING ON MANAGEMENT PLAN FOR REGULATING  
MEDICAL USE OF BYPRODUCT MATERIAL

PLACE OF MEETING: ROCKVILLE, MARYLAND

DATE OF MEETING: SEPTEMBER 10, 1993

were transcribed by me. I further certify that said transcription  
is accurate and complete, to the best of my ability, and that the  
transcript is a true and accurate record of the foregoing events.



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# **MEDICAL MANAGEMENT PLAN**

**COMMISSION BRIEF by  
CARL PAPERIELLO, Ph.D.**

**September 10, 1993**

## BACKGROUND

- o NMSS Senior Management Conference (8/92).
- o Medical Issues Paper (9/92).
- o Indiana, Pennsylvania Therapy Misadministration and IIT Findings (11/92).
- o Master Agenda for Improvement to the Regulatory Program (5/93).
- o NRC Senior Manager Review

## DEVELOPMENT OF PLAN

- o Each of the 90 Action Items were Reviewed. Some Consolidated, Some Completed.
- o Priority assigned, Lead & Support Offices, Resources, and Time Frame Identified for Each Action Item.

### DEVELOPMENT OF PLAN cont.

- o Action Items Categorized into 9 Major Regulatory Program Areas.  
Direction of Program Area Determined.
- o TIMELINE CHART: Identifies Program Areas and Projected Time Frame for the Action Items.

## RESOURCES

- o Total: 50 direct FTE and \$4.25M from FY 94 - 1st qtr. FY 98.
- o All Resources Budgeted Except for \$1.25M in FY 94 for NMSS. Includes \$800K for NAS study and an additional \$450K for QM reviews. Funds will be obtained through available or redirected NMSS or Agency Funds.



### RESOURCES cont.

- o Affected Offices: NMSS, RES, OGC, AEOD, OE, OSP, and the Regions.
- o Rotation of Regional Personnel.

## PROGRAM AREA #1

### ISSUE: MEDICAL POLICY AND COORDINATION

- o National Academy of Science Review
- o Implement MOU with FDA
- o Time Frame: Present - 1/96  
Resources: ~ 3 FTE Total

## PROGRAM AREA #2

### ISSUE: MISADMINISTRATION & PATIENT FOLLOWUP

- o 3 step approach: 1) Draft Management Directive; 2) Ensure Adequate Implementation of QM Rule; 3) Evaluate Effectiveness of QM rule.
- o Time Frame: At Present - 12/94 (Mgt. Directive - Contractor Review of QM plans); Resources: ~ 4 FTE Total

## PROGRAM AREA #3

### ISSUE: MEDICAL RULEMAKING

- o Comprehensive, to include provision for changing technology and patterns of use.
- o Complete ongoing actions related to: release of patients, radiopharmacy and radiation exposure to embryo/fetus or nursing infants.
- o Time Frame: Present - 6/97  
Resources: ~ 12 FTE Total

## PROGRAM AREAS #4, #5 & #6

### ISSUE: REVIEW OF LICENSING AND INSPECTION GUIDANCE AND ENFORCEMENT POLICY

- o Licensing guidance out of date and incomplete.
- o Inspection guidance to focus on management and effectiveness of Radiation Safety Programs. Provide additional guidance on response to events, including misadministrations.

### PROGRAM AREAS #4, #5, & #6 cont.

- o Examine ways of providing greater incentive for compliance by medical use licensees.
- o Time Frame: Present - 12/97  
Resources: ~ 14 FTE Total

## PROGRAM AREA #7

### ISSUE: LICENSEE MGT. & RSO RESPONSIBILITIES FOR LICENSED ACTIVITIES

- o 3 step approach: 1) NUREG on Radiation Safety Program Mgt.; 2) Evaluate Training & Experience Criteria for Physicians, Physicists, and RSOs; 3) Revise Parts 30, 35, 40, & 70.
- o Time Frame: At Present - 12/97  
(NUREG - Revision of Parts 30, 35, 40, 50 & 70); Resources: ~ 12 FTE Total

## PROGRAM AREAS #8 & #9

### ISSUES: RESEARCH AND INFORMATION MANAGEMENT

- o Human Factors and relative risk assessment.
- o Expand database and tracking systems.
- o Time Frame: Present and Ongoing  
Resources: ~ 5 FTE Total



## QM IMPLEMENTATION

- o QM Enforcement Panel Reviews Cases Weekly to Interpret & Apply Enforcement Policy.
- o Panel Participants: NMSS, OE, OGC, Regional Representatives and Medical Visiting Fellow.
- o Contractor Review of Plans and Followup During Routine Inspection or Review During Reactive Inspection.

## SUMMARY

- o Staff Seeks Commission Approval of Proposed Plan.
- o Ongoing efforts to address some action items identified in plan.
- o Management Plan is a Portion of the Entire Medical Use Regulatory Program.

### SUMMARY cont.

- o Implementation of the plan is scheduled to begin on 10/1/93.
- o Implementation will require full management attention and dedication of resources.
- o Periodically review and adjust based on new information such as the report of the National Academy of Sciences.

Task Name	Start	End	Years				
			93	94	95	96	97
<b>POLICY ISSUES</b>	Oct/01/93	Jan/12/96					
National Academy of Science Study	Oct/01/93	Jan/12/96					
Proposed SOW to NAS	Oct/01/93	Nov/04/93					
Let Contract	Nov/04/93	Jan/14/94					
Contract Work and Final Report	Jan/14/94	Jan/12/96					
Waste Processor Guidance	Oct/01/93	Jan/31/94					
RES-1979 Med Policy	Oct/01/93	Dec/31/93					
NRC/Agreement State Device Jurisdiction	Oct/01/93	Jun/01/94					
<b>RULEMAKING</b>	Oct/01/93	Jun/27/97					
Pharmacy Rule	Nov/01/93	Nov/01/94					
Final Rule	Nov/01/93	Nov/01/94					
Embryo/Neo-nate Protection	Oct/01/93	Dec/30/94					
Part 20/Part 35 Patient Release	Oct/01/93	Jul/07/94					
Part 35 Revision (HDR & Other Issues)	Jan/03/95	Jun/27/97					
Review QM Rule Progress	Oct/03/94	Apr/28/95					
<b>LICENSING GUIDANCE</b>	Oct/01/93	Dec/31/97					
RG 10.5 Broadscope	Oct/01/93	Mar/01/95					
Draft to RES	Oct/01/93	Dec/09/93					
Draft for comment	Jun/01/94	Sep/30/94					
Final Reg Guide	Oct/03/94	Mar/01/95					
Submit Revised FC 86-4 to OGC	Oct/01/93	Nov/23/93					
Add Appendices to RG 10.8	Oct/01/93	Aug/01/97					
Draft to RES	Oct/01/93	Sep/29/95					
Therapy Included	Oct/01/93	Sep/29/95					
Physician Training	Oct/01/93	Sep/29/95					
Relation to QM	Oct/01/93	Sep/29/95					
Draft for comment	Oct/03/95	Feb/01/96					
Final Reg Guide	Feb/03/97	Aug/01/97					
Revise Reg Guide 8.33	Apr/01/97	Dec/31/97					
Revise License Reviewer Training	Oct/01/93	Jun/30/94					
Issue MC on Materials Enforcement Discreti	Oct/03/94	Jun/30/95					
Issue Guidance for Master Material Program	Oct/01/93	Dec/31/93					

Task Name	Start	End	Years				
			93	94	95	96	97
<b>INSPECTION GUIDANCE</b>	Oct/01/93	Jul/31/96					
Prime Alert-10	Oct/01/93	Apr/29/94					
MC - Assessing Public Exposure & Notificat	Oct/01/93	Jan/13/94					
TI on Significant Licensee Changes	Oct/01/93	May/09/94					
Revise MC 2800	Jan/03/94	Dec/29/95					
Program Expansion	Jan/03/94	Dec/29/95					
Performance Adjustment	Jan/03/94	Dec/29/95					
Medical Field Notes	Jan/03/94	Jun/30/94					
QM Inspection Procedure	Jan/03/94	Sep/30/94					
Satellite, Field, Temporary	Jan/03/94	Dec/29/95					
Third Party Inspection	Jul/03/95	Jul/31/96					
Memorandum to OGC	Jul/03/95	Jul/31/95					
Evaluation	Aug/01/95	Jul/31/96					
Event Response Procedure	Jan/03/94	Jun/30/94					
Allegation Follow-up Procedure	Oct/03/94	Jun/30/95					
<b>ENFORCEMENT</b>	Jul/03/95	Dec/29/95					
Revision of the Enforcement Policy	Jul/03/95	Dec/29/95					
<b>MANAGEMENT AND RSO RESPONSIBILITY</b>	Oct/01/93	Dec/31/97					
NUREG-MAN/RSO	Oct/01/93	Sep/30/94					
Rulemaking	Jan/02/95	Dec/31/97					
Adv. Notice of Proposed Rulemaking	Jan/02/95	Jun/28/95					
Industry Workshops	Oct/02/95	Oct/01/96					
Guidance Documents	Oct/02/95	Oct/01/96					
Proposed Rule	Oct/01/96	Dec/31/96					
Final Rule	Jan/02/97	Dec/31/97					
RSO Certification Form	Oct/01/93	Mar/31/94					
<b>INFORMATION MANAGEMENT SYSTEMS</b>	Oct/01/93	Dec/31/97					
Licensee Events - Support to AEOD	Oct/01/93	Mar/31/94					
Division Action Items	Oct/01/93	Dec/31/97					





## **POLICY ISSUE** **(Notation Vote)**

August 31, 1993

SECY-93-244

**FOR:** The Commissioners

**FROM:** James M. Taylor  
Executive Director for Operations

**SUBJECT:** PROPOSED STAFF MANAGEMENT PLAN FOR NRC's MEDICAL USE  
REGULATORY PROGRAM

**PURPOSE:**

To request Commission approval of a proposed plan for management of the medical use regulatory program to address major policy issues associated with the current program. The medical management plan identifies major program areas and reflects the current management direction for the medical use regulatory program.

**SUMMARY:**

This paper provides the Commission with the proposed staff management plan for the medical use regulatory program. It incorporates action items previously identified in the master agenda transmitted to the Commission in a memorandum dated May 19, 1993, and others resulting from the senior manager review of the medical use program submitted in June 1993 by Dr. Carl Paperiello. The plan includes a combination of one-time initiatives and ongoing projects.

Resources to implement the management plan are included in the FY 1994-1998 Internal Program/Budget Review document except \$1.25M in FY 1994. This funding shortfall includes \$800K for the National Academy of Science study and \$450K for the medical quality management program contract. The shortfall will be funded by reprogramming funds within NMSS or the agency. The resources

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**NOTE:** TO BE MADE PUBLICLY AVAILABLE  
AT COMMISSION BRIEFING ON  
SEPTEMBER 10, 1993

for each office are identified in a Table on page 8. Implementation of the medical management plan is scheduled to begin on October 1, 1993; however, there are current efforts to address some of the action items previously identified by the staff and included in the management plan. The projected completion date for plan action items is December 31, 1997.

#### BACKGROUND:

During the NMSS Senior Management Conference held on August 3 and 4, 1992, senior management decided to prepare a medical management plan to guide the conduct of the medical use regulatory program. In a memorandum dated September 8, 1992, from Robert M. Bernero, the staff described its efforts to develop this plan and anticipated submitting it to the Commission in January 1993.

In September 1992, the staff identified a number of actions to address the more pressing problems associated with the regulatory program and developed a medical issues paper that identified certain program areas to be reviewed to determine if modifications were necessary for improvement. Subsequently, the medical issues paper was discussed during meetings with representatives from the Agreement States, the U.S. Nuclear Regulatory Commission's Advisory Committee on the Medical Uses of Isotopes (ACMUI) and NRC regional management. However, these efforts were delayed as a result of staff actions in response to the November 1992 radiation therapy misadministration and associated patient fatality in Indiana, Pennsylvania, and the Cleveland Plain Dealer series of articles published December 13-17, 1992.

In a Staff Requirements Memorandum (SRM) dated March 31, 1993, the Commission directed the staff to continue with development of the medical management plan, the internal management review of current practices for implementing the medical use regulatory program and the external review of the program. In recent months, the staff developed a master agenda for improvement of the regulatory program. The master agenda identified 71 action items to address the issues raised as a result of the Incident Investigation Team (IIT) report associated with the Indiana, Pennsylvania incident, and others previously identified in the medical issues paper. It was submitted to the Commission in a memorandum dated May 19, 1993. Since that time, the staff identified 19 other action items resulting from the senior manager review of the medical use program submitted in June 1993 by Dr. Carl Paperiello. These additional 19 action items were combined with the 71 master agenda items and considered during development of the medical management plan described below. The development of this plan was influenced by key meetings with the ACMUI, representatives from Agreement States, professional organizations, other regulatory agencies, the medical community, and NRC senior management.



**DISCUSSION:**

Each of the 90 action items was analyzed to determine the: scope of the required work to complete all tasks associated with the action item; lead and support Offices for completion of the tasks; priority of each item so that an interrelationship of tasks could be identified; projected time frame for completion of each action item; and estimated resources for completion of the action item. In some cases, action items were consolidated to coordinate work efforts and increase efficiency, and in some cases, action has been completed or will be completed before October 1, 1993. The staff reviewed the action items and grouped them into nine program areas, which are discussed below. The projected time line associated with a specific action item can be found in the enclosed Gantt chart (see enclosure 1). The 90 individual action items are also referred to as "tracks" and are found in Enclosure 2. It should be noted that the number assigned to an action item or track is for accounting purposes and does not reflect its priority.

