1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	BRIEFING ON FOREIGN OWNERSHIP, CONTROL, AND DOMINATION
5	(PUBLIC)
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7	THURSDAY
8	JANUARY 29, 2015
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10	The Commission met in the Commissioners'
11	Conference Room, 1st Floor, One White Flint North, 11555
12	Rockville Pike, Rockville, Maryland, at 9:00 a.m.,
13	Stephen G. Burns, Chairman, presiding.
14	PRESENT
15	STEPHEN G. BURNS, Chairman
16	KRISTINE L. SVINICKI, Commissioner
17	WILLIAM C. OSTENDORFF, Commissioner
18	JEFF BARAN, Commissioner
19	ALSO PRESENT
20	STEWART BAKER
21	JOHN HAMRE
22	WILLIAM LYNN III
23	PAUL MURPHY
24	SEAN O'KEEFE
25	STANLEY SIMS
26	MARGARET M. DOANE, General Counsel
27	ANNETTE L. VIETTI-COOK, Secretary of the Commission

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1	P-R-O-C-E-E-D-I-N-G-S
2	(9:01 a.m.)
3	CHAIRMAN BURNS: Well, good morning,
4	everyone and welcome to our meeting this morning and on
5	the general topic of foreign ownership control and
6	domination.
7	I want to welcome our panelists today who
8	will be speaking with us. We have a couple who are
9	running a bit late but will join us as we go.
10	The focus of today's meeting is on the
11	processes and methods through which issues of foreign
12	ownership, control and domination are addressed in the
13	non-nuclear sectors of U.S. critical infrastructure and
14	the U.S. defense establishment.
15	As many of you know, the commission has been
16	looking at this issue of foreign ownership and control
17	and domination in connection with its responsibilities
18	under Section 103d of the Atomic Energy Act which
19	applies to production and utilization facilities.
20	We're hoping our discussions today will aid
21	the commission in its deliberations on this policy issue
22	before us, and the commission will be briefed by a panel
23	of external experts today including John Hamre,
24	President and Chief Executive Officer, The Center for
25	Strategic and International Studies; Mr. Stanley Sims,
26	Director of the Defense Security Service and former

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1	Director for Security with the Department of Defense;
2	Mr. Lynn - William Lynn III, the Chief Executive Officer
3	of Finmeccanica-North America and a former Deputy
4	Secretary of Defense; Paul Murphy, Special Counsel with
5	Milbank Tweed Hadley & McCloy and who has also served
6	as representative to my former organization, the
7	Nuclear Energy Agency's Expert Working Group on the
8	Financing of Nuclear Power Plants; Mr. Stewart Baker,
9	a partner at Steptoe & Johnson and a former Assistant
10	Secretary for Policy in the Department of Homeland
11	Security; and finally, Mr. Sean O'Keefe, former Chief
12	Executive Officer of Airbus Group-North America and a
13	former Secretary of the Navy and former Administrator
14	of NASA.
15	We look forward to your presentations this
16	morning and the discussion with the members of the
17	Commission. But before we begin, would any of my
18	colleagues like to say something?
19	COMMISSIONER SVINICKI: Thank you,
20	Chairman Burns. Good morning and a belated Happy New
21	Year to many and I have not had an opportunity, Chairman
22	Burns, to publically congratulate you in your selection
23	as Chairman and look forward - we're diving right in to
24	a very complex topic here.
25	But welcome and, again, congratulations
26	and really look forward to serving under your

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1	Chairmanship.
2	And I also want to thank our very
3	distinguished group of panelists for being here today,
4	you know, and Commissioner Ostendorff suggested that we
5	step way back and look at non-nuclear experts who are
6	tackling some of the same issues.
7	I thought about it and I thought in general
8	we'd try to stick to our meeting here and we look within
9	the four corners of the Atomic Energy Act.
10	But this is the type of issue that across
11	the economy, across the government many people are
12	having to grapple with it and I came to understand that
13	some people have it presented to them with perhaps even
14	greater complexity than we do.
15	So I really look forward to today's
16	meeting. Thank you.
17	CHAIRMAN BURNS: Thank you.
18	COMMISSIONER OSTENDORFF: Thank you,
19	Chairman Burns. I'd like to add my thanks and best
20	wishes to you, to echo Commissioner Svinicki's comments
21	on your Chairmanship here.
22	I'd also like to look at the panelists here
23	and those that will be arriving and say thank you for
24	helping us tackle a difficult issue. It's important
25	for us to go outside our narrow lanes at times, look more
26	broadly at issues from a broad national perspective that

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1	you bring to this table.
2	I'd like to personally thank John Hamre for
3	his help in assembling this distinguished group. Thank
4	you, John.
5	COMMISSIONER BARAN: I guess I should
6	chime in. Just to echo my colleagues, congratulations
7	on your new position. You've been doing it now what
8	seems like for so long.
9	It's hard to believe that this is the first
10	time we've had a full meeting. But congratulations
11	again on that and thanks to our panelists for being here.
12	We appreciate it.
13	CHAIRMAN BURNS: I think it's been a month
14	but it only seems like ten years. So anyway, on that
15	happy note, Mr. Hamre, we'd be pleased to hear from you.
16	DR. HAMRE: Thank you. I'm really honored
17	to be invited. I must tell you, I've testified many
18	times before the Congress because of previous roles but
19	this is far more intimidating and the reason is because,
20	you know, when you testify to Congress you know a hell
21	of a lot more than everybody sitting on the other side
22	of the dais and, you know, so you enter with a lot of
23	confidence.
24	Here, you know a hell of a lot more about
25	this than I do and so it's - I'm a little intimidated
26	but I'm going to try to press through, if I may.

