

Interview with Paul Leventhal and Tom Grumbly

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Lauren Green, anchor:

The decision between the United States and the former Soviet Union to unilaterally disarm nuclear weapons marks a beginning to the end of the Cold War. And although disarmament lessened the threat of nuclear war, other problems arose. Both countries were faced with the challenge of safely disposing of their stores of nuclear weapons.

Recently the Department of Energy announced plans to use plutonium from dismantled atomic bombs as an energy source in commercial nuclear reactors. The Clinton Administration says this plan will effectively and safely dispose of plutonium while providing an additional source of energy. But critics of the plan warn that transporting plutonium to commercial sites runs the risk of materials falling into the hands of terrorists.

Joining us now to discuss this topic is Tom Grumbly, undersecretary of the Department of Energy. Also with us is Paul Leventhal, founder and president of the Nuclear Control Institute. Both guests join us from our--live from our studio in Washington, D.C. And thank you both for being here.

Both: Thank you.

Green: Mr. Grumbly, I want to start with you. Just briefly go back over the Department's plan, what it--what it means.

Tom Grumbly (Undersecretary, U.S. Department of Energy): Well, Lauren, I want to clarify a couple of things that you said in your opening. First, the most dangerous thing in the world about the material coming out of the weapons at the moment is that it stays in its current state where it's quite vulnerable to terrorism and to theft. And what the United States is doing is proposing a two-track option. You mentioned one of them, the track in which we would burn so-called MOX fuel, which is to say we would take plutonium and mix it with uranium and use it in commercial reactors in the United States.

We've also proposed at the same time a second option of immobilizing, either using glass or ceramic, a good deal of the plutonium, as well.

And what we're trying to do over the next couple of years as we investigate the technology and the costs of both options, is to make sure that the president of the United States has the best technical and political choices that he can have so that we can reduce over fifty tons of plutonium that's out there in the world at the moment.

Green: Mr. Grumbly, I want you to go back over the point you were talking about, where you said it's actually more dangerous where it is right now. Is that what you're saying?

Grumbly: What we're saying is that as the material comes out of the nuclear weapons -and we're obviously, I think, all thankful that we're dismantling thousands of these weapons, both us and the former Soviet Union- the key thing is not to let the plutonium stay in its current form. Because in its current form, as it comes out of the weapons, it can be made directly into more weapons at the moment. So the key thing is to come up, as quickly as possible, with viable technological options that both us and the former Soviet Union will pursue in order to turn this material into material that cannot be used for nuclear weapons.

Green: Mr. Leventhal, can you come in here and explain why you're against this plan?

Paul Leventhal (President, Nuclear Control Institute); Well, of course we're in agreement that the weapons must be dismantled and that the atom bomb material that represents the core of the weapon has to be disposed of safely. What we object to is the way in which the Department of Energy is going toward the ultimate disposal decision.

Mr. Grumbly is making it sound as if this is still an open question, but the politics and the diplomacy of it right now are that, in order to accommodate Russia, and more particularly, to accommodate our European and Japanese allies, who have a very big stake in using plutonium and atom bomb material as a fuel in civilian reactors, that the Department of Energy is inevitably heading toward that path unless, and I emphasize the unless, the American public becomes aware of the danger here and strongly objects to our being drawn in by the Russians and the Europeans and the Japanese into a very dangerous approach.

Green: What is the danger? Is it the transporting of the materials or is it the using of the material?

Leventhal: Well, the danger is what's embodied in U.S. law and policy for over the past twenty years. And that is that the U.S. will avoid the use of plutonium, which is an atom bomb material, as a fuel in reactors because nations can divert it to weapons applications and terrorists, if they get hold of it, can blow up cities. And actually in the civilian sector there's potentially far more plutonium than there is now contained in all the weapons of the world.

So the U.S. has attempted to set up a barrier to the introduction of plutonium fuel. And now, much to our chagrin -and I say that sadly, because our organization has worked closely with the Department of Energy in terms of disposing of the other atom bomb material, highly enriched uranium- on this one, we have a disagreement. Because while the highly enriched uranium will not be used-in - bomb-usable form in reactors, plutonium will be used in a bomb-usable form. And that introduces into the civilian nuclear power industry a very dangerous commodity.

Green: so, Mr. Grumbly, it sounds as if, even though you- these- this plutonium, which is the stuff that makes atomic or nuclear bombs tick, would be used for commercial use. But, at the same time, it-still could be used- it's like, almost a storage, in effect, because it still is in a form that could be used as a bomb. Is that correct?