**PROGRAM AREA #1****Policy Issues**

In February 1979, NRC issued a medical policy statement to guide its regulatory program. A key issue in the policy statement is the commitment to patient safety without intrusion into the practice of medicine. Since then, there have been a number of key regulatory initiatives to address medical use issues, some of which have been opposed by members of the regulated industry and representatives of Agreement States. Reexamination of broad policy issues regarding NRC's role in the regulation of the medical use of byproduct material will include an analysis of the policy statement, and NRC's current regulatory relationships with the Food and Drug Administration (FDA) and Agreement States. NRC and FDA representatives recently signed a Memorandum of Understanding for medical use to further clarify their respective roles.

In accordance with the SRM dated June 23, 1992, and December 21, 1992, the staff is in the final stages of securing contract support for the conduct of an external review of the medical use program composed of several tasks. These include: an analysis of whether the evolution of NRC's medical use program has been consistent with the medical policy statement and whether any changes to the policy are warranted; whether NRC's current framework is appropriate to fulfill its statutory responsibilities for public health and safety; and the appropriateness of the regulatory relationships that exist among NRC, the Agreement States, FDA and various State boards.

**PROGRAM AREA #2****Misadministrations and Patient Followup**

There is lack of a clear policy on the staff actions required to respond to a misadministration report and lack of agreement among Offices on the appropriate level of patient followup. The ongoing effort to resolve these issues, on a case-by-case basis, diverts significant resources from day-to-day management of other safety-significant issues associated with the regulatory

program and long-term improvements, as shown in the medical management plan. Consequently, resolving misadministration followup issues is a high priority item in the medical management plan. Therefore, the staff plans the following: 1) develop an NRC Management Directive to provide specific inspection guidance and procedures for misadministration followup to permit the determination of the extent and depth of followup needed in each case; 2) ensure adequate implementation of the 1992 Quality Management Program and Misadministrations (QM) rule; and 3) once the QM rule has been in effect for some time, evaluate whether modifications to the rule are necessary to provide clarification of requirements to reduce the likelihood of errors during patient administration of byproduct material. The staff is scheduled to brief the Commission in January 1995 to review the progress made with the QM rule, and determine whether further or alternate direction is needed.

The staff has identified a number of specific questions about NRC's legal responsibilities related to patient followup and is currently formulating answers to these questions to develop the policy basis for the Management Directive mentioned above. These questions involve complex legal matters and require coordination with and review by the Office of the General Counsel (OGC) staff. Therefore, concurrent with its effort to develop the patient followup policy, the staff has provided these questions to OGC which OGC has responded to, or is in the process of responding to. Additionally, the staff has provided OGC with the draft Management Directive and the presumptions made by the staff in developing the policy. OGC has provided comments on the draft Management Directive.

The NRC Management Directive will specifically provide: 1) guidance on use of a medical consultant in misadministration cases to assist NRC staff in evaluating the medical consequences of the radiation exposure and licensee compliance with reporting and notification requirements; 2) an NMSS misadministration coordinator to follow up with the regions on each misadministration, monitor patient followup activities, maintain complete records of misadministrations, and coordinate data collection with the Office for the Analysis and Evaluation of Operational Data (AEOD) and the Office of State Programs (OSP); 3) inspection procedures to ensure that inspectors properly emphasize to licensees their duty to meet all reporting and notification requirements associated with misadministrations; and 4) guidance for notification of local authorities for more serious misadministrations, so that actions by NRC and local authorities can be coordinated. The Draft Management Directive is scheduled for Office review by December 31, 1993.

### **PROGRAM AREA #3**

#### **Rulemaking**

Currently, there are three medical use proposed rulemaking actions in progress: 1) draft revision of the patient release criteria described in section 10 CFR 35.75 and possibly, conforming changes to 10 CFR Part 20; 2) revision of requirements for radiopharmacy (published as a Proposed Rule in June 1993); and 3) development of a draft proposed rule to reduce the likelihood of an unintended radiation exposure to an embryo/fetus or nursing infant.

A comprehensive revision to Part 35 is planned to address a wide variety of issues. The staff is considering a major modification to the format of Part 35 and associated licensing and inspection guidance to more easily accommodate changes in the current technology and patterns of medical use. Specifically, Part 35 would incorporate "general" modules, containing appropriate safety standards applicable to all authorized types of medical use, to allow greater licensee flexibility, and "specific" modules, to address radiation safety requirements specific to each type of use. These specific modules would also be discussed in supporting regulatory guides. The staff will also evaluate the feasibility of incorporating existing national technical standards into regulatory guides for the conduct of specific quality control tests on required equipment. Specific regulatory issues to be addressed in the major revision include: requirements for the safe use of remote afterloading brachytherapy and gamma stereotactic radiosurgery devices; modification of existing training and experience criteria; lessons learned as a result of inspection, licensing and enforcement activities since the last revision of Part 35 in April 1987; and minor revisions to clarify existing requirements. As part of the management plan, there are several related tasks on supervision, and training and experience related to radiation safety, that must be completed and the results evaluated, before the staff can make any recommendations in this area. This issue is discussed further in program area 7, "Management and Radiation Safety Officer Responsibilities." The staff anticipates that final action to revise Part 35 may not be completed until the end of calendar year 1997.

In the interim, there is a need to develop and provide specific licensing and inspection guidance. This issue is described in more detail in program area 4, "Licensing Guidance," and program area 5, "Inspection Guidance."

#### **PROGRAM AREA #4**

##### **Licensing Guidance**

Comprehensive licensing and inspection guidance is a high priority item and focus of the medical management plan. Adequate information is needed by NRC regional staff, licensees, and applicants. The staff proposes two steps: 1) revising current guidance that is outdated because of evolving medical technology and practice; and 2) issuing new guidance to address each type of medical use currently authorized. Existing guidance for licensing radiopharmacies will be updated to incorporate current requirements, and the staff has begun updating current guidance for licensing the medical use of teletherapy devices. Existing guidance in various documents for licensing manual brachytherapy applications, including Strontium-90, and radiopharmaceutical therapy will be consolidated. Additionally, new guidance for the medical use of remote afterloading devices is in its final stages of development, and new guidance will be developed for gamma stereotactic radiosurgery.

The issuance of comprehensive, up-to-date guidance should result in fewer requests by the regions for technical assistance. In addition, it is likely that licensees will submit more complete license applications, thus reducing NRC resources spent on licensing actions.

**PROGRAM AREA #5****Inspection Guidance**

Current inspection guidance needs to be revised to focus more attention on the management and effectiveness of radiation safety programs and the performance of key personnel such as the Radiation Safety Officer (RSO), responsible managers, and members of the Radiation Safety Committee (RSC). In addition, the inspectors need additional guidance on: 1) misadministration followup; 2) new authorized types of medical use such as remote afterloading and gamma stereotactic radiosurgery; and 3) reactive inspections and allegation followup at licensed facilities, including medical facilities. The staff will also develop criteria for when an inspection for misadministration followup warrants an Augmented or Incident Investigation Team.

Recently developed inspection procedures for the review of licensee Quality Management (QM) Programs will be evaluated based on the findings of a pilot program to be conducted in the near future. A contractor who reviews the QM programs submitted by licensees will assist NMSS and regional staff in conducting the pilot program, using the QM inspection procedures to evaluate the utility of the procedures. The staff will consider the contractor's findings in the issuance of final QM inspection procedures.

As a partial alternative or augmentation of routine NRC inspection efforts, the staff will continue to explore the issue of third-party audits of medical use programs conducted by professional organizations such as the American College of Nuclear Physicians and the American College of Radiology. The staff will consult with the OGC on the legal questions surrounding this issue. The staff will solicit additional information from interested professional organizations to determine whether certain components of audit programs meet the needs of NRC's regulatory program and would be used to enhance or substitute for routine inspections conducted by NRC staff.

**PROGRAM AREA #6****Enforcement**

The current materials escalated enforcement process may need modification to increase incentive for larger licensees to assure compliance. The staff is reviewing the amount of base civil penalties for various categories of licensees or facilities, and is proposing to evaluate other potential sanctions, such as probation for medical licensees, as suggested at a meeting of the NRC's ACMUI. By FY96, Office of Enforcement (OE) staff will complete a proposed revision to the current enforcement policy on base civil penalties and will have considered other ways of providing greater incentive for compliance by medical use licensees. In addition, the staff is currently tracking identified wrongdoers and has notified the appropriate State, and will notify the appropriate professional bodies.

**PROGRAM AREA #7****Management and Radiation Safety Officer Responsibilities**

NRC requires a radiation safety program at a licensed medical use facility to

include appropriate management direction and supervision. Key components include: executive management of the licensed facility, the RSO, and RSC. Responsible individuals are expected to take an aggressive approach to ensure that adequate resources are available, that the program adequately ensures public health and safety, and that procedures are fully implemented. Inspection activities at medical facilities indicate that individuals do not always fulfill their roles to ensure effective management of the radiation safety program. This problem is not unique to medical licensees, and will be addressed through rulemaking for all materials licensees.

The staff proposes a three-step approach. First, Parts 30, 40, and 70 will be revised to emphasize the commitment by licensee management, and clarify management's responsibility, to ensure that adequate resources are provided for effective radiation safety management. Licensees must ensure that all responsible parties fulfill their respective roles and are knowledgeable of appropriate regulatory requirements. The rule would reflect materials licensing and inspection guidance directed at significant management involvement in the radiation safety program. Secondly, NMSS staff has initiated a task force to develop a NUREG entitled, "Management of Radioactive Materials Safety Programs at Medical Facilities." The NUREG, a practical guide for NRC staff and licensees, will clarify the role of licensee management, the RSO and RSC to effectively manage the radiation safety program at licensed medical use facilities. Task force participants for development of the NUREG include Headquarters and regional staff and two representatives from Agreement States. The task force is also seeking input from professional organizations and conducting an extensive literature search on related issues. Thirdly, NRC staff will evaluate current training and experience requirements for physician authorized users and RSOs and will secure contract support to evaluate a broad scope of related issues. These include: 1) the adequacy of the radiation safety requirements, including the didactic, laboratory, and clinical components, of the accreditation programs offered by medical professional boards; 2) the preceptor process currently used by NRC for documentation of training and experience obtained outside of an accredited program; the feasibility of a testing process for authorized users and RSOs in lieu of recognition of other training paths; and 3) the need for training and experience criteria for supervised individuals. As part of this contract, other board certification programs, not currently recognized in Part 35, may be evaluated for demonstration of adequacy to meet the required training and experience criteria. The results of this study will be considered during the major revision of Part 35 discussed in program area 3.

#### **PROGRAM AREA #8**

##### **Research**

NRC has ongoing contracts in place to evaluate the risks associated with therapy procedures and the human error component of misadministrations. These include: 1) a contract for the investigation of certain therapy misadministrations, including root cause; 2) contracts to evaluate the contribution of the human factors in brachytherapy and teletherapy performance errors; and 3) contracts to evaluate quality assurance and risk associated with brachytherapy procedures and devices, and gamma stereotactic

radiosurgery. The findings of these studies could result in revised equipment specifications and operating procedures and form the basis for revised regulations and inspection guidance. Contract work is in the final stages for item 1, and has yet to be completed for items 2 and 3.

#### **PROGRAM AREA #9**

##### **Information Management Systems**

NMSS and AEOD staff will expand the current NRC database for tracking and evaluation of medical events within the NRC and Agreement State jurisdiction. Currently, the staff is working to identify a set of essential data elements to meet the needs of NRC and enhance the current system. Additionally, NMSS staff will expand the current medical use program tracking system to accommodate action items identified in the management plan.

#### **RESOURCES:**

In FY 1994 through FY 1998, the staff estimates approximately 50 direct Full Time Equivalents (FTE) and \$4.25M will be required to implement the medical management plan by the Offices of NMSS, OGC, OE, AEOD, Nuclear Regulatory Research (RES), and the Regions. A chart with resources by Office and fiscal year is shown below. All resources are currently within budget, except \$1.25M in FY 1994. This shortfall will be funded by NMSS if funds are available, or additional funding will be provided during mid-year or as necessary.

#### **\*BUDGETED RESOURCES PER FISCAL YEAR BY OFFICE**

<u>OFFICE</u>	<u>FY94</u> <u>FTE \$K</u>	<u>FY95</u> <u>FTE \$K</u>	<u>FY96</u> <u>FTE \$K</u>	<u>FY97</u> <u>FTE \$K</u>	<u>FY98</u> <u>FTE \$K</u>
AEOD	0.8	0.0	0.0	0.0	0.0
OGC	0.8	0.8	0.8	0.8	0.8
OE	0.3	0.3	0.3	0.3	0.3
RES	2.5/350	2.5/100	2.5	2.5	2.5
NMSS/REGIONS	<u>5.6/308</u>	<u>6.6/1200</u>	<u>6.1/500</u>	<u>6.1/500</u>	<u>6.1/500</u>
<b>TOTAL</b>	<b>10.0/658</b>	<b>10.2/1300</b>	<b>9.7/500</b>	<b>9.7/500</b>	<b>9.7/500</b>

\* Direct Staff FTE

The resources for AEOD in FY 1994 are for development of an expanded non-reactor event database. Beginning in FY 1995, AEOD resources for maintenance and operation of the database, and other efforts in implementing the management plan, are considered part of their normal responsibilities.