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1	Let me just start with a disclosure, that
2	for a period of about six years I served on an advisory
3	committee to people that appeared before you,
4	supplicants before you.
5	This was a joint venture between
6	Constellation Energy and EDF. They knew that there
7	were going to be issues of FOCD and so they created an
8	advisory commission to serve as kind of a mitigation
9	strategy for that.
10	So I spent six years working that. I'm no
11	longer associated with them.
12	The scale of that work came - went down so
13	far they didn't five people on the - on this advisory
14	committee but they retain two very fine people, Bill -
15	Jim Asselstine and Dick Meserve, you know, who were both
16	Commissioners here.
17	So they still have it in place but they
18	didn't need me. So I have no - I'm not conflicted in
19	any sense with the testimony that I'd like to offer
20	today, and I really am coming today more to speak of my
21	experience at the Defense Department.
22	For 30 years the Department of Defense has
23	had to deal with this question. We depend on foreign
24	sources. We have foreign supply chains for some of our
25	most sensitive things.
26	Some of our most sophisticated weapons

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1	systems depend on foreign sourcing and so we have a
2	process. Stan runs this so he's really the expert here.
3	We call it FOCI - Foreign Ownership, Control and
4	Influence, not domination.
5	But so we had to work on this in many, many,
6	many ways, designing not only for mitigation procedures
7	for very sophisticated hardware but also for operations
8	because we operate around the world and we operate
9	around the world in ways where we have to operate with
10	other countries.
11	So we have - we have had to work out
12	sophisticated ways to protect our, you know, national
13	security. And when I look at the way which we were just
14	simply looking at ownership of a company I thought this
15	is - this is not good security. It's actually
16	counterproductive that I'll mention in a minute.
17	But we need to design more sophisticated
18	mitigation techniques and that's really what we were
19	doing on this advisory committee to Constellation
20	Energy.
21	You know, how we operated with them, our
22	rules with them, how we were able to independently
23	investigate things that came up, we sat in on the safety
24	committee, et cetera.
25	So we designed more sophisticated
26	techniques because we do have an obligation to protect

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1	crucial things. I don't personally think there's a
2	great national security risk letting a foreign company
3	own a power generating plant in America, personally.
4	But we can find techniques for it but they
5	need to be focused techniques. The second point I would
6	make is that, you know, America is a declining nuclear
7	power.
8	We are losing our edge in nuclear power.
9	We now - it's now a global enterprise and we are
10	completely dependent on cooperation with other
11	countries - entities in other countries.
12	You can't build a nuclear reactor in this
13	country without depending on foreign supplying -
14	foreigners supplying key components. So we have to
15	have - America has to have foreign participation in
16	nuclear energy and in all of the instances I know of
17	that's actually contributing to strengthening our
18	program here.
19	It's not weakening anything. It's
20	actually strengthening it. So we have to be careful not
21	to take and put a block in the way that's going to make
22	it harder for America to remain a competent and leading
23	nuclear power.
24	This leads to the third point and I - this
25	goes back to when President Eisenhower gave that very
26	famous Atoms for Peace speech. We knew the great

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1	promise of nuclear power as a commercial energy source.
2	We also knew that it was the primary vector by which you
3	have weapons - nuclear weapons.
4	The foundation of every weapons program is
5	material that's developed in a - usually in a commercial
6	process. You know, uranium in a natural concentration
7	is at 1000th of a percent.
8	To get it to 4 to 5 percent for a commercial
9	reactor you are at the 95-yard goal to get a nuclear
10	weapon because you only have to go from 5 percent to 90
11	percent enrichment.
12	You're at the 95-yard line. So we have to
13	have strong regulatory procedures around commercial
14	energy and the Nonproliferation Act does that.
15	It's actually - commercial energy is the
16	source of our ability to know that we are protecting
17	ourselves from proliferation and we are the global
18	standard now, and I would say the NRC is the global
19	standard in terms of regulation - safety and regulation.
20	It is the global standard. But if you
21	adopt - forgive me for saying it - dumb FOCD rules you're
22	going to alienate the very moral authority that you have
23	around the world.
24	So I'd ask you, this is a very important
25	thing for us to get right. We have to get - we have to
26	have good security. I'm all for it. I'm not trying to