Grumbly: Well, I think there are four reasons why the United States needs to pursue the dual track that I talked about before. And I want to emphasize again that all we really have done is to say that we're going to continue to pursue these two options: burning some of this material in reactors, at well as immobilizing it. So that we have, really, the maximum choice a couple of years from now in order to make the right choices for the nation.

But there are really four reasons why we're doing this. First, there are- I really need to emphasize...

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Green: Go ahead, please, go ahead.

Grumbly: ...that there are large technical uncertainties with both ways that we're pursuing this. And from the taxpayers' perspective, it's important that we make the right choice for actually getting rid of this material. There's no guarantee that either of the options that we and Mr. Leventhal agree on will work.

Secondly, the Russians believe that the immobilization approach, which the Nuclear Control Institute believes in, is actually less proliferation resistant, because a sophisticated nation like the United States could actually get that material back out of glass.

Third, it's clear that the dual approach that we're taking is the only approach that will get bipartisan support from the Congress of the United States.

And fourth, and I think this is particularly important, in order for us to be at the table with the Russians, who in many respects are quite reluctant to dispose of any of this plutonium, in order to ensure that they take the metal and turn it into stuff that cannot directly have nuclear weapons be

made from it, we have to exert the influence that only the United States can influence at the negotiating table.

Green: Are the Russians following our lead or are they disposing of it in another way?

Grumbly: The Russians, right now, are just taking the stuff out of the weapons. But if left to their own devices, they will only put this into MOX fuel form. What we are trying to do is, first of all, make sure that even that happens. There's no guarantee that unless we're at the table, the Russians will do anything but keep that plutonium in a form in which it could directly be put back into nuclear weapons.

And secondly, they are, together with us, being persuaded that they can actually immobilize tons of this stuff. So it's only by working together, us and the Russians and our European allies, that we can make this problem better.

And with respect to...

Green: And Mr. Leventhal, I want to come back to you right after the break, because I want you to voice your objections. I see you shaking your head. We have to take a break, we'll continue our discussion when we come back.

(commercial break)

Green: Welcome back to "Fox in Depth." I'm Lauren Green. We're talking about the plutonium out of our nuclear warheads, where to store it. Tom Grumbly, a Department of Energy undersecretary, he is with us in Washington. Also joining us in Washington, is Paul Leventhal, Nuclear Control Institute.

Mr. Leventhal, I want you to get back to the point because you were voicing some objections to what Mr. Leven- what Mr. Grumbly was talking about before we went to the break. Why don't you continue with that?

Leventhal: Well, it'll try to respond to some of the specific points that he raised. People have to understand that right now, U.S. nuclear power plants run on a low- enriched form of uranium that cannot be used in bombs. So, at least from that perspective, it is a safe material. It is not a nuclear weapons material.

The plutonium coming out of weapons will be mixed with the uranium and put into these reactors as fuel. And that plutonium can be separated out, particularly from the fresh fuel; it can be stolen in process; there are any number of vulnerabilities that arise.

And there are sixteen states now where utility companies have stepped forward -in return, by the way, for hundreds of millions, probably billions, of dollars in subsidies to do this- they've stepped forward. And the states are Arizona, Ohio, North Carolina, South Carolina, Illinois, Mississippi, Louisiana, Florida, Georgia, Iowa, New York, Pennsylvania, Alabama, Virginia, Wisconsin and Washington.

Green: These are where the sites will be?

Leventhal: These are the potential sites. Now, a few reactors will be chosen, but these are the sites that are- these are the candidate utilities. Perhaps five reactors in all will be chosen.

The point that these people have to understand is that a new danger is being introduced because the United States government has felt, after forty to fifty years of negotiating hardball with the Russians, we now have to all of a sudden accept a false premise on their part, which is that, since the plutonium cost a lot of money to produce and a lot of blood, it's therefore valuable. When, in fact, plutonium has a zero value, because plutonium fuel used in a light-water reactor is four to eight times more expensive. And even if it's free, even if it comes out of weapons and therefore it's, quote, "free," it's still about twice as expensive so it makes no sense economically, but the danger is enormous.

Green: Mr. Grumbly...

Leventhal: There'll be thousands- let me just make a point...

Green: Okay.

Leventhal: There'll be thousands of tons, potentially, of plutonium in world commerce, if the nuclear industry, which has been pushing plutonium for decades, actually now gets its way as the result of this need of the U.S. government to figure out a way to dispose of weapons plutonium with Russia.