The table reflects expenditure of FTEs at a constant rate. Inherently, implementation of the management plan will require changes and adjustments. The enclosed Gantt chart contains the projected time frame associated with

completion of action items, and thus, does not reflect a constant rate of resource expenditure. It is expected that more FTEs may be required in FY 1994 for initiating implementation of the management plan and less in FY 1998, if the plan is completed on schedule. NMSS will internally reprogram any FTEs necessary in FY 1994 from lower priority efforts.

The resource estimates presented do not include OSP. OSP's role in this plan is limited to support in coordinating review of rulemakings by the Agreement States, which is part of its normal, ongoing efforts to involve the Agreement States in an early and substantive fashion in changes to NRC regulations that may affect them. Many of the medical use program areas will have a significant impact on Agreement State programs. Early and substantive interaction with Agreement States could involve workshops and meetings in which OSP would normally provide travel and per diem expenses, as well as make arrangements for such workshops. If such workshops were to be held, it is estimated that each workshop would cost approximately \$25K for a two and a half day meeting. The staff believes that it would be prudent to have approximately one workshop per year. OSP staff resources for arranging such a meeting are estimated to be less than 0.1 FTE per year.

#### OBSERVATIONS AND CONCLUSIONS:

1. The staff anticipates that the medical management plan will be dynamic and will require periodic review and modification to adjust for new initiatives resulting from periodic reassessments, unforeseen events, and changes to projected completion dates, particularly, when the outcome or completion date of one task affects another. It should be recognized that the assignment of additional action items or tasks could have a significant impact on implementation and completion of all tasks associated with the medical management plan. Each new action item must be carefully evaluated to determine its priority, and associated resource implications and time frame, so that the impact on the plan can be estimated and priorities adjusted.
2. In addition to implementing the management plan, the eight member technical staff dedicated to the medical use regulatory program will continue to manage a wide variety of program issues that typically ranges from 160-190 action items, at any one time (see Enclosure 3 for a categoric description of these issues and tasks). Most of these items are not included in the management plan because they represent routine tasks associated with program management.
3. NMSS plans to rotate regional personnel to NMSS for some period of time to accomplish specific goals, whereas, some work by regional personnel will be coordinated with NMSS, while remaining in the region. Regional personnel will assist NMSS staff on various action items and related issues, and be focused primarily on rulemaking and the development of new and revised licensing and inspection guidance.
4. NMSS will sustain or increase the level of effort to support the ACMUI. The expertise it represents is a valuable asset to the staff in its

effort to more fully understand current and future medical use and technology. The staff will continue to consult with the ACMUI, particularly in view of the number of issues identified in the management plan to be addressed by the Commission over the next few years.

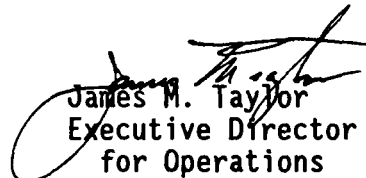
5. As part of its integration of tasks, NMSS staff has identified difficulties or inefficiencies in meeting some IIT due dates. The staff has incorporated changes in these due dates into the medical management plan. Enclosure 4 provides an update on, and current due date for, IIT action items. (EDO WITS 9300046).

RECOMMENDATION:

- That the Commission:
- 1) Approve the staff's proposed management plan for the medical use regulatory program as presented.
  - 2) Note that the staff plans to provide an annual briefing on the status of implementation of the management plan, beginning 1 year from Commission approval of the plan.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection.

  
James M. Taylor  
Executive Director  
for Operations

Enclosures:

1. Gantt chart
2. Maps to Tracks & Indiv. Trkng. Sheets
3. Routine tasks assoc. with Prog. Mgt.
4. IIT Item Dates

Commissioners' comments or consent should be provided directly to the Office of the Secretary by COB Thursday, September 16, 1993.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Thursday, September 9, 1993, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

DISTRIBUTION:

Commissioners	OPA
OGC	OCA
OCAA	OPP
OIG	EDO
	SECY



**ENCLOSURE 1**

**Gantt Chart  
for NMSS resources**

Task Name	Start	End	Years				
			93	94	95	96	97
<b>POLICY ISSUES</b>	Oct/01/93	Jan/12/96					
National Academy of Science Study	Oct/01/93	Jan/12/96					
Proposed SOW to NAS	Oct/01/93	Nov/04/93					
Let Contract	Nov/04/93	Jan/14/94					
Contract Work and Final Report	Jan/14/94	Jan/12/96					
Waste Processor Guidance	Oct/01/93	Jan/31/94					
RES-1979 Med Policy	Oct/01/93	Dec/31/93					
NRC/Agreement State Device Jurisdiction	Oct/01/93	Jun/01/94					
<b>RULEMAKING</b>	Oct/01/93	Jun/27/97					
Pharmacy Rule	Nov/01/93	Nov/01/94					
Final Rule	Nov/01/93	Nov/01/94					
Embryo/Neo-nate Protection	Oct/01/93	Dec/30/94					
Part 20/Part 35 Patient Release	Oct/01/93	Jul/07/94					
Part 35 Revision (HDR & Other Issues)	Jan/03/95	Jun/27/97					
Review QM Rule Progress	Oct/03/94	Apr/28/95					
<b>LICENSING GUIDANCE</b>	Oct/01/93	Dec/31/97					
RG 10.5 Broadscope	Oct/01/93	Mar/01/95					
Draft to RES	Oct/01/93	Dec/09/93					
Draft for comment	Jun/01/94	Sep/30/94					
Final Reg Guide	Oct/03/94	Mar/01/95					
Submit Revised FC 86-4 to OGC	Oct/01/93	Nov/23/93					
Add Appendices to RG 10.8	Oct/01/93	Aug/01/97					
Draft to RES	Oct/01/93	Sep/29/95					
Therapy Included	Oct/01/93	Sep/29/95					
Physician Training	Oct/01/93	Sep/29/95					
Relation to QM	Oct/01/93	Sep/29/95					
Draft for comment	Oct/03/95	Feb/01/96					
Final Reg Guide	Feb/03/97	Aug/01/97					
Revise Reg Guide 8.33	Apr/01/97	Dec/31/97					
Revise License Reviewer Training	Oct/01/93	Jun/30/94					
Issue MC on Materials Enforcement Discreti	Oct/03/94	Jun/30/95					
Issue Guidance for Master Material Program	Oct/01/93	Dec/31/93					

Task Name	Start	End	Years				
			93	94	95	96	97
<b>INSPECTION GUIDANCE</b>	Oct/01/93	Jul/31/96					
Prime Alert-10	Oct/01/93	Apr/29/94					
MC - Assessing Public Exposure & Notificat	Oct/01/93	Jan/13/94					
TI on Significant Licensee Changes	Oct/01/93	May/09/94					
Revise MC 2800	Jan/03/94	Dec/29/95					
Program Expansion	Jan/03/94	Dec/29/95					
Performance Adjustment	Jan/03/94	Dec/29/95					
Medical Field Notes	Jan/03/94	Jun/30/94					
QM Inspection Procedure	Jan/03/94	Sep/30/94					
Satellite, Field, Temporary	Jan/03/94	Dec/29/95					
Third Party Inspection	Jul/03/95	Jul/31/96					
Memorandum to OGC	Jul/03/95	Jul/31/95					
Evaluation	Aug/01/95	Jul/31/96					
Event Response Procedure	Jan/03/94	Jun/30/94					
Allegation Follow-up Procedure	Oct/03/94	Jun/30/95					
<b>ENFORCEMENT</b>	Jul/03/95	Dec/29/95					
Revision of the Enforcement Policy	Jul/03/95	Dec/29/95					
<b>MANAGEMENT AND RSO RESPONSIBILITY</b>	Oct/01/93	Dec/31/97					
NUREG-MAN/RSO	Oct/01/93	Sep/30/94					
Rulemaking	Jan/02/95	Dec/31/97					
Adv. Notice of Proposed Rulemaking	Jan/02/95	Jun/28/95					
Industry Workshops	Oct/02/95	Oct/01/96					
Guidance Documents	Oct/02/95	Oct/01/96					
Proposed Rule	Oct/01/96	Dec/31/96					
Final Rule	Jan/02/97	Dec/31/97					
RSO Certification Form	Oct/01/93	Mar/31/94					
<b>INFORMATION MANAGEMENT SYSTEMS</b>	Oct/01/93	Dec/31/97					
Licensee Events - Support to AEOD	Oct/01/93	Mar/31/94					
Division Action Items	Oct/01/93	Dec/31/97					

[illegible]

**ENCLOSURE 2**

**Guide to Maps;  
Maps to Track Sheets; &  
Individual Track Sheets**

DIRECTIONS FOR REVIEWING MAPS TO TRACKS  
AND INDIVIDUAL TRACK SHEETS

Attached you will find three documents to guide you through review of the 90 track sheets on action items considered in development of the medical management plan. They are:

- 1) a list of the tracks by topic bin that will enable you to identify which tracks were included for each line item in each topic bin;
- 2) a numerical list of the tracks that indicates whether the track (action item) is categorized into a topic bin on the Gantt chart and where it can be located; and
- 3) individual track sheets for all 90 action items that provide specific information on the topic bin, brief description of item, source of the action item, action needed, end date, support Offices, and contract costs, where applicable.

General comments:

- o The topic bins identified on the Gantt chart are:

1- Policy Issues	6- Management and RSO Responsibility
2- Rulemaking	7- Information Management Systems
3- Licensing Guidance	8- Misadministrations
4- Inspection Guidance	9- Research
5- Enforcement	

The individual tracks (90) were categorized into topic bins and assigned the appropriate topic bin number as indicated above.

- o The following abbreviations were used on the individual track sheets to indicate the resource support provided by other Offices:

C- Commission	E- EDO	N- NMSS
R- Regions	X- Research	D- AEOD
I- IIT	P- State Programs	S- Agreement States
A- ACMUI	M- Medical industry	G- OGC
O- Other	F- Enforcement	

- o The start date of 10/1/93 was chosen for certain items because it is impractical to indicate a date prior to submittal or Commission approval of the medical management plan. However, there are on-going efforts to address several of the action items identified in the plan, including IIT items.

Enclosure 2

# MASTER TRACK LIST (BY BIN)

## TOPIC BIN AND TASK NAME

## TRACKS

### 1 POLICY ISSUES

National Academy of Science Study	14, 22, 31
Proposed SOW to NAS	-----
Let Contract	-----
Contract work and final report	-----
Waste Processor Guidance	60
RES-1979 Med Policy	90
NRC/Agreement State Device Jurisdiction	57

### 2 RULEMAKING

Pharmacy Rule	-----
Final Rule	64
Embryo/Neo-nate Protection	12
Part 20/Part 35 Patient Release	62
Part 35 Revision (HDR & Other Issues)	7, 26, 47, 55, 89
QM Rule Commission Briefing	67

### 3 LICENSING GUIDANCE

Regulatory Guide 10.5 Broadscope	10
Draft to RES	-----
Draft for Comment	-----
Final Reg Guide	-----
Submit Revised FC 86-4 to OGC	45
Add Appendices to Reg Guide 10.8	-----
Draft to RES	-----
Therapy Included	48
Physician Training	65
Relation to QM	-----
Draft for Comment	-----
Final Reg Guide	-----
Revise Reg Guide 8.33	81
Revise License Reviewer Training	86
Issue MC on Materials Enforcement Discretion	68
Issue Guidance for Master Materials Programs	69

Enclosure 2  
Attachment 1

## BIN AND TASK NAME

## TRACKS

### 4 INSPECTION GUIDANCE

Revise MC 2800	50
Program Expansion	58
Performance Adjustment	83
Medical Field Notes	66
QM Inspection Procedure	9, 34
Satellite, Field, Temporary	-----
Prime Alert-10	52
MC - Assessing Pub. Exposure & Notification	53
TI on Significant Licensee Changes	59
Third Party Inspection	15, 23, 24
Memorandum to OGC	-----
Evaluation	-----
Event Response Procedure	84
Allegation Follow-up Procedure	85

### 5 ENFORCEMENT

Revision of the Enforcement Policy	30, 78, 79
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### 6 MANAGEMENT & RSO RESPONSIBILITY

NUREG-MAN/RSO	33, 77
Rulemaking	6, 8, 13, 16, 17, 18, 51, 56
Advance Notice of Proposed Rulemaking	-----
Industry Workshops	-----
Guidance Documents	-----
Proposed Rule	-----
Final Rule	-----
RSO Certification Form	88

### 7 INFORMATION MANAGEMENT SYSTEMS

Licensee Events - Support to AEOD	72
Division Action Items	87



## BIN AND TASK NAME

## TRACKS

### 8 MISADMINISTRATION

Management Directive	40, 49
Patient Follow-up Policy	28, 39, 74
Notification of Local Authorities	80
Medical Consultant Policy	41, 75
AIT/IIT Guidance	37
Review all QM Plans	21
TI - QM Inspection	25
Misadministration Coordinator	82

### 9 RESEARCH

QA/QC & Risk for Gamma Knife	2
QA/QC & Risk for HDR Afterloaders	3
Misadministration Events Analysis	4
Human Factors Studies	5
SW source-wire evaluation	61

### COMPLETED:

11, 20, 27, 29, 32, 35, 36, 38, 42, 43, 44, 46, 54, 63, 70, 71, 76

### DELETED:

19, 73

1 - Task for development of the Medical Management Plan

# MASTER TRACK LIST (BY TRACK)

<u>TRACK #</u>	<u>COVERED ON GANTT</u>	<u>BIN</u>	<u>BIN TITLES</u>
1	N/A	N/A	1 = POLICY ISSUES
2	Y	9	2 = RULEMAKING
3	Y	9	3 = LICENSING GUIDANCE
4	Y	9	4 = INSPECTION GUIDANCE
5	Y	9	5 = ENFORCEMENT
6	Y	6	6 = MANAGEMENT & RSO RESPONSIBILITY
7	Y	2	7 = INFORMATION MANAGEMENT SYSTEMS
8	Y	6	8 = MISADMINISTRATION
9	Y	4	9 = RESEARCH
10	Y	3	
11	Done		
12	Y	2	
13	Y	6	
14	Y	1	
15	Y	4	
16	Y	6	
17	Y	6	
18	Y	6	
19	Deleted		
20	Done		
21	Y	8	
22	Y	1	
23	Y	4	
24	Y	4	
25	Y	8	
26	Y	2	
27	Done		
28	Y	8	
29	Done		
30	Y	5	
31	Y	1	
32	Done		
33	Y	6	
34	Y	4	
35	Done		
36	Done		
37	Y	8	
38	Done		
39	Y	8	
40	Y	8	
41	Y	8	
42	Done		
43	Done		
44	Done		
45	Y	3	
46	Done		
47	Y	2	
48	Y	3	
49	Y	8	

Enclosure 2  
Attachment 2

<u>TRACK #</u>	<u>COVERED ON GANTT</u>	<u>BIN</u>
50	Y	4
51	Y	6
52	Y	4
53	Y	4
54	Done	
55	Y	2
56	Y	6
57	Y	1
58	Y	4
59	Y	4
60	Y	1
61	Y	9
62	Y	2
63	Done	
64	Y	2
65	Y	3
66	Y	4
67	Y	2
68	Y	3
69	Y	3
70	Done	
71	Done	
72	Y	7
73	Deleted	
74	Y	8
75	Y	8
76	Done	
77	Y	6
78	Y	5
79	Y	5
80	Y	8
81	Y	3
82	Y	8
83	Y	4
84	Y	4
85	Y	4
86	Y	3
87	Y	7
88	Y	6
89	Y	2
90	Y	1

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC #** N/A

**TRACK NUMBER:** 01

**Source Code:** N                    **Document No.:**001

**Doc. Date:** 09/08/92

**DOCUMENT:** Memo on Medical Management Plan

**DESCRIPTION:** Develop medical mgt. plan to include long term objectives, umbrella policy, strategy for achieving those objectives, & provision for annual update. Coordinate with ACMUI and Agreement States.

**ACTION:** Prepare management plan.  
Incorporate Commission direction regarding evolution of program and consistency with policy statement.

**STATUS:** In progress.

**NOTES:** Action incorporates Commission direction in SRM of 6/23/92 (Item #31).

**PRIORITY:** H  
**LEAD:** Glenn  
**SUPPORT:** X,R,G,F,D

**Category 1:** PO  
**Category 2:** O  
**Category 3:**

**Due Date:** 08/30/93

**Due Date:**

**Due Date:**

*Enclosure 2*  
*Attachment 3*

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 09**

**TRACK NUMBER: 02**

**Source Code: N Document No.:001**

**Doc. Date: 09/08/92**

**DOCUMENT: Memo on Medical Management Plan**

**DESCRIPTION: Develop a methodology for assessing risk significance of use of medical devices & examine QA issues for gamma knife.**

**ACTION: Develop NUREG on Methodology and QA issues.**

**STATUS:**

**NOTES: Livermore**

**PRIORITY: M**  
**LEAD: Cunningham/G**  
**SUPPORT:**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 12/30/93**

**Due Date:**

**Due Date:**

MASTER AGENDA: Medical Program Improvements  
Printed on 08/05/93

TOPIC # 09

TRACK NUMBER: 03

Source Code: N Document No.:001

Doc. Date: 09/08/92

DOCUMENT: Memo on Medical Management Plan

DESCRIPTION: QA Plan for HDR Afterloaders.  
Contract to examine requirements, QA procedures, devise  
critical components & risk of high dose rate devices &  
provide model QA/QC program.

ACTION: Develop QA/QC plan for HDR Afterloaders.

STATUS:

NOTES: Find out real due dates from Serig/Rathbun.

PRIORITY: H  
LEAD: Glenn  
SUPPORT:

Category 1: 0  
Category 2:  
Category 3:

Due Date: 12/30/93

Due Date:

Due Date:

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 09**

**TRACK NUMBER: 04**

**Source Code: N Document No.:001**

**Doc. Date: 09/08/92**

**DOCUMENT: Memo on Medical Management Plan**

**DESCRIPTION: Conduct misadministration events analysis & summarize root causes & corrective actions.**

**ACTION: Publish NUREG summarizing results.**

**STATUS:**

**NOTES:**

**PRIORITY: H**  
**LEAD: Rathbun**  
**SUPPORT:**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 12/30/93**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/19/93**

**TOPIC # 09**

**TRACK NUMBER: 05**

**Source Code: N Document No.:001**

**Doc. Date: 09/08/92**

**DOCUMENT: Memo on Medical Management Plan**

**DESCRIPTION:** Human Factors studies  
Teletherapy, Brachytherapy, remote afterloaders.  
Conduct human factors study.  
Manual brachytherapy study to follow remote aft'ldr study.

**ACTION:** Issue NUREG/CRs summarizing results of HF studies of teletherapy and remote afterloading brachytherapy.

**STATUS:** Comments on initial draft of Vol. I of HF Evaluation of Remote Afterloading Brachytherapy provided to contractor; final version of Vol I due 9/30/93. Initial draft of HF Eval of teletherapy in preparation by contractor; final version of Vol I due 12/31/93.

**NOTES:** Manual brachytherapy study to begin approximately 7/94 and be completed 7/96.

**PRIORITY: H**  
**LEAD: Serig/Coffma**  
**SUPPORT:**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 09/30/93**

**Due Date: 12/31/93**

**Due Date: 07/31/96**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 06**

**Source Code: A Document No.:001**

**Doc. Date: 09/08/92**

**DOCUMENT: Memo on Medical Management Plan**

**DESCRIPTION: Reassessment of training & experience criteria and preceptoring process for physician authorized users by Visiting Medical Fellow.**

**ACTION: Evaluate need to revise training & experience criteria in Part 35 & need to revise preceptoring process.**

**STATUS:**

**NOTES: Action incorporates recommendations from ACMUI (Item #18) to revise 35.920 & 35.930 and to revise preceptor process. Contract dollar figure and resource considerations are also for related Items #08, 13, 16, 17, 18, & 56. All Items are being consolidated for these purposes.**

**PRIORITY: M**  
**LEAD: Glenn with P**  
**SUPPORT: X,G,P,S,M,A**

**Category 1: O**  
**Category 2: RM**  
**Category 3: RG**

**Due Date: 12/31/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 07**

**Source Code: N Document No.:002**

**Doc. Date:**

**DOCUMENT: Medical Issues Paper (MIP)**

**DESCRIPTION: Adequacy of Part 35**

**ACTION:** Review lessons learned since 1986 revision & include changes in the user need memo. See Item #26, if appropriate.

**STATUS:**

**NOTES:** See related Items #26, 47, 55 & 89.

**PRIORITY: L**  
**LEAD: Glenn**  
**SUPPORT: R,A,S,P,M**

**Category 1: O**  
**Category 2: RM**  
**Category 3: LG**

**Due Date: 06/27/97**

**Due Date:**

**Due Date:**

MASTER AGENDA: Medical Program Improvements  
Printed on 08/05/93

TOPIC # 06

TRACK NUMBER: 08

Source Code: N Document No.:002

Doc. Date:

DOCUMENT: Medical Issues Paper (MIP)

DESCRIPTION: Part 35  
Evaluate need for training & experience requirements for supervised individuals.

ACTION: Evaluate Part 35 requirements for supervision, training, & experience. Determine if revision is necessary.

STATUS:

NOTES: Resource and contract considerations were made in Item #06 for this and Items #13, 16, 17, 18 and 56.

PRIORITY: L  
LEAD: Glenn  
SUPPORT: S,A,X,G,P,M

Category 1: O  
Category 2: RM  
Category 3: PO

Due Date: 12/31/97

Due Date:

Due Date:

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 09**

**Source Code: N Document No.:002**

**Doc. Date:**

**DOCUMENT: Medical Issues Paper (MIP)**

**DESCRIPTION:** Inspection/Enforcement guidance for QM Rule.  
Issue guidance for performance-based inspections of QM programs.

**ACTION:** Issue revised TI & field notes for QM program inspections.  
Issue Enforcement Guidance Memorandum.

**STATUS:** Combined with Item #34. See related #66 (Final TI). Rsrcs considered in #34. **COMPLETED:** Enforcement Guidance Memo issued 4/30/93. Draft TI issued to Regions. Final TI (Item #66) will be based on Livermore contract, to be done after 12/93.

**NOTES:** See followup items #34 and #66.

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT: F,R**

**Category 1: IG**  
**Category 2: PO**  
**Category 3: EG**

**Due Date: 09/30/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 03**

**TRACK NUMBER: 10**

**Source Code: N Document No.:002**

**Doc. Date:**

**DOCUMENT: Medical Issues Paper (MIP)**

**DESCRIPTION: Licensing Guidance**  
Complete SRP for Type A Broad Scope (updating P&GD).  
Submit revision to RG 10.5 for Broad Scope to Research.

**ACTION: Complete SRP & submit revised Reg Guide for Broad Scope to Research.**

**STATUS:**

**NOTES:**

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT: X, R, A**

**Category 1: LG**  
**Category 2: RG**  
**Category 3:**

**Due Date: 03/01/95**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # N/A**

**TRACK NUMBER: 11**

**Source Code: N Document No.:002**

**Doc. Date:**

**DOCUMENT: Medical Issues Paper (MIP)**

**DESCRIPTION: Abnormal Occurrence (AO) Reporting Criteria**  
**Review and revise AO reporting criteria.**

**ACTION: Prepare Commission Paper on revision of AO reporting**  
**criteria to specifically address misadministrations.**

**STATUS: COMPLETED: Staff has prepared a Commission Paper recommend-**  
**ing AO Reporting Criteria for misadministrations and this**  
**paper is currently with EDO for review.**

**NOTES: Incorporates OGC recommendation in Item #38.**

**PRIORITY: H**  
**LEAD: Jordan**  
**SUPPORT: N, R, P**

**Category 1: PO**  
**Category 2: RG**  
**Category 3:**

**Due Date: 04/30/93**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 12**

**Source Code: N Document No.:002**

**Doc. Date:**

**DOCUMENT: Medical Issues Paper (MIP)**

**DESCRIPTION: Part 35 Rulemaking on Admin of Byproduct Material to Pregnant and Breastfeeding Women.**

**ACTION: Revise Part 35 to address need for licensees to determine pregnancy status of patients prior to administration to EDO.  
Prepare licensing and inspection guidance.**

**STATUS:**

**NOTES: Proposed rulemaking due to EDO 11/30/93.  
Final rule 12/31/94.**

**PRIORITY: H**  
**LEAD: Bahadur**  
**SUPPORT: N,G,P,S,A**

**Category 1: RM**  
**Category 2:**  
**Category 3:**

**Due Date: 11/30/93**

**Due Date: 12/30/94**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 13**

**Source Code: A Document No.:007**

**Doc. Date: 07/13/92**

**DOCUMENT: ACMUI Minutes**

**DESCRIPTION:** NRC should prepare syllabus that can serve as basis for didactic basic radiation safety training of physicians for licensure.

**ACTION:** Evaluate need for syllabus.

**STATUS:**

**NOTES:** Resource and contract considerations were made in Item #06 for this Item and Items #08, 16, 17, 18 and 56.

**PRIORITY:** L  
**LEAD:** Glenn  
**SUPPORT:** X,G,P,S,M,A

**Category 1:** RG  
**Category 2:**  
**Category 3:**

**Due Date:** 12/31/97

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 01**

**TRACK NUMBER: 14**

**Source Code: A Document No.:009**

**Doc. Date: 11/05/92**

**DOCUMENT: ACMUI Minutes**

**DESCRIPTION:** NRC should fund a national study of the impact of regulation on all uses of byproduct material in medicine. Study should be conducted by a University of neutral professional group.

**ACTION:** Evaluate for inclusion in Regulatory Impact Survey.  
Award contract by 10/01/93.  
Complete Action by 01/12/96.

**STATUS:**

**NOTES:** Award & monitor contract.  
Award 10/01/93; complete 01/12/96.

**PRIORITY: M**  
**LEAD: Paperiello**  
**SUPPORT:**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 10/01/93**

**Due Date: 01/12/96**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 15**

**Source Code: A Document No.:009**

**Doc. Date: 11/05/92**

**DOCUMENT: ACMUI Minutes**

**DESCRIPTION:** NRC should explore substitution of voluntary accreditation by professional organizations for some of the NRC inspection processes.

**ACTION:** Request OGC to prepare legal analysis of substitution. Staff will evaluate feasibility of substitution of ACNP, ACR processes in Commission paper with recommendations.

**STATUS:**

**NOTES:** Incorporates ACNP recommendation (Item #23) and ACR recommendation (Item #24).  
Projected resources are based upon the development of the Commission paper and include consideration of resources for Items #23 and #24.

**PRIORITY:** M  
**LEAD:** Glenn  
**SUPPORT:** G,S,P,F,A

**Category 1:** O  
**Category 2:** PO  
**Category 3:**

**Due Date:** 07/31/96

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 16**

**Source Code: A Document No.:009**

**Doc. Date: 11/05/92**

**DOCUMENT: ACMUI Minutes**

**DESCRIPTION: NRC should establish testing process for physicians & RSOs to evaluate competence.**

**ACTION: Evaluate feasibility of developing testing process.**

**STATUS:**

**NOTES: Resource and contract considerations were made in Item #06 for this Item and Items #08, 13, 17, 18 and 56.**

**PRIORITY: M**  
**LEAD: Glenn**  
**SUPPORT: G,P,S,X,M,A**

**Category 1: PO**  
**Category 2:**  
**Category 3:**

**Due Date: 12/31/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 17**

**Source Code: A Document No.:009**

**Doc. Date: 11/05/92**

**DOCUMENT: ACMUI Minutes**

**DESCRIPTION:** NRC should monitor adequacy of radiation safety component of consultant rad. safety courses, residency programs, & board certification courses.

**ACTION:** Evaluate adequacy of radiation safety component of programs.

**STATUS:**

**NOTES:** Resource and contract considerations were made in Item #06 for this Item and Items #08, 13, 16, 18, and 56.

**PRIORITY: M**

**Category 1: 0**

**LEAD: Glenn**

**Category 2:**

**SUPPORT: G,P,X,M,S,A**

**Category 3:**

**Due Date: 12/31/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 18**

**Source Code: A Document No.:009**

**Doc. Date: 11/05/92**

**DOCUMENT: ACMUI Minutes**

**DESCRIPTION:** NRC should revise 10 CFR 35.920 (Training for Imaging and Localization) & 10 CFR 35.930 (Training for Therapeutic Use of Radiopharmaceuticals) to more appropriately reflect knowledge base.

**ACTION:** Incorporated into action for Item #6.

**STATUS:**

**NOTES:** Resource and contract considerations were made in Item #06 for this Item and Items #08, 13, 16, 17 and 56.

**PRIORITY:**

**LEAD:** Glenn

**SUPPORT:** X,G,P,M,S,A

**Category 1: 0**

**Category 2: RM**

**Category 3:**

**Due Date: 12/31/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC #** N/A

**TRACK NUMBER:** 19

**Source Code:** A                    **Document No.:**009

**Doc. Date:** 11/05/92

**DOCUMENT:** ACMUI Minutes

**DESCRIPTION:** NRC should expand address list for mailings to include not only licensee mgt. but also RSO & Chief of Service for each authorized user. And use newsletters of professional societies for informing users.

**ACTION:** Evaluate feasibility and cost of expanding LTS and mailing lists.

**STATUS:** Deleted.

**NOTES:**

**PRIORITY:** L  
**LEAD:** Combs  
**SUPPORT:** O

**Category 1:** O  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # N/A**

**TRACK NUMBER: 20**

**Source Code: N Document No.:011**

**Doc. Date: 03/10/93**

**DOCUMENT: SOW QM Plan Review**

**DESCRIPTION: Contractor to review QM plans for adequacy & develop tracking system showing status of reviews.**

**ACTION: Award Contract.**

**STATUS: COMPLETED.**

**NOTES:**

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT:**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 21**

**Source Code: N**                      **Document No.:011**

**Doc. Date: 03/10/93**

**DOCUMENT: SOW QM Plan Review**

**DESCRIPTION:** Contractor to review QM plans for adequacy & develop tracking system showing status of reviews.

**ACTION:** Complete review of all QM plans and issue final report.

**STATUS:**

**NOTES:** Related to Item #25.

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT: R**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 12/01/94**

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 01**

**TRACK NUMBER: 22**

**Source Code: N**                      **Document No.:013**

**Doc. Date: 03/12/93**

**DOCUMENT:** Response to COMSECY-93-004

**DESCRIPTION:** Upon Commission approval of SOW, prepare proposal package for National Academy of Sciences' Review of Medical Program.

**ACTION:** Prepare proposal package for NAS Review of Medical Program.

**STATUS:** COMBINED WITH ITEM #14.

**NOTES:** Contract and resource figures are considered in Item #14.  
Consolidated with Items #14 and 31.

**PRIORITY:** H  
**LEAD:** Paperiello  
**SUPPORT:**

**Category 1:** O  
**Category 2:** PO  
**Category 3:**

**Due Date:** 10/01/93

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 23**

**Source Code: N Document No.:017**

**Doc. Date: 11/09/92**

**DOCUMENT: Summ. Public Meeting on QM**

**DESCRIPTION: ACNP expressed a desire to explore possibility of NRC recognition of its Practice Audit Program as alternative to inspection of the audit program.**

**ACTION: Incorporated into Item #15. Resources considered there. Item #24 was also incorporated into #15.**

**STATUS:**

**NOTES:**

**PRIORITY: L**  
**LEAD: Glenn**  
**SUPPORT: G,S,P,F,A**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 07/31/96**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 24**

**Source Code: 0**                      **Document No.:018**

**Doc. Date:**

**DOCUMENT:** Comm Paper QM/Misadministration

**DESCRIPTION:** American College of Radiology (ACR) expressed interest in discussions w/ NRC re: acceptance of a voluntary QA program.

**ACTION:** Incorporated into action for Item #15. Resources considered there. Item #23 was also incorporated into #15.

**STATUS:**

**NOTES:**

**PRIORITY:** L  
**LEAD:** Glenn  
**SUPPORT:** G,S,P,F,A

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 07/31/96**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 25**

**Source Code: N Document No.:020**

**Doc. Date: 05/13/92**

**DOCUMENT: SECY 92-175: Annual Report**

**DESCRIPTION: Provide training to Regions on QM field notes & temporary instruction. (Sept/Oct timeframe)**

**ACTION: Followup training for Regions on interim final field notes & temporary instruction for QM rule.**

**STATUS:**

**NOTES:**

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT: R**

**Category 1: IG**  
**Category 2:**  
**Category 3:**

**Due Date: 03/31/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 26**

**Source Code: N Document No.:020**

**Doc. Date: 05/13/92**

**DOCUMENT: SECY 92-175: Annual Report**

**DESCRIPTION:** User need memo to revise Part 35 and Reg Guide 10.8 to address remote afterloader brachtherapy and gamma stereotactic surgery.

**ACTION:** Issue user need memo to RES following completion of Item #48 to revise Part 35 and Reg Guide 10.8.

**STATUS:**

**NOTES:** See related Items #7, 47, 55 and 89. Also considers resources for #47 and 55.

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT:**

**Category 1: RM**  
**Category 2: RG**  
**Category 3:**

**Due Date: 06/27/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # N/A**

**TRACK NUMBER: 27**

**Source Code: M Document No.:020**

**Doc. Date: 05/13/92**

**DOCUMENT: SECY 92-175: Annual Report**

**DESCRIPTION: ACNP/SNM petition of 2/10/92 contends current fee schedule adversely impacts medical licensees.**

**ACTION: Prepare comments for LFMB.**

**STATUS: COMPLETED 4/9/93**

**NOTES:**

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT:**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 28**

**Source Code:** N                      **Document No.:** 021                      **Doc. Date:** 01/19/93

**DOCUMENT:** SECY 93-007: Aspects of Med. Prog. RE: Misad.

**DESCRIPTION:** Consider issue of expanded NRC followup of patients subject to misadministrations; also refer to external group for consideration.

**ACTION:** Issue comprehensive Management Directive. Review findings of NAS when completed in 1/96.

**STATUS:**

**NOTES:** Resource consideration encompasses the following related Items: #39, 40, 49, 74, 80; which are all related to Dr. Paperiello's Management Directive.

**PRIORITY:** H  
**LEAD:** Glenn/Combs  
**SUPPORT:** G,R

**Category 1:** PO  
**Category 2:** O  
**Category 3:** RM

**Due Date:** 12/31/93

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 01**

**TRACK NUMBER: 29**

**Source Code:** N                      **Document No.:**021                      **Doc. Date:** 01/19/93

**DOCUMENT:** SECY 93-007: Aspects of Med. Prog. re: Misad.

**DESCRIPTION:** Conduct analysis of adequacy of NRC & FDA review of medical devices.

**ACTION:** Develop MOU with FDA on medical devices. See related Items #57 and 76.

**STATUS:** To be completed by 10/01/93.

**NOTES:**

**PRIORITY:** H  
**LEAD:** Paperiello  
**SUPPORT:** P, S, G

**Category 1:** 0  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 05**

**TRACK NUMBER: 30**

**Source Code: N Document No.:021**

**Doc. Date: 01/19/93**

**DOCUMENT: SECY 93-007: Aspects of Med. Prog. re: Misad.**

**DESCRIPTION: Reassess materials civil penalties policy.**

**ACTION: Reassess materials civil penalty policy.**

**STATUS:**

**NOTES: Probation/higher**

**PRIORITY: M**  
**LEAD: Lieberman**  
**SUPPORT: N, A, S, P**

**Category 1: O**  
**Category 2: PO**  
**Category 3: EG**

**Due Date: 12/29/95**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 01**

**TRACK NUMBER: 31**

**Source Code: C Document No.:022**

**Doc. Date: 06/23/92**

**DOCUMENT: SRM: Annual Medical Briefing**

**DESCRIPTION:** Analysis on whether the evolution of the NRC's medical use program has been consistent with the 1979 statement of Comm. policy & whether any changes to the policy are warranted.

**ACTION:** Incorporate into medical management plan; also refer to external group. Work into all rulemakings a statement of consistency. Add to NAS.

**STATUS:** COMBINED WITH ITEM #14 (AND #22).

**NOTES:** Incorporate into Item #14, (consequently #22).  
See related Item #90.  
(still have a question re: source document)

**PRIORITY: M**  
**LEAD: Glenn**  
**SUPPORT: X**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 01/12/96**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC #** N/A

**TRACK NUMBER:** 32

**Source Code:** C

**Document No.:** 023

**Doc. Date:** 12/21/92

**DOCUMENT:** COMIS-92-026: Review of Medical Program

**DESCRIPTION:** Nominate senior NRC manager to perform mgt. review of existing medical program. Coordinate review with med. management plan & focus on whether program is being efficiently implemented.

**ACTION:** Perform management review of existing medical program.

**STATUS:** COMPLETED 6/15/93

**NOTES:**

**PRIORITY:** H

**LEAD:** Paperiello

**SUPPORT:** N, P

**Category 1:** 0

**Category 2:**

**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 33**

**Source Code: N Document No.:024**

**Doc. Date: 08/10/92**

**DOCUMENT:** Memo on Developing NUREG for RSOs

**DESCRIPTION:** Role of licensee management radiation safety committee &  
RSO in the effective management of the rad safety program at  
a medical use facility.

**ACTION:** Develop and publish NUREG.

**STATUS:**

**NOTES:** See related IIT Item #51.  
Contract and resource considerations for this and Item #77.  
Resource considerations do not include time expended with  
Agreement States.

**PRIORITY:** M  
**LEAD:** Glenn  
**SUPPORT:** R,S

**Category 1:** RG  
**Category 2:**  
**Category 3:**

**Due Date:** 09/30/94

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 34**

**Source Code: N Document No.:028**

**Doc. Date: 02/09/92**

**DOCUMENT: P&G Directive on Supervision**

**DESCRIPTION: Formal guidance will be developed for routine and reactive inspections re: QM Rule.**

**ACTION: Finalize field notes & inspection procedure after completion of pilot program.**

**STATUS:**

**NOTES: Followup action to complete Item #9. Consolidate with #66. Resource consideration for Item #66 is included here.**

**PRIORITY: H**  
**LEAD: Combs**  
**SUPPORT: R**

**Category 1: IG**  
**Category 2:**  
**Category 3:**

**Due Date: 09/30/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC #** N/A

**TRACK NUMBER:** 35

**Source Code:** G                      **Document No.:** 029

**Doc. Date:** 02/12/93

**DOCUMENT:** OGC Memo on Misadministrations

**DESCRIPTION:** Develop guidance document on licensee responsibilities in event of misadministration. Include reporting, patient notification and investigation of event.

**ACTION:** Develop Information Notice.

**STATUS:** COMPLETED 5/30/93

**NOTES:** Also see related IIT Item #55.

**PRIORITY:** H  
**LEAD:** Glenn  
**SUPPORT:** G

**Category 1:** RG  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # N/A**

**TRACK NUMBER: 36**

**Source Code: G**

**Document No.:029**

**Doc. Date: 02/12/93**

**DOCUMENT: OGC Memo on Misadministrations**

**DESCRIPTION:** Evaluate need for specific requirement, together with implementing guidance, imposing a duty on licensee to inform other persons exposed as a result of misadministration.

**ACTION:** Incorporate into action for IIT Item #54.

**STATUS: COMPLETED**

**NOTES:**

**PRIORITY:**

**LEAD: Combs**

**SUPPORT:**

**Category 1: O**

**Category 2: LG**

**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 37**

**Source Code: G Document No.:029**

**Doc. Date: 02/12/93**

**DOCUMENT: OGC Memo on Misadministrations**

**DESCRIPTION: Develop criteria for when a misadministration warrants an AIT or IIT.**

**ACTION: Revise directive 8.3, NRC Incident Investigation Program to include criteria that may warrant AIT or IIT for misadministrations.**

**STATUS:**

**NOTES: Will include examples.  
Coordinate with AEOD.**

**PRIORITY: M**  
**LEAD: Jordan**  
**SUPPORT: N, O, R**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 04/29/94**

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # N/A**

**TRACK NUMBER: 38**

**Source Code: G Document No.:029**

**Doc. Date: 02/12/93**

**DOCUMENT: OGC Memo on Misadministrations**

**DESCRIPTION:** Develop criteria for misadministrations that are abnormal occurrences, identifying what efforts NRC will use to meet its statutory reporting obligations under Section 208.

**ACTION:** Incorporate into action for Item #11.

**STATUS: COMPLETED**

**NOTES:**

**PRIORITY:**

**LEAD:** Jordan

**SUPPORT:** N

**Category 1: 0**

**Category 2:**

**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 39**

**Source Code: G Document No.:029**

**Doc. Date: 02/12/93**

**DOCUMENT: OGC Memo on Misadministrations**

**DESCRIPTION:** Develop criteria for following up with patients suffering acute present injury or possibility of radiation illness after misadministrations.

**ACTION:** Incorporate into revision to MC 1360 in Item #41.  
Commission - Consider policies on patient followup.

**STATUS:** Consolidated into Item #28 - Management Directive. Resource considerations made there.

**NOTES:** Need response to OGC memo.

**PRIORITY:** H  
**LEAD:** Combs/Glenn  
**SUPPORT:** G

**Category 1:** IG  
**Category 2:**  
**Category 3:**

**Due Date:** 12/31/93

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 40**

**Source Code: G Document No.:029**

**Doc. Date: 02/12/93**

**DOCUMENT: OGC Memo on Misadministrations**

**DESCRIPTION:** Review draft & final guidance on QM Program to ensure inspectors properly emphasize licensee's duty to report misadministrations to patients & referring physicians.

**ACTION:** Incorporated into guidance development addressed in Items #09 and #34, and Management Directive (#28).

**STATUS:**

**NOTES:**

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT: R,G**

**Category 1: IG**  
**Category 2:**  
**Category 3:**

**Due Date: 12/31/93**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 41**

**Source Code: G Document No.:029**

**Doc. Date: 02/12/93**

**DOCUMENT: OGC Memo on Misadministrations**

**DESCRIPTION: Review existing policies/requirements/guidance on proper role of medical consultants in assisting NRC.**

**ACTION: Revise MC 1360 to address issue and provide guidance to regional and HQ staff.**

**STATUS:**

**NOTES: Incorporates Item #75; resource consideration is made here.**

**PRIORITY: H**  
**LEAD: Combs**  
**SUPPORT: R**

**Category 1: IG**  
**Category 2:**  
**Category 3:**

**Due Date: 04/29/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC #** N/A

**TRACK NUMBER:** 42

**Source Code:** G                      **Document No.:** 029

**Doc. Date:** 02/12/93

**DOCUMENT:** OGC Memo on Misadministrations

**DESCRIPTION:** Review existing policies/requirements on retention of records including what records must be retained and for how long.

**ACTION:** Meet with OGC and request legal analysis of basis for longer retention.

**STATUS:** Completed.

**NOTES:** Should be completed by 7/30 per Fred.  
Feed into long term Rulemaking on Part 35.

**PRIORITY:** M  
**LEAD:** Combs  
**SUPPORT:**

**Category 1:** 0  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC #** N/A

**TRACK NUMBER:** 43

**Source Code:** G

**Document No.:** 029

**Doc. Date:** 02/12/93

**DOCUMENT:** OGC Memo on Misadministrations

**DESCRIPTION:** Staff may wish to review for each misadministration classified as an AO, licensee's written reports to patients versus those submitted to NRC.

**ACTION:** Prepare memo based on meeting with OGC & OI to discuss feasibility.

**STATUS:** COMPLETED by memo of 4/19/93; see Item #70

**NOTES:**

**PRIORITY:** H  
**LEAD:** Glenn  
**SUPPORT:**

**Category 1:** 0  
**Category 2:**  
**Category 3:**

**Due Date:** 04/15/93

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC #** N/A

**TRACK NUMBER:** 44

**Source Code:** G                      **Document No.:** 030

**Doc. Date:** 02/17/93

**DOCUMENT:** OGC Memo on IIT Report

**DESCRIPTION:** Review guidance & guides on Brachytherapy in light of IIT findings re: Indiana, PA incident.

**ACTION:** Issue bulletin to all HDR users;  
consider longer term actions consistent with IIT memo.

**STATUS:** PARTIALLY CLOSED: Bulletin issued 4/20/93  
COMPLETED

**NOTES:** See related actions under IIT Item #55.

**PRIORITY:** H  
**LEAD:** Glenn  
**SUPPORT:** G

**Category 1:** LG  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 03**

**TRACK NUMBER: 45**

**Source Code: G Document No.:030**

**Doc. Date: 02/17/93**

**DOCUMENT: OGC Memo on IIT Report**

**DESCRIPTION: Revise licensing guidance in FC 86-4 which appears to be outdated & not well integrated with NRC regulations.**

**ACTION: Submit revised FC 86-4 to OGC.**

**STATUS:**

**NOTES: See related actions under IIT Item #55.**

**PRIORITY: H**  
**LEAD: Glenn**  
**SUPPORT: R, G**

**Category 1: LG**  
**Category 2: LG**  
**Category 3:**

**Due Date: 11/23/93**

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 46**

**Source Code: G Document No.:030**

**Doc. Date: 02/17/93**

**DOCUMENT: OGC Memo on IIT Report**

**DESCRIPTION:** Revise insp. guidance to address HDR Brachytherapy & cover multiple places of use, situations where RSO can't promptly respond & license amendments greatly expanding licensee's operations scope.

**ACTION:** Issue TI for inspection of HDR afterloaders.

**STATUS:** To be completed by 9/30/93.

**NOTES:** See related IIT Item #59 for multiple locations & changes in scope.

**PRIORITY: H**  
**LEAD: Combs**  
**SUPPORT: R, P**

**Category 1: IG**  
**Category 2:**  
**Category 3:**

**Due Date: 09/30/93**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 47**

**Source Code: G Document No.:030**

**Doc. Date: 02/17/93**

**DOCUMENT: OGC Memo on IIT Report**

**DESCRIPTION:** Consider revisions to Part 35 to eliminate list of sources in 35.400; clarify which provisions apply to HDRs & to LDRs; & need for additional provisions for either.

**ACTION:** Incorporate into action for Item #26.

**STATUS:**

**NOTES:** Resources considered in Item #26. See related Items #7, 26, 55 & 89.

**PRIORITY:**

**LEAD:** Badahur

**SUPPORT:** G,N,S,P,M,A

**Category 1: O**

**Category 2: RM**

**Category 3:**

**Due Date: 06/27/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 03**

**TRACK NUMBER: 48**

**Source Code: N Document No.:031**

**Doc. Date:**

**DOCUMENT:** Outline for Paperiello Review

**DESCRIPTION:** Revise existing guidance & develop new guidance for all therapy other than HDRs.

**ACTION:** Revise, develop and issue licensing guidance for all therapy other than HDRs; including Regulatory Guides and Standard Review Plans.

**STATUS:**

**NOTES:**

**PRIORITY:** H  
**LEAD:** Glenn  
**SUPPORT:** X

**Category 1:** LG  
**Category 2:**  
**Category 3:**

**Due Date:** 09/29/95

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 49**

**Source Code: N Document No.:031**

**Doc. Date:**

**DOCUMENT:** Outline for Paperiello Review

**DESCRIPTION:** Regional inspectors need an inspection procedure for the followup of misadministration reports & other radiation therapy events.

**ACTION:** Incorporated into Item #28 - Management Directive.

**STATUS:**

**NOTES:** Resource considerations made in Item #28.

**PRIORITY:** H  
**LEAD:** Combs  
**SUPPORT:** R,G

**Category 1:** IG  
**Category 2:**  
**Category 3:**

**Due Date:** 12/31/93

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 50**

**Source Code: N Document No.:031**

**Doc. Date:**

**DOCUMENT:** Outline for Paperiello Review

**DESCRIPTION:** Ensure availability of current inspection guidance for therapy programs other than HDR.

**ACTION:** See related IIT Item #55.  
Brachytherapy, teletherapy, gamma stereotactic, radiopharmacy, strontium-90.

**STATUS:**

**NOTES:**

**PRIORITY:**

**LEAD:** Combs

**SUPPORT:** R

**Category 1: IG**

**Category 2:**

**Category 3:**

**Due Date: 01/29/95**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 51**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Evaluate need to further define RSO & authorized user responsibilities. Issue new or revised guidance, as appropriate.

**ACTION:** Evaluate need for guidance for authorized users.

**STATUS:**

**NOTES:** Resources do not consider any action beyond evaluation.  
Revised guidance for RSOs will be developed under Item #33.

**PRIORITY:** M  
**LEAD:** Glenn  
**SUPPORT:** A,S,P,X,G,M

**Category 1:** O  
**Category 2:** RG  
**Category 3:**

**Due Date:** 12/31/97

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 52**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Evaluate performance & design of PrimAlert-10 ARMs.  
Take followup action as required to resolve issue of  
spurious alarms & need for confidence by users.

**ACTION:** 1) Write to manufacturer for evaluation of nonionizing RF's  
or EMF's re: Spurious alarms. 2) Issue TI to Regions to  
include in routine inspection program. 3) Issue IN

**STATUS:**

**NOTES:** If appropriate, issue Information Notice to licensees.

**PRIORITY: M**  
**LEAD: Combs**  
**SUPPORT: R**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 04/29/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 53**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Evaluate NRC's process for: a) assessing exposure & consequences, & b) notifying individuals & authorities following following elevated exposure to the public. Issue guidance as appropriate.

**ACTION:** Incorporate IIT lessons and issue Manual Chapter.

**STATUS:**

**NOTES:** Draft is currently in place.

**PRIORITY:** H  
**LEAD:** Combs  
**SUPPORT:** R,G

**Category 1:** IG  
**Category 2:**  
**Category 3:**

**Due Date:** 01/13/94

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # N/A**

**TRACK NUMBER: 54**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Evaluate need to further define licensee responsibility for assessing radiation exposure & notifying members of public & authorities. Issue guidance as appropriate.

**ACTION:** Staff will evaluate need for rule change.

**STATUS:** COMPLETED (New Part 20 with 19.13(d) requires informing members of the public who receive >100 mrem.)

**NOTES:**

**PRIORITY:** H  
**LEAD:** Combs  
**SUPPORT:** R, G, NRR

**Category 1:** O  
**Category 2:** RM  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 55**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Eval. need to update & integrate existing requirements. Guidance & inspection procedures for HDR Afterloaders. Issue new or revised requirements & guidance, as appropriate.

**ACTION:** Incorporate results of guidance & research into user need memo to RES to revise Part 35.

**STATUS:**

**NOTES:** Related actions include: Issue bulletin to Remote After-loader users (4/30/93); Revise P&GD 86-4 (6/30/93); Issue TI for HDR inspections (7/30/93); Evaluate QA and HF studies (9/30/93). Refer also to Items #7, 26, 48 & 89. Resources considered in Item #26.

**PRIORITY: H**

**Category 1: LG**

**LEAD: Badahur**

**Category 2: IG**

**SUPPORT: G,N,S,P,M,A**

**Category 3: RM**

**Due Date: 06/27/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 56**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Eval. performance based approach vs schooling or certifications to verify adequate rad. safety knowledge of HDR afterloader users. Issue new or revised requirements or guidance, as appropriate.

**ACTION:** Conduct evaluation, discuss with ACMUI and provide recommendations.

**STATUS:**

**NOTES:** IIT due date is 3/01/94. Can we change the date to 12/30/94  
Need to seek contract dollars, estimate \$5K-7K. Check with Pangburn to see what has been done in response to last SRM. Resource and contract considerations have been made in Item #06. Resources considered in #06 for this & 8,13,16,17,18.

**PRIORITY: H**

**Category 1: O**

**LEAD: Glenn**

**Category 2: RM**

**SUPPORT: X,G,P,S,M,A**

**Category 3: LG**

**Due Date: 12/31/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 01**

**TRACK NUMBER: 57**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Eval licsng interface & juris. betw NRC/FDA & states/agreement states for sealed sources & devices including licensee requirements for design reviews & QA/QC. Execute new or revised agreements, as appropriate.

**ACTION:** Coordinate with FDA/Agreement States.  
Prepare evaluation of interface & jurisdiction issues.  
Develop Commission paper.

**STATUS:**

**NOTES:** Refer to Item #29 for FDA interface issue.  
This action dependent on Commission response to Task Force.

**PRIORITY: H**  
**LEAD: Haughney**  
**SUPPORT: P, S, G**

**Category 1: O**  
**Category 2: PO**  
**Category 3:**

**Due Date: 06/01/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 58**

**Source Code: I**                      **Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Revise inspection guidance to include a provision to trigger consideration for licensees whose programs have significantly changed.

**ACTION:** Develop criteria and prepare P&G Directive.

**STATUS:**

**NOTES:**

**PRIORITY: H**  
**LEAD: Combs**  
**SUPPORT: R**

**Category 1: LG**  
**Category 2: IG**  
**Category 3:**

**Due Date: 01/29/95**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 59**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** For near term & where indicated, conduct inspections of licensees whose programs have significantly expanded or changed since last routine inspection.

**ACTION:** 1) Issue TI to Regions to poll licensing staff; determine if any significant issues are found. 2) Complete inspections. 3) Followup .

**STATUS:**

**NOTES:**

**PRIORITY: H**  
**LEAD: Combs**  
**SUPPORT: R**

**Category 1: IG**  
**Category 2:**  
**Category 3:**

**Due Date: 05/09/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 01**

**TRACK NUMBER: 60**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION:** Eval need for assisting nonradioactive waste processing industry in establishing guidance for detecting & obtaining expert assistance for handling of radioactive materials. Assist in developing guidance.

**ACTION:** Develop guidance for non-radioactive waste processors on emergency response, incorporating IIT lessons.

**STATUS:**

**NOTES:**

**PRIORITY: M**  
**LEAD: Austin/Combs**  
**SUPPORT: P, R**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 01/31/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 09**

**TRACK NUMBER: 61**

**Source Code: I Document No.:032**

**Doc. Date: 03/12/93**

**DOCUMENT: IIT Action Memo**

**DESCRIPTION: Evaluate Southwest Research's final report on source wire failure and document findings.**

**ACTION: Evaluate and make recommendations to the Commission.**

**STATUS:**

**NOTES: Contract info reflects 200K; 180K spent thus far.**

**PRIORITY: H**  
**LEAD: Haughney**  
**SUPPORT:**

**Category 1: 0**  
**Category 2:**  
**Category 3:**

**Due Date: 10/29/93**

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 62**

**Source Code: M Document No.: Doc. Date: 06/01/91**

**DOCUMENT: Marcus Petition**

**DESCRIPTION: Inconsistency between revised Part 20 Public Dose limits & Patient release criteria in 35.75 should be clarified (incorporate ACNP petition).**

**ACTION: Issue final rule revising Parts 20 and 35 and prepare Reg. Guide. Modify licensing and inspection peocedures.**

**STATUS:**

**NOTES: Proposed rule due: 8/30/93**  
**Final rulemaking due: 3/30/94**

**PRIORITY: H**  
**LEAD: Cool**  
**SUPPORT: N,P,G,S,A**

**Category 1: RM**  
**Category 2: LG**  
**Category 3: IG**

**Due Date: 07/07/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 63**

**Source Code: N Document No.: Doc. Date: 06/05/89**

**DOCUMENT: ACNP/SNM Petition**

**DESCRIPTION: Continue to allow physician-directed departures from package inserts: extension of time period under interim final rule.**

**ACTION: Issue final rule revising Part 35.**

**STATUS: Completed 7/22/93**

**NOTES:**

**PRIORITY: H**  
**LEAD: Bahadur**  
**SUPPORT: N,G,P,S,A**

**Category 1: RM**  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 64**

**Source Code: M**

**Document No.:**

**Doc. Date: 06/05/89**

**DOCUMENT: ACNP/SNM Petition**

**DESCRIPTION:** Revise Pt.35 to allow departures fr/pkg inserts create category of auth. nuc. pharm., allow physician authorized users & auth. nuc. pharm to compound radioactive drugs, allow research in human subjects...

**ACTION:** Issue final rule revising Parts 35, 32 and 30.  
Revise current radiopharmacy guidance.  
Modify licensing & inspection guidance.

**STATUS:**

**NOTES:**

**PRIORITY: H**

**LEAD: Bahadur**

**SUPPORT: N,G,P,A,S**

**Category 1: RM**

**Category 2: LG**

**Category 3: IG**

**Due Date: 11/01/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 03**

**TRACK NUMBER: 65**

**Source Code: N**

**Document No.:**

**Doc. Date: 02/17/93**

**DOCUMENT:**

**DESCRIPTION:** Prepare P&GD on acceptable training and  
experience for physician-authorized users.

**ACTION:** Develop P&GD.

**STATUS:**

**NOTES:**

**PRIORITY:** M  
**LEAD:** Glenn  
**SUPPORT:** P,S,G,A

**Category 1:** LG  
**Category 2:** PO  
**Category 3:**

**Due Date:** 09/29/95

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 66**

**Source Code: N**

**Document No.:**

**Doc. Date: 12/09/92**

**DOCUMENT:**

**DESCRIPTION:** Review medical field notes, specifically Nuclear Medicine field notes (diagnostic component) to determine savings of time to divert to QM inspections. (IMAB 1149)

**ACTION:** Revise QM field notes & inspection guidance.

**STATUS:**

**NOTES:** Consolidated with Item #34, & resources considered there. See related Item #9. Revision to 87100. IMAB to provide user need memo to IMOB for that action.

**PRIORITY:** M  
**LEAD:** Glenn/Combs  
**SUPPORT:** R

**Category 1:** IG  
**Category 2:** EG  
**Category 3:**

**Due Date:** 06/30/94

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 67**

**Source Code:** C                      **Document No.:**                      **Doc. Date:** 06/25/91

**DOCUMENT:** SRM Dated 06/19/91

**DESCRIPTION:** Provide Commission with assessment of the effectiveness of QM Rule at annual briefing 3 years after rule becomes effective.

**ACTION:** Gather data regarding implementation, monitor QM enforcement actions; evaluate need for comprehensive QM program.

**STATUS:**

**NOTES:**

**PRIORITY:** H  
**LEAD:** Glenn  
**SUPPORT:** X,R,A,S,P

**Category 1:** RG  
**Category 2:** IG  
**Category 3:** EG

**Due Date:** 04/28/95

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 03**

**TRACK NUMBER: 68**

**Source Code: R Document No.:NA**

**Doc. Date: 02/17/93**

**DOCUMENT: IMAB 974**

**DESCRIPTION: Prepare Policy & Guidance on Temporary exemptions for  
Emergency/Humanitarian Reasons.**

**ACTION: P&GD would provide Region with guidance on how to proceed  
in granting temporary exemptions from the regulations for  
emergency/humanitarian reasons, such as patient release  
outside of criteria in 35.75.**

**STATUS:**

**NOTES: Although this action was originally considered to be a lic-  
ensing issue, the final action will be to provide guidance  
through the inspection manual on when & how to grant tempor-  
ary waivers as a matter of discretion.**

**PRIORITY: M**  
**LEAD: Glenn**  
**SUPPORT: R, G**

**Category 1: PO**  
**Category 2:**  
**Category 3:**

**Due Date: 06/30/95**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 03**

**TRACK NUMBER: 69**

**Source Code: N**

**Document No.:NA**

**Doc. Date: 12/19/91**

**DOCUMENT:**

**DESCRIPTION:** Prepare Policy & Guidance directive for master materials  
licensing/inspection manuals (IMAB 731).

**ACTION:** Prepare P&G Directive.

**STATUS:**

**NOTES:**

**PRIORITY:** M  
**LEAD:** Glenn, Smith  
**SUPPORT:** R, O

**Category 1:** LG  
**Category 2:** IG  
**Category 3:**

**Due Date: 12/30/93**

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # N/A**

**TRACK NUMBER: 70**

**Source Code: N**

**Document No.:NA**

**Doc. Date: 03/10/93**

**DOCUMENT:**

**DESCRIPTION:** Need for clarification of apparent weaknesses in 10CFR 35.33 regarding patient notification.

**ACTION:** Prepare memo to OGC requesting clarification of current rule language & whether additional rulemaking is needed.

**STATUS:** COMPLETED 4/19/93

**NOTES:**

**PRIORITY:** H  
**LEAD:** Glenn  
**SUPPORT:** G, H

**Category 1:** O  
**Category 2:** PO  
**Category 3:** RM

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 71**

**Source Code: N**

**Document No.:NA**

**Doc. Date: 08/05/92**

**DOCUMENT:**

**DESCRIPTION:** Develop inspection manual guidance regarding verification of newly-licensed activities & supervision under 35.25 guidance Coordinate with IMAB.

**ACTION:** Update inspection guidance in Manual Chapter 2800.

**STATUS:** Completed

**NOTES:**

**PRIORITY:** H  
**LEAD:** Combs  
**SUPPORT:** N, G, L

**Category 1:** IG  
**Category 2:** LG  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 07**

**TRACK NUMBER: 72**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Consider the advisability of establishing a national data-base for tracking and evaluation of medical events within the NRC and Agreement State jurisdiction.

**ACTION:**                      NMSS issue user need memo to AEOD/  
Expand existing AEOD data-base.

**STATUS:**

**NOTES:**      Resource estimates are for preparation of user need memo.  
                 AEOD resource estimates are for developing and maintaining the database.

**PRIORITY:** M  
**LEAD:** AEOD  
**SUPPORT:** N

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 03/31/94**

**Due Date: Ongoing**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # N/A**

**TRACK NUMBER: 73**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Consider the potential for underreporting of misadministrations.

**ACTION:** Include discussion in the Medical Management Plan.

**STATUS:** Deleted. Discussed in Dr. Paperiello's report.

**NOTES:**

**PRIORITY:** H  
**LEAD:** State Progra  
**SUPPORT:**

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 74**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Consider possible NRC policies on patient followup.

**ACTION:** Incorporate into Mgt. Directive on Misadministration follow-up.

**STATUS:**

**NOTES:** See related Items #28 & 39; part of Management Directive.  
Resources considered in Item #28.

**PRIORITY:** H  
**LEAD:** N  
**SUPPORT:** G

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 12/31/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 75**

**Source Code:**

**Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Define the appropriate role and responsibilities of the medical consultant in NRC medical activities.

**ACTION:**

**STATUS:** MC 1360 is now in circulation for Office and OGC review. Procedures will be made consistent with the final MC 1360.

**NOTES:** See related Item #41; resources considered in Item #41.

**PRIORITY:** H  
**LEAD:** Combs  
**SUPPORT:** R

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 04/29/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 01**

**TRACK NUMBER: 76**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Consider NRC's role & scope of responsibilities vs. that of the FDA & Agreement States in the review & approval of SS&D.

**ACTION:**

**STATUS:** MOU with FDA is presently being developed. Office of Policy & Planning is defining options in response to Sen. Glenn.  
To be completed by 10-/01/93

**NOTES:** See related Items #29 (FDA) and #57 (Agreement States).  
Resources are considered in those Items.

**PRIORITY:** H  
**LEAD:** Glenn  
**SUPPORT:** G

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date:**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 77**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Clarify responsibilities & role of RSO at medical instits.

**ACTION:** Develop and publish NUREG.

**STATUS:**

**NOTES:** Contract and resource considerations for this Item are  
made in Item #33.

**PRIORITY:** M  
**LEAD:** Glenn  
**SUPPORT:** R,S

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 09/30/94**

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 05**

**TRACK NUMBER: 78**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Consider the need for modifications or additions to the Enforcement Policy to provide for notifying licensee boards of Directors or Trustees in cases where escalated enforcement is undertaken by the NRC.

**ACTION:** Memo needed to Lieberman.

**STATUS:**

**NOTES:**

**PRIORITY:** L  
**LEAD:** Lieberman  
**SUPPORT:** N

**Category 1:** OE  
**Category 2:**  
**Category 3:**

**Due Date: 12/30/95**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 05**

**TRACK NUMBER: 79**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Consider potential mechanisms for tracking & notifying Agreement States & appropriate licensing/credentialing authorities of problem auth. users/wrongdoers.

**ACTION:** Develop tracking system for wrongdoers; info to be available to license reviewers. Evaluate existing mechanisms to determine need for identifying physicians associated with multiple misadministrations, and notifying appropriate authorities.

**STATUS:**

**NOTES:** May 27, 1993 memo from OGC describes current system. Creating additional categories would require rulemaking & some provision to offer hearing rights to an affected individual.

**PRIORITY:** M  
**LEAD:** Lieberman/Co  
**SUPPORT:** A,D,N

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 12/29/95**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 80**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Notify local authorities for serious misadministration or other serious events including potentially significant exposures to radiation or radioactive materials.

**ACTION:**

**STATUS:**

**NOTES:** Procedure outlined in Appendix A of Paperiello paper. Would ensure accuracy of death certificates. See related Items #28, 39, 40, 49, 74. Part of Management Directive.

**PRIORITY:** H  
**LEAD:** N  
**SUPPORT:** R,G

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 12/31/93**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 03**

**TRACK NUMBER: 81**

**Source Code: IG Document No.:033**

**Doc. Date:**

**DOCUMENT:** Memo to Bernero from IG 3/93

**DESCRIPTION:** Revise guidance in RG 8.33 to clarify sampling & guidance for determination if other errors exist.

**ACTION:** Revise RG 8.33 to clarify sampling and incorporate findings from contractor review of QMPs, if warranted.

**STATUS:**

**NOTES:** Results from the IG audit.

**PRIORITY:**

**LEAD:** Bahadur

**SUPPORT:** G,R,A,S,P,N

**Category 1:**

**Category 2:**

**Category 3:**

**Due Date: 12/31/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 08**

**TRACK NUMBER: 82**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** NMSS Misadministration Coordinator

**ACTION:** Coordinate response with Regions, monitor misadministrations and followup, and maintain complete records of misadministrations, and coordinate data collection with AEOD. Send memo to Agreement States informing of this action.

**STATUS:**

**NOTES:** Resources are considered on a per-year basis.

**PRIORITY:** M  
**LEAD:** Combs  
**SUPPORT:** R, D, P

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 12/31/97**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 83**

**Source Code:**                      **Document No.:033**

**Doc. Date:**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Inspection MC 2800 & inspection procedures should reflect risk & be based on the need for a QM program and be adjusted for performance.

**ACTION:** Revise MC 2800 and inspection procedures.

**STATUS:**

**NOTES:** Meetings to be held with License community, States, ACMUI, and Regional counterparts.  
Resources being expended for Items #50, #34, and #71 will support this effort.

**PRIORITY:** M  
**LEAD:** Combs  
**SUPPORT:** S,A,R,F,P

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date:** 01/29/95

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 84**

**Source Code:**                      **Document No.:**                      **Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Special event response procedure to ensure that  
management can adequately evaluate events with respect to  
cause and consequences.

**ACTION:** Issue reactive inspection procedure.

**STATUS:**

**NOTES:**

**PRIORITY:** H  
**LEAD:** Combs  
**SUPPORT:** R, D

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 06/30/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 04**

**TRACK NUMBER: 85**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Allegation followup.

**ACTION:** Issue allegation followup procedure.

**STATUS:**

**NOTES:**

**PRIORITY:** H  
**LEAD:** Combs  
**SUPPORT:** F,R,G,D

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 06/30/95**

**Due Date:**

**Due Date:**



**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 03**

**TRACK NUMBER: 86**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Revise MC 1245 to establish a license reviewer training program.

**ACTION:** Revise MC 1245.

**STATUS:**

**NOTES:** Already in P&GD form- needs to be formalized for this. Grandfather those who are qualified; provide for ongoing refresher training also.

**PRIORITY:**

**LEAD:** Combs

**SUPPORT:** R,S,P

**Category 1:**

**Category 2:**

**Category 3:**

**Due Date: 06/30/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 07**

**TRACK NUMBER: 87**

**Source Code: N Document No.:033**

**Doc. Date:**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** Ensure Regional TARs and other ticketed action items are tracked by the Division.

**ACTION:** Establish Division tracking system.  
Maintain the system on a daily basis.  
Revise associated P&GD.

**STATUS:**

**NOTES:** FTE to be considered on a per-year basis.

**PRIORITY:** H  
**LEAD:** Combs  
**SUPPORT:**

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 03/31/98**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 06**

**TRACK NUMBER: 88**

**Source Code:**                      **Document No.:033**

**Doc. Date: 06/01/93**

**DOCUMENT:** Paperiello Paper to Commission

**DESCRIPTION:** RSO certification form

**ACTION:** Determine method for implementing use of RSO certification form.

**STATUS:**

**NOTES:**

**PRIORITY:** M  
**LEAD:** Glenn  
**SUPPORT:**

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 03/31/94**

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 02**

**TRACK NUMBER: 89**

**Source Code:**

**Document No.:**

**Doc. Date:**

**DOCUMENT:**

**DESCRIPTION:** Revision of Part 35 & Reg Guide 10.8 to  
address remote afterloader brachytherapy, gamma stereotactic  
radiotherapy and other therapies.

**ACTION:** Support Research in revision of documents.

**STATUS:**

**NOTES:** See related Items # 7, 26, 47, 48, 55.  
Begin in 1995 after completion of Items #48 and #26.

**PRIORITY:** H  
**LEAD:** bahadur  
**SUPPORT:** P,N,G,S,M,A

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date:** 06/27/97

**Due Date:**

**Due Date:**

**MASTER AGENDA: Medical Program Improvements**  
**Printed on 08/05/93**

**TOPIC # 01**

**TRACK NUMBER: 90**

**Source Code: N**

**Document No.:**

**Doc. Date:**

**DOCUMENT:** SRM on Annual Medical Brief

**DESCRIPTION:** Analysis of consistency with 1979 Medical Policy Statement.  
Compare all rulemakings for consistency with the above.

**ACTION:** Send memorandum to Office of Research requesting an analysis  
to be included in each rulemaking package.

**STATUS:**

**NOTES:**

**PRIORITY:** M  
**LEAD:** Glenn  
**SUPPORT:**

**Category 1:**  
**Category 2:**  
**Category 3:**

**Due Date: 12/31/93**

**Due Date:**

**Due Date:**

**ENCLOSURE 3**

**Medical and Academic Section  
Routine Work Items**

## ROUTINE MANAGEMENT OF MEDICAL USE REGULATORY PROGRAM

### 1. CATEGORIC LIST OF 180 TICKETED WORK ITEMS:

- o Preparation of Commission Papers
- o Assistance to other Offices, i.e., rulemaking efforts, guidance from OGC, data gathering, interact with OSP
- o Technical Assistance Requests from the Regions
- o Review of enforcement cases, particularly QM related issues
- o Issuing inspection and licensing guidance
- o Review of potential misadministrations
- o Preparation of Information Notices, Bulletins, NMSS Newsletter articles, generic letters to licensees and other communications
- o Environmental Assessments for the release of radioactive material from research studies at academic institutions
- o Monitor and followup on incident response
- o Freedom of Information Act Requests
- o Coordination with other regulatory agencies and professional organizations
- o Responses to members of the public and others

### 2. MANAGEMENT OF UNTICKETED BROAD PROGRAM ITEMS:

- o Management of, and preparation for meetings of the ACMUI
- o Contract management/Technical advisor duties
- o Followup on regulatory issues associated with Indiana event
- o Implementation of the QM rule
- o Development of a NUREG on effective management of radioactive material safety programs at medical facilities
- o Three current rulemaking efforts to revise Part 35
- o Oversight of the broad materials licenses issued to the U.S. Departments of Army and Navy
- o Coordination with the Veterans Affairs Central Office and the FDA
- o Presentations at regional workshops and professional meetings
- o Management of the Medical Visiting Fellows Program

**ENCLOSURE 4**

**IIT Action Item Update**



### IIT ACTION ITEM UPDATE (8/93)

Action 1a. Review Oncology Services Corporation's (OSC) corrective actions in response to the finding of ineffectiveness of the radiation safety program.

#### Action Plan:

The licensee committed to provide a written detailed response to the March 5, 1993, NRC deficiency letter to address weaknesses in radiation safety training, RSO oversight, normal emergency operating procedures, and internal and independent audit program. Region I received the licensee's submittal on April 8, 1993. Upon review, Region I issued a letter to OSC dated April 22, 1993, to acknowledge the submitted radiation safety program upgrades, inform OSC that the upgraded program appeared to meet NRC requirements, and inform OSC of planned future NRC inspections. Inspections were performed during the period of April 22 through May 5, 1993, and an inspection report was issued on May 28, 1993. The inspection findings confirmed that appropriate supervision was exercised by the Medical Director and authorized physician users, and the physicists were cognizant of and performed their duties in accordance with the applicable requirements. Additionally, the inspectors verified that the corporate oversight of licensed activities had improved. On June 3, 1993, NRC issued general relaxation Orders to OSC to resume brachytherapy procedures, without specific relaxation requests, at the Greater Harrisburg and Greater Pittsburgh Cancer Centers. A hearing by the Atomic Safety and Licensing Board (ASLB) to review NRC's suspension of licensed activities is pending.

STATUS: Open  
COMPLETION DATES: Review findings of ASLB expected to be held no earlier than 10/93.  
CONTACT: RI/Cooper

Action 1b. Evaluate the need to further define RSO and Authorized User responsibilities.

#### Action Plan:

A task force of NMSS, Regional and Agreement State representatives met during the months of April, May and July 1993, and is scheduled to meet during September and December 1993. Meetings during 1994 to be determined. The staff expects to publish the NUREG in mid calendar year 1994.

Additionally, the staff will evaluate the need to further define and provide guidance on the responsibilities of the authorized user. This issue will be addressed during a major revision of Part 35 scheduled for completion in December 1997.

STATUS: Open  
COMPLETION DATES: Draft NUREG for RSO's 6/30/94 (No change)  
Evaluate authorized users;  
Possible rulemaking 12/30/97  
CONTACT: NMSS/IMAB/Glenn

Enclosure 4

Action 1c. Evaluate performance and design of PrimAlert-10 Area Radiation Monitors (ARM's) and take appropriate followup action.

Action Plan:

The staff has written to the manufacturer (Victoreen) and requested an evaluation of the potential for nonionizing radiation fields or electromagnetic fields (associated with linear accelerators) to cause spurious alarms by the PrimAlert-10 ARM as well as similar models used by medical licensees, such as the PrimAlert-50 ARM. In addition, NMSS will develop a Temporary Instruction (TI) for the Regions to review operation and reliability of PrimAlert ARM's as part of the routine inspection program. The staff will evaluate the information developed by the Regions as well as the manufacturer's response and, if appropriate, will issue an information notice to licensees.

STATUS:	Open
COMPLETION DATES:	Letter to Victoreen 8/31/93 Issue TI to Regions 12/31/93 Decision on IN 4/29/94
CONTACT:	NMSS/IMOB/Combs

Action 2a. Evaluate NRC's process for a) assessing exposures and consequences and b) notifying individuals and authorities following an elevated exposure.

Action Plan:

The staff has developed guidance to address this recommendation for materials licensees based on the experience of the Amersham source incident. The guidance has previously been approved by the EDO. However, it is being revised to incorporate the lessons learned from the IIT, and will be issued as Inspection Manual Chapter 1302.

STATUS:	Open
COMPLETION DATES:	Issue guidance 1/13/94
CONTACT:	NMSS/IMOB/Combs

Action 2b. Evaluate the need to further define licensee responsibility for assessing radiation exposure and notifying members of the public and authorities.

Action Plan:

The staff will forward a memorandum to OGC to request formal OGC interpretation regarding the applicability of Parts 19 and 20 to licensees for assessing radiation exposure and notifying members of the public and authorities. Staff will incorporate guidance into the appropriate Manual Chapter.

STATUS: Open  
 COMPLETION DATES: Memorandum to OGC: 9/30/93  
 Incorporate guidance: 2 months after receipt of  
 OGC interpretation.  
 CONTACT: NMSS/IMOB/Combs

Action 3a. Evaluate the need to update licensing and inspection guidance and requirements for HDR afterloaders.

Action Plan:

The staff has undertaken several efforts in this regard. A bulletin was sent to all remote afterloader users, imposing the requirements contained in Bulletin 92-03. Policy and Guidance Directive 86-4, is being revised to incorporate the requirements of the two bulletins. A Temporary Instruction has been drafted to provide guidance on routine inspection of HDR afterloaders. In addition, research efforts are continuing into QA plans for remote afterloaders and human factors related to brachytherapy. The results of these various efforts will be incorporated into a user need memorandum to RES to revise Part 35.

STATUS: Open  
 COMPLETION DATES: Issue Bulletin 4/30/93  
 Revise P&GD 86-4:  
 Draft 8/30/93 Final 11/23/93  
 Issue TI:  
 Draft 7/29/93 Final 10/31/93  
 Evaluate QA studies 9/30/93  
 Evaluate HF studies 9/30/93  
 Issue user need memo 3/1/94  
 Revise Part 35 12/31/97  
 CONTACT: NMSS/IMAB/Glenn  
 NMSS/IMOB/Combs

Action 3b. Evaluate the relative merits of performance-based approach vs. schooling or certifications to verify radiation safety knowledge of HDR afterloader users.

Action Plan:

The staff will conduct an evaluation as requested and continue to discuss this issue with the Advisory Committee on Medical Use of Isotopes (ACMUI). The staff will incorporate this issue into the user need memo described in 3a. above, as appropriate.

STATUS: Open  
 COMPLETION DATES: Discuss with ACMUI 11/93  
 Incorporate into user need memo,  
 as appropriate 3/1/94 (No change)  
 Revise Part 35 12/31/97  
 CONTACT: NMSS/IMAB/Glenn

Action 3c. Evaluate the licensing interface among NRC, FDA, and States/Agreement States for sealed sources and devices, including licensee requirements for design reviews and QA/QC. Develop an Memorandum of Understanding (MOU) with the FDA to further clarify respective roles.

Action Plan:

The staff has reviewed FDA's description of its regulatory review of devices such as the Omnitron 2000 and met with FDA staff to clarify the NRC/FDA interface. A MOU has been drafted by both parties and is expected to be signed in the near future. The staff will also review the interface between NRC and the Agreement States with respect to approval of sealed sources and devices and will make appropriate recommendations for improving the definition of that interface.

STATUS:	Open
COMPLETION DATES:	Establish MOU between NRC and FDA 10/30/93 Discuss at All Agreement State Meeting 10/93 Complete Commission paper 6/1/94 (No change)
CONTACT:	NMSS/IMAB/Glenn and SCDB/Haughney

Action 3d. Revise the inspection guidelines to trigger consideration for licensees whose programs have significantly expanded or changed.

Action Plan:

The staff is currently revising the guidance in Manual Chapter 2800, "Materials Inspection Program," to provide guidance on inspection of satellite facilities, field offices and temporary job sites. This effort will be expanded to include development of a Policy and Guidance Directive that will provide criteria for license reviewers to use in determining if licensees programs have significantly expanded or changed.

STATUS:	Open
COMPLETION DATES:	Issue P&GD 1/29/95
CONTACT:	NMSS/IMOB/Combs

Action 3e. For near term and where indicated, conduct inspections of licensees whose programs have significantly expanded or changed since last routine inspection.

Action Plan:

The staff has issued a memorandum to the Regions requesting that they poll licensing staff to identify licensees whose programs (i.e., number of sites, scope of licensed activities, and/or possession limits) have significantly expanded or changed within the last two years, determine if inspections have been conducted since the changes, and where they

have not, conduct inspections at those facilities.

STATUS: Open  
 COMPLETION DATES: Issue memorandum 7/9/93  
 Proposed Regional schedule  
 for conduct of inspections  
 due to IMOB 9/30/93  
 Complete inspections 5/9/94  
 CONTACT: NMSS/IMOB/Combs

Action 4. Evaluate the need for assisting the nonradioactive waste processing industry in establishing guidance for detecting and obtaining expert assistance for handling of radioactive materials.

Action Plan:

The staff has already initiated efforts to prepare such guidance. The staff met with representatives from the Agreement States and the waste processing industry on June 29, 1993, to develop the guidance. The guidance will incorporate lessons learned from the IIT.

STATUS: Open  
 COMPLETION DATES: Conduct meeting 6/29/93  
 Publish final guidance 1/31/94  
 CONTACT: NMSS/LLWM/Austin and IMOB/Combs

Action 5. Evaluate Southwest Research's final report on the source wire failure and document the findings.

Action Plan:

Upon receipt, the staff will review the final report and make appropriate recommendations.

STATUS: Open  
 COMPLETION DATES: Complete evaluation 10/30/93 (No change)  
 CONTACT: NMSS/SCDB/Haughney