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1	weaken anything.
2	It has to be smart security and it has to
3	be security that strengthens us a global leader. Thank
4	you.
5	CHAIRMAN BURNS: Thank you. Mr. Sims?
6	MR. SIMS: Thank you, Commission, and I
7	also want to join the - in saying congratulations,
8	Chairman Burns.
9	CHAIRMAN BURNS: Thank you.
10	MR. SIMS: And, you know, as Dr. Hamre
11	said, I've not addressed the Commission before and I try
12	to stay off the Hill. At the end of the day, I'm just
13	an operator. But I have testified on the Hill before
14	and, as Dr. Hamre said, this is a little bit different.
15	But I do thank you for the opportunity to
16	come and at least help you think through this challenge
17	and hopefully what I have to say here today will help
18	you all work your way through it.
19	It is important. Dr. Hamre said a lot of
20	what I would echo about what - foreign investment and
21	foreign involvement in our national security apparatus.
22	It's very important.
23	Other foreign countries and companies do
24	have technologies which we so desperately need in our
25	national defense organization. I've been doing this
26	now. This will be my 36th year in the Department of

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1	Defense both in uniform and now as a civilian and so I
2	consider myself, at the end of the day, an operator.
3	So I'll explain a little bit about how we
4	in the Defense Security Service, DSS, we do this, and
5	I apologize if I repeat some of this stuff in the
6	statement but I think it bears saying.
7	Again, as Dr. Hamre said, we call this FOCI
8	- influence as opposed to dominance - but the terms are
9	absolutely the same. I would like to take a moment.
10	I brought two of my key individuals in my
11	organization with me today - Ms. Lynda Mallow, who is
12	actually my Acting Director for Policy and Programs, but
13	in her day job she runs what we call our FOCI analytic
14	division, which is pretty important to this thing, and
15	then Nicoletta Giordani, colleague of hers, and she runs
16	our FOCI operations division.
17	Now, the two of them work together every day
18	to mitigate this risk, we so call it, from our foreign
19	companies, if you will - an analytical shop that
20	actually does most of the analysis and then our FOCI
21	operations branch which actually put together
22	mitigation agreements, and together they work together
23	every day to make sure that we are doing - taking those
24	more sophisticated ways to look at this - what we call
25	the risk.
26	At the end of the day, DSS, we consider

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1	ourselves a risk management organization. That's what
2	we do, at the end of the day.
3	Now, just for a little bit of background,
4	DSS - Defense Security Service - we do this business on
5	behalf of the Department of Defense and 27 other federal
6	- executive federal agencies and soon to be 28.
7	So while we are a DoD organization, we
8	perform a national mission, and you all know - are
9	probably aware that the National Industrial Security
10	Program, Executive Order 12829, established the program
11	and it assigned the Secretary of Defense as the
12	executive agent to execute the program.
13	And so DSS - that's where our mission is
14	derived from. We're the organization that actually
15	execute the mission on a day-to-day basis for all of the
16	DoD components in those other 27 federal agencies and
17	we take that very seriously because we know we're
18	managing risk for those companies.
19	Now, the National Industrial Security
20	Program operating manual, that's the guideline that we
21	use that tells us what it is - how we should look at FOCI,
22	or Foreign Ownership, Control and Influence.
23	And then what we do is it gives us some what
24	we call factors, if you will, to consider, and if I will,
25	there are seven specific FOCI factors we consider and
26	then there's one general, and what I would like to do

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1	is say that while there are seven or eight total, if you
2	will, we don't take any one single FOCI factor and make
3	it absolute.
4	We evaluate them in the aggregate because
5	we think that's important. If we look at just one
6	single factor we believe we could fall in the trap of
7	locking out, like Dr. Hamre said, those companies that
8	could be very valuable to our national security.
9	But we look at them in the aggregate, and
10	then there's one general FOCI factor which I'll talk to
11	in a little bit. But let me just - let me just, for the
12	purpose of the audience here, those factors - each of
13	those factors they talk to the company, the foreign
14	interests and then the government of the foreign
15	interests.
16	So that's where they're trying to focus on.
17	So what are they? Number one, the record of enforcement
18	and our engagement in unauthorized technology transfer.
19	So we look at that.
20	Number two - the type and sensitivity of the
21	information that the company will access. Number three
22	- the source, nature and extent of FOCI - how big is it.
23	Number four - the record of compliance with
24	the pertinent U.S. laws, regulations and contracts. So
25	your past history does matter in this case.
26	Five - the nature of any relevant bilateral

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1	and multilateral security and information exchange
2	agreements that that foreign interest may have with the
3	U.S. As you all know, we have a lot of companies that
4	we share some of our most sensitive national security
5	information with. So would it be proper for us to lock
6	those type of foreign interests out of our national
7	security apparatus? I would think not.
8	Number six - ownership in whole or in part
9	by the foreign government, and I think that's one that's
10	particularly interesting to the Commission here.
11	And number seven, the record of economic
12	and government espionage against the U.S. interests,
13	and then the one general factor is we get to consider
14	any information that is indicative of or that would
15	demonstrate some type of unduly influence - undue
16	influence on that U.S. national interest.
17	So if one of those other seven don't apply,
18	we get to look at any other factors that we deem be
19	pertinent to the interests of national security. So
20	it's pretty broad. We have broad responsibilities in
21	this case and we take it very seriously.
22	But the point is we don't take any one
23	single, I guess, factor and then make a determination
24	on whether we should allow them in our national security
25	apparatus.
26	I will highlight the one - I guess, the

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1	record of economic and government espionage. See, DSS
2	we - each year we produce a document called Targeting
3	U.S. Technologies, a trend analysis of clear industry
4	reporting, and basically this - we take this information
5	that comes from our cleared companies.
6	They report suspicious stuff to us and then
7	we combine that with the other information source that
8	we have available and a lot of it is from our
9	intelligence databases and we combine that.
10	And so we think we have a lot of expertise
11	about economic espionage as far as foreign interests.
12	So we take that and we consider that in our factors.
13	The other thing I will tell you is that we
14	have standard, I guess, templates, if you will, with
15	regard to how do you mitigate depending on how much
16	foreign interests or control or influence there is in
17	there.
18	We have five types of mitigation plans that
19	we put in place and they range anywhere from a simple
20	board resolution with very minimal ownership and where
21	the company really can't - doesn't have the power to
22	elect board members, if you will, and it goes all the
23	way up to what we call a voting trust where the company,
24	if they want to do business in a national security
25	structure here in the U.S., they actually have to turn
26	over their voting right or their title to that company

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to U.S. trustees.

Now, we don't dictate those, but the one just below that, proxies, we do quite a number of those where they actually do turn - they give their voting rights to a proxy holder and then it can't have any real involvement in running the company. The company is really an independent organization.

The foreign interests may take the profits or the losses but they certainly don't get involved in the operation of the company. So there are a number of tools that we have available to us and it's very sophisticated.

And so in the time I have left I will tell you I mentioned that our FOCI operations in our FOCI analytic division we have a very rigorous process by which we analyze the FOCI.

17 And they're not constant. They change -18 they change with the changing security environment, and we have databases that we research every day and before 19 20 a company is given a facility clearance, which is 21 essentially a license to do business in the U.S. 22 national security space we run every one of those 23 companies through that process and then we establish the mitigation agreement, figure out what plan it is and 24 then there's a continuous monitoring effort that goes 25 26 on behind there.

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1	So we make sure that those companies, if any
2	FOCI changes over time we are aware of. So what I hope
3	I've given you some sense of is that we are changing.
4	We understand that you need foreign
5	interests here. But there is a process and to mitigate
6	that risk and that's what we do every day.
7	So I'll end there and say I do appreciate,
8	again, having the opportunity to help you with this and
9	I look forward to any questions you have. Thank you.
10	CHAIRMAN BURNS: Thank you, Mr. Sims. Mr.
11	Lynn, welcome, and we look forward to your remarks.
12	MR. LYNN: Thanks. Thanks very much.
13	Appreciate the opportunity to be here with the
14	Commission and particularly the opportunity to testify
15	with some good friends and the distinguished panel that
16	you've put together.
17	Let me start with a little background.
18	I've spent the last three years as the CEO of a mid-sized
19	U.S. defense company, DRS Technologies, that's owned by
20	a foreign parent, an Italian conglomerate,
21	Finmeccanica.
22	Before that, like John I was Deputy
23	Secretary of Defense and wrestled with these same issues
24	from the perspective of a government policy maker. I
25	worked there with Stan.
26	So I see my role today is to use those two

1 experiences on both sides of the fence, if you will, to give you some perspective on FOCI in the defense 2 technology area. 3 In the defense arena I think you have to 4 5 start with the central purpose of FOCI is to prevent the loss of critical military technologies to a potential 6 7 adversary. That seems like a simple purpose and it is, 8 and Stan focused on it. You also need to know what the 9 purpose is not. The purpose is not to prevent foreign 10 11 owned or controlled companies from acquiring U.S. 12 defense companies, it's not to prevent foreign companies from participating in the U.S. defense market 13 and it's not intended to give advantage to U.S.-based 14 15 defense companies. Those are not the purposes of FOCI. 16 Now, 17 it's important to start with those purposes because the 18 context in which the FOCI statutes and processes and institutions were initially developed was quite 19 20 different than it is today. 21 It was a Cold War context and there - things 22 were different on a number of lines. First, the Cold 23

War itself was bipolar. Our main adversary for almost five decades was the Soviet Union.

25 It was very much an us versus them. There
26 were two camps, and so in terms of protecting technology

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1	you very much knew who you were trying to prevent from
2	getting the technology.
3	Second, the U.S. was the clear leader at
4	that time in defense technologies such that in fact that
5	we had - we based our strategies around using our
6	technology advantages to offset the numerical
7	advantages that the former Soviet Union had.
8	Third, most defense technologies at that
9	time were developed organically - that is, within the
10	defense industrial complex. And then relatedly, not
11	only were defense companies heavily U.S. based but their
12	entire supply chain was heavily U.S.
13	None of those conditions pertain today.
14	First, the world is now multipolar. It's not bipolar.
15	There is many potential but few actual adversaries.
16	This means we can no longer rely on this
17	kind of us versus them, this two-camp theory of how do
18	we protect our technology. It's much blurrier who we
19	should be protecting technology from and who we should
20	be sharing with as allies. So it's a much more complex
21	world.
22	Second, the origins of defense technology
23	have shifted substantially in two ways. First, while
24	the U.S. is still the leader in defense technology, it's
25	no longer as dominant as it was in the '50s and the '60s.
26	There are much more foreign sources of critical

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1	technologies for our military.
2	And then the second aspect in which that's
3	changed as well is - I indicated that defense technology
4	was largely organically developed. That's no longer
5	the case anymore.
6	You find much more transfer of commercial
7	technology into the military sphere than you might of
8	two, three, four decades ago. Whereas before defense
9	was really a net exporter of technology - global
10	positioning systems, the Internet itself came out of
11	initial defense research.
12	There's still some of that but the balance
13	has shifted and now you see much of what we're trying
14	to do in the defense sphere is to import technologies
15	from the commercial - 3D printing, nanotechnology, the
16	broad swath of information technology - and
17	operationalize it for military purposes.
18	And then finally, the way things have
19	changed, like other industries defense has embraced the
20	concept of a global supply chain. I'm sorry I wasn't
21	here for John's testimony but I read it. I think he made
22	the mention of the F-35 example.
23	That's a very good one. It's a high profile
24	one. But even if you look at, you know, most of our
25	weapons systems, most of our defense companies you'll
26	find that they, like the rest of industries, have a very

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1	globalized supply chain and they - not only - I guess
2	there's two aspects of that.
3	One, they outsource much more of the work
4	than they used to and they outsource it in a global
5	fashion. So given these dramatic changes in the
6	conditions of the defense industry, the FOCI system
7	itself had to evolve.
8	Now, interestingly, I know this is an issue
9	before the Commission, I think, as you think about it.
10	There was not an enormous amount of legislation involved
11	in these changes.
12	The changes have been mostly process
13	driven, changing the culture of institutions - fewer
14	legislative changes and, indeed, the DSS, led by Stan,
15	has really focused on some of the newer strategies that
16	he discussed within the same legal framework that's
17	existed.
18	So and, again, the DSS, I think, has looked
19	back to the original purpose of FOCI to - which is to
20	encourage foreign investment in our defense industrial
21	base while at the same time protecting our classified
22	programs and other key technologies and has sought to
23	update the processes to reflect these different
24	purposes.
25	I think it has done that in several concrete
26	ways. First, there's now a greater recognition that a

1 foreiqn parent, like any investor, has an understandable interest in increased financial 2 transparency and more efficient business processes. 3 So the emphasis is now on addressing and 4 5 mitigating areas of actual risk while seeking to avoid placing unnecessary burdens on mitigated companies. 6 7 For example, DSS has taken a leadership role in trying to streamline the administrative 8 9 procedures for addressing FOCI company participation in 10 certain restricted programs. 11 Second, while this is a general consistency 12 across the FOCI program, we've seen a more nuanced approach to tailoring implementation to a company's 13 risk profile. For example, FOCI companies with a 14 15 strong record of compliance and a sophisticated and active government security committee comprised of 16 17 clear, trusted and highly reputable members should and 18 seemingly do get greater delegated authority. Finally, DSS has also leveraged its closer 19 20 regulatory control over mitigated companies to promote 21 greater adherence to its broadly applicable security 22 controls and procedures. As a result of its greater emphasis on 23 24 security, FOCI companies indeed generally perform better than their U.S. counterparts on DSS' annual 25 26 facility audits.

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1	Similarly, DSS appears to use its close
2	relationship with FOCI companies to launch important
3	new initiatives in not directly related but closely
4	related and increasingly important areas of security
5	such as cyber security and insider threats.
6	So let me just conclude by going back to the
7	beginning. My concluding point here is the FOCI
8	process is about balance. Its primary purpose is to
9	prevent the loss of defense technologies to potential
10	adversaries because that would harm our national
11	security.
12	But the loss of foreign investment in our
13	defense industry or the loss of access to foreign
14	technologies of supply chains would also harm our
15	national security.
16	So the goal of the FOCI system is to balance
17	between those two imperatives and I think Stan and the
18	DSS have done an extremely nice job in adapting an older
19	set of laws and regulations to a newer area while keeping
20	in mind those two competing purposes.
21	Thank you.
22	CHAIRMAN BURNS: Thank you, Mr. Lynn. Mr.
23	Murphy?
24	MR. MURPHY: Mr. Chairman, Commissioners,
25	it's an honor to be here. Thank you for having me.
26	I was asked to speak today about nuclear

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1	financing and somehow weave in some concepts of climate
2	change, and then I asked well, how many minutes do I have
3	to do that and I was told ten.
4	We did a course out at Argonne National Lab
5	for the IAEA this year on financing that was a week long.
6	So I'm going to try and distill this into a few minutes
7	and really try and focus on what are the key issues at
8	it really relates to this and not to try and do a user's
9	guide on nuclear financing.
10	But, you know, when you start - you know,
11	I put in the slides sort of five key points and, you know,
12	you start with a concept that nuclear financing is sort
13	of where the rubber hits the road for NPP development.
14	You can have the best case for nuclear.
15	You can have a good design. You can have a favorable
16	regulatory environment. You can go through all those
17	hoops. But if you don't have the money to build the
18	plant there is no project.
19	And so that we've seen in our practice is
20	sort of the ultimate test for whether nuclear plants can
21	go forward or not. From a financier's perspective,
22	financiers want clarity.
23	They want it to be simple. They're lending
24	money. They want to make money. They don't like risk
25	and they like clear bright line rules.
26	One of the trends that we've seen in NPP

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1	development internationally has been vendor equity -
2	that they're asking the vendors, the ones who are
3	providing the NSSS design to bring money to the project.
4	Not just debt but also equity to invest in
5	the project and that has been one of the determining
6	factors as to how winners and losers are being chosen.
7	And then, of course, within all this we have
8	to acknowledge that specific to the United States right
9	now it's not a favorable environment for developing new
10	nuclear power plants.
11	You know, we're looking at shutting down
12	perfectly good power plants because the economics
13	aren't working. That needs to be factored in but it
14	can't overwhelm the conversation.
15	And then finally, you know, as I was asked
16	to talk - when we talk about climate change there is a
17	piece for nuclear in all of this and when we look at some
18	of the studies that have been done, clearly, nuclear has
19	a place in it.
20	It doesn't mean that that's an
21	anti-renewables position. There's a place for all of
22	this. But if we want nuclear to have that place we have
23	to keep building plants. We can't sit still because the
24	percentages will continue to decline and we get farther
25	and farther away from our goals.
26	So when you consider the challenges for

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1	nuclear financing, and I put a list in the slides, you
2	know, sort of, again, from a lender or an equity
3	perspective, why is financing so challenging - what are
4	the issues that you look at.
5	And when you then consider the foreign
6	ownership rules and tie that into financing, it raises
7	two issues - regulatory oversight, of course, and then
8	the challenges generally with financing and how the two
9	might weave together.
10	The current rules are not clear. There is
11	not a bright line that says if this the answer is X, if
12	that the answer is Y.
13	Well, again, that doesn't make it right or
14	wrong but from an investor perspective - from a lender
15	perspective you start getting nervous because now you
16	say well, what does that mean - how is it going to work
17	out - am I willing to wade through this process not
18	knowing how this might turn out.
19	Because you look - you know, it's very
20	fact dependent and, you know, from a safety perspective
21	when you're tasked with a safety responsibility the
22	easiest answer is to say no, right. If you say no you
23	haven't taken any risks.
24	But if now you're having to look at a set
25	of facts and come up with an answer, moving away from
26	no becomes more difficult, more risky, more uncertain,

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1	and from a lender perspective or investor perspective
2	they realize that.
3	You know, it's difficult to move away from
4	the simple case, and you know, as has already been
5	mentioned in reference to the defense industry, when you
6	look at the nuclear industry it's an international
7	industry nowadays.
8	We can't - as was mentioned already, we
9	can't build a plant in the United States on our own. We
10	need foreign participation and we see the cross border
11	activity in other places of the world.
12	At the same time, it's understandable why
13	we struggle with these issues. All investors and all
14	lenders are not created equal. If the Second People's
15	Bank of North Korea showed up and said we'd like to
16	invest in a nuclear project, you might be a little
17	worried about that.
18	And, you know, so the facts do matter and
19	that is understandable. But then you say is the
20	financier really going to wait around for all this stuff
21	to get sorted out, figured out, and, again, you sit there
22	and say but we're not really building a lot of nuclear
23	plants in the United States right now so why should we
24	care - you know, is this something we should be doing
25	- is this a problem.
26	Are we not building plants because foreign

Are we not building plants because foreign

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1	investors want to do this - there's this line at the door
2	that we're saying no and that's why nuclear plants
3	aren't being built?
4	I would submit the answer is no. That
5	doesn't mean that we don't look at the rule and say is
6	it a problem - could it be better - could it open up new
7	possibilities down the road even if current market
8	conditions may not favor nuclear development.
9	You know, I put a couple of slides in the
10	presentation. One was on trends in the nuclear sector,
11	and the only point I put it there was that the point of
12	all these trends one of the key trends is vendor equity.
13	I teach for the IAEA. It's one of those
14	basic training points that say what's going on - what
15	are the trends. Well, vendor equity is one of those
16	trends, looking at bringing money into the deal.
17	You know, when you go to the next slide
18	about challenges to financing and you say, you know, how
19	do you make this happen - how do you build the economic
20	case. You know, if you could go to the next slide,
21	please.
22	You know, can the project be financed, and
23	when you look at it again the believability of the
24	financial model is key and then you look at the potential
25	sources. Again, right in that list vendor equity -
26	having that money come into the deal.

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1	And so stepping back and saying what are the
2	overall prevailing themes with the nuclear financing
3	abroad we're seeing the importance of government
4	support, the importance of export credit agency
5	financing, which fortunately we have an institution
6	here in the United States that does want to support
7	nuclear, which is great, but it can only do so overseas,
8	which is U.S. Ex-Im.
9	But the reputational risk, government to
10	government deals, bilateral relationships - but it
11	involves, you know, countries coming together and
12	working these issues out and then we're seeing emerging
13	in this conversation conversations about climate
14	change, conversations about grid stability and all this
15	stuff is weaving together.
16	When you look at how projects have been
17	developed overseas, I put a list together and for the
18	most part these projects would not be going forward
19	without foreign equity.
20	I think the UAE is the exception. They
21	seem to have a lot of money. But the rest of them are
22	- everybody is out there looking for money, both debt
23	and equity, and if - to win bring money into the deal.
24	So if that's the trend elsewhere on how
25	these projects are happening then we look at ourselves
26	and say well, you know, can we do things to make it easier

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1	to get these projects to market - are we limiting our
2	options by having more restrictive rules.
3	And I think that's where we have to consider
4	this, and what I would also stress is from a financing
5	perspective everybody likes to focus on the development
6	and construction period. That is, clearly, the most
7	difficult period.
8	At the same time, you have an asset you're
9	going to - that's going to run for 60, probably 80 years
10	with the new designs. That provides tons of
11	opportunities for financing on the back end to
12	refinance, and refinancing means bringing in new
13	investors.
14	You lower your cost of capital. You look
15	at the life of the plant and say well, I have a high cost
16	in the beginning, a low cost later - when I level that
17	out it's a much better story.
18	If we're limiting our options, it's just
19	making it that much harder and so, you know, when you
20	go through all this you say okay, maybe there's not that
21	line at the door but if we're - if we consider nuclear
22	to be a viable option for a lot of different things, you
23	know, climate change being one of - what I'll get to in
24	a second, do we need to have all the tools available to
25	us and if we don't we're restricting our options.
26	Again, doesn't mean that we make a decision

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1	based on market factors today and saying well, is this
2	that big a deal. You have to look long term. You have
3	to look decades and given the asset class, given how long
4	it takes to develop these and we can't make a policy
5	based on what's happening at this moment and time and
6	say well, you know, we just shut down Vermont Yankee.
7	If we shut down a perfectly good nuclear
8	plant well, then why are we talking about - worrying
9	about building new ones.
10	I mean, you know, but we have to look more
11	broadly and when we think about climate change you see
12	that not only have a lot of environmentalists and
13	biologists now turned and thought differently about the
14	value of nuclear but we're seeing the WEN, the IAEA,
15	other groups talking about saying we shouldn't just
16	build only nuclear but it has to be part of the story.
17	And if that's relevant for the world it's
18	relevant for the United States as well as we try and meet
19	our climate goals.
20	And as we shut down more and more plants and
21	don't replace them, we're just making those - we're
22	creating an asymptotic relationship to the goal. We're
23	never going to get there.
24	And so in order for it to be part of the mix
25	we've got to look and say are we doing everything we can
26	to facilitate this in a rational way - you know,

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1	recognizing again there are specific considerations.
2	So I think we have to always be careful and
3	say let's not be overwhelmed by the current case in the
4	United States.
5	Let's look at what's happening oversees and
6	see that there are a lot of intelligent people outside
7	of the United States that are making rational judgments
8	and saying we can do this.
9	You know, after my slides had to be
10	submitted there were some stories about Hinkley Point
11	where the U.K. government is saying we have a golden
12	share in this project so that we can have some rights
13	with regard to national security and we're going to
14	impose some requirements about the nationality of the
15	operators and other things.
16	So we're seeing that it can be done. You
17	know, the U.K. is more of the extreme to say hey, anybody
18	can come - we're going to put some restrictions on it
19	but we're not going to limit you coming through the door.
20	And so I think there's a balance in there
21	that we have to consider. We've also seen - you know,
22	we've heard from the defense side, also within the
23	nuclear side when you look at 810 licensing, for
24	example.
25	All countries are not created equal under
26	810 licensing. We do draw distinctions. We've gotten

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1	comfortable with drawing distinctions, not always
2	perfectly. But there is precedent for doing that.
3	You know, we can figure out what are those
4	key issues as we've heard on the defense side about have
5	the criteria, look at them on a case by case basis but,
6	you know, see can we facilitate development as opposed
7	to making it less clear and ambiguous.
8	And I think that, again, from the lender
9	perspective - the financier perspective - you're
10	stepping back and saying do I want to get involved in
11	this or is it too complicated - is it too hard.
12	And the more clarity we can have in the
13	process to achieve some of these goals that I've stated,
14	you know, I think that's better for the industry and
15	hopefully for the country as well. Thank you very much.
16	CHAIRMAN BURNS: Thank you, Mr. Murphy.
17	Mr. Baker?
18	MR. BAKER: Thank you, Mr. Chairman. I
19	thought the most useful thing that I could do for the
20	Commission would be to talk a little bit about an
21	alternative way of regulating foreign investment, which
22	is CFIUS, the Committee on Foreign Investment in the
23	United States.
24	That's something I - a process I ran for the
25	Department of Homeland Security when I was there. I've
26	 written the only - this shows my bad judgment - the only

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1	attempted popular book that touches on CFIUS and you've
2	got a chapter in your materials.
3	But I think it shows that it's possible to
4	do - to achieve some of the flexibility that you have
5	heard people talking about today using a slightly
6	different format, and I'll just talk about how CFIUS
7	works.
8	CFIUS presumes largely control when you get
9	to 10 percent indirect and direct and, obviously, that's
10	quite different from the OCD rules that the Commission
11	uses.
12	The reason it's different and the reason it
13	can be different is control just brings you into the
14	regulatory process and doesn't guarantee a particular
15	outcome.
16	It doesn't say you're going to be rejected.
17	In fact, roughly 90 percent of the investments that
18	result in foreign control of a U.S. company that
19	triggers CFIUS interests are approved without any
20	conditions at all.
21	So but that means a lot of stuff goes in and
22	then the committee goes through a process in which first
23	they - they're centrally looking at three things -
24	what's the threat, what's the vulnerability and what are
25	the consequences if the threat and vulnerability come
26	together in a bad way for us.

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1	To determine the threat, this is a very
2	focused and quite particular to the company and the
3	country it comes from analysis that the intelligence
4	community helps with.
5	They produce a report saying, often, is
6	this a company that has helped its foreign government
7	engage in espionage or steal secrets or violate export
8	controls and that will then shape the climate of the
9	further review.
10	The committee has a choice of saying no to
11	the transaction. I said about 10 percent - 90 percent
12	are approved without any action. Probably 1 or 2
13	percent are rejected.
14	The remainder go through a process that is
15	also very flexible that allows the negotiation of what's
16	called a mitigation agreement.
17	This is not completely different from the
18	negation agreements that you all do but the negation
19	agreements, as I understand them, are really focused on
20	are you in the control or out of the control and we can
21	negate your control in these particular ways.
22	Mitigation agreements are more about
23	ending the threat or the vulnerability or minimizing the
24	consequences. So they are far more flexible and focus
25	not so much on ownership as on what are you worried about
26	- are you worried that these guys are going to steal

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1	secrets - are you worried they're going to sabotage the
2	plant - are you worried they're going to export
3	technology that they shouldn't export, and you can write
4	a set of rules that are designed to prevent the thing
5	that you are most worried about and those mitigation
6	agreements have evolved quite substantially over 20
7	years as we've become worried about different things.
8	And, obviously, there's a whole bunch of
9	cyber that is built into some of these agreements that
10	wasn't previously built into agreements 15 years ago.
11	Greater emphasis - they'll be candid about
12	worries about Chinese espionage that you didn't see as
13	often 15, 20 years ago. But probably the most
14	significant thing, and I've given them the slides, some
15	lists of typical mitigation terms.
16	They might be described in some respects as
17	a light version of what Stan Sims' DSS does. DSS is
18	about restricting the access of the foreign owner to
19	information about the operations of the subsidiary by
20	building in a layer of American management that cuts off
21	a lot of that communication.
22	In CFIUS because we can say Stan's got the
23	DSS part, if this is the defense industry it's much
24	lighter, we might say we want to have an
25	American-cleared - American who handles security
26	matters and who has a special reporting relationship to

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the government.

And so the terms can be very flexible. I think Paul's right that when you're investing a lot of money you want a lot of certainty and the way CFIUS has handled that is by saying you're going to come in for a process.

We're not telling you in advance how it's going to come out. We're certainly not going to tell you how to get out of this process. But once you're in we will negotiate an agreement with you and that will give you the certainty that you need. You'll know what the obligations are and if you don't want to do it you don't have to invest.

So that's how the process works. I've thought a little bit and only a little bit about how if the NRC wanted to move to a process that was more flexible in that format it would do it and it seems to me that the FOCD rules are - they're sort of inherently binary in the statute. You're either in or you're out.

But the inimicality rules offer a good deal of flexibility and it would not be impossible, it seems to me, subject to your General Counsel's okay, to build a structure that looked very much like CFIUS on the foundation of inimicality.

25 That is to say, you say yes, you are not 26 foreign - FOCD as FOCD is defined in 103d but you could

1 be inimical and to prevent inimicality we're going to ask you to give us all sorts of assurances about how your 2 company is going to run, how much information we're 3 going to have about the activities of the foreign 4 5 investors, et cetera. That's one possibility. The other 6 7 possibility, to be candid, is that you could rely more heavily on CFIUS. You could say we're approving this 8 under 103 but you still have to go through the CFIUS 9 10 process and we will negotiate a mitigation agreement in 11 that context. 12 The good news is that that's a reasonably clearly established set of rules. The difficulty with 13 that is you will have a lot of other agencies telling 14 15 you how to do your business - the U.S. trade representative, the Commerce Department, the State 16 17 Department. 18 They will all weigh in and usually to tell you that you're being too hard on the foreign investor, 19 20 and then the Defense Department and DHS will say maybe 21 you're not being hard enough. 22 So it may be that you'd be better off from a control of your process to build a structure, if you 23 wanted