It takes fifteen pounds of plutonium, or less, to destroy a city. Now, the arithmetic is rather compelling. Do we really want to have an industry that's gonna be processing tons of a material, which if fifteen pounds or less falls into the wrong hands, could be used to terrorize governments and destroy cities? And our answer to that is no. And frankly, we are very disappointed that the U.S. government has taken a rather weak-willed approach to the Russians, and it's largely to accommodate the French, the British, and the Japanese that have made big investments, over U.S. objections, in their nuclear power industries to utilize plutonium, and that is a danger that we face today.

Green: Okay. Mr. Leventhal, I want to get Mr. Grumbly in here because I want him to answer some of these questions. First of all, talking about are we really doing this to appease the Russians? I mean, should we be doing that?

Grumbly; No, we're not doing anything to appease the Russians. The most dangerous plutonium in the world, and I think Mr. Leventhal would agree, is not really the plutonium that's currently in the United States stockpiles. It's the plutonium that's scattered around the former Soviet Union and that's coming out of the Russian weapons. And the very first priority that the United States government has, and the way that we can use our leverage the most, is in hard, tough, negotiations with the Russians to make sure that they do something with this plutonium. Right now, it is sitting there and we have people who don't have enough money to feed their families, let alone do anything else with it at the moment. And the risks of having that stuff sit there is just too great.

And the fact is, is that the way in which we can get the Russians to actually change this material from stuff that can be directly used into bombs into stuff that cannot be used into bombs is through persuading them that a combination of turning this material into reactor-grade stuff, as well as immobilizing it, is the best course to do that. We can only do that..

Green: So it's a matter of saying that if we do it, then it's safe for them to do it. Is that the point?

Grumbly: We can only do this if we're at the bargaining table. We can only be persuasive if it's clear that we're both drawing-down in a way that's transparent, in a way that's guarded by the International Atomic Energy Agency...

Green: But what's to safeguard that something like Mr. Leventhal has suggested will happen- will not happen? That it will fall into the hands of the wrong people? What's the safeguard?

Grumbly: Well, it's much more likely that it will fall into the hands of the wrong people if it simply stays in the condition in the Soviet Union that it's in now. What mystifies me about Paul's argument is that he thinks that- he seems to think that the monitored, guarded, irretrievable processes that we're talking about are somehow worse than leaving all this stuff sit around in Russia at the moment and that's an argument I simply don't understand.

Green: But we're talking about the stuff that's in the United States. Even the stuff that's here, I mean, are there safety precautions for even the United States?

Grumbly: Well, I think the safety precautions that we can take here in the United States, first of all, are those that we have taken successfully for the last fifty years. We have successfully guarded all of the weapons, all of the materials, we will continue to guard the weapons and the materials in the same way that we have, without accident, without problem, for the last fifty years. And, turn the

stuff in a systematic way, over the next twenty-five to thirty years- and it'll important to emphasize that this is gonna be a long-term process no matter what we do.

Green: Mr. Grumbly, everyone knows the political winds change over twenty to thirty, or forty, fifty years. Is this plutonium, if we store it in the way that you suggested, either way, can the United States go back and get it? Can- I mean, you're talking about fifteen pounds of it only needs to be used to destroy one city. I mean, is it possible that they can go back and use it, if they need it ?

Grumbly: Well, let's first of all remember that the plutonium itself has a radioactive half-life of nearly twenty-five thousand years, so we can't actually get rid of a lot of the material. Actually, the reactor-burning, the MOX option that we're talking about, actually destroys some of the plutonium.

Leventhal: I'd like to ... **Grumbly:** And the immobilization option that we're talking about as well will make it extremely difficult to get it back into weapons-grade material.

Leventhal: Please...

Grumbly: It's theoretically possible to do that.

Green: All right.

Leventhal: Could I just have a moment?

Greene Okay, very quickly.

Leventhal: I just need a moment to respond.

Green: Okay.

Leventhal: Now, first of all, the plutonium that even the Russians will burn in reactors can be retrieved, and they can also, by reprocessing, get it out of the spent fuel, and they can make bombs out of it. We and the Russians are both capable of making bombs out of so-called reactor-grade plutonium. And-the problem is we haven't offered the Russians an inducement to do it our way. But we offered them...

Green: All right, we're running out of time. Both Mr. Grumblyw Mr. Leventhal, I thank you very much for being here this morning. I'm sure this controversy will continue to go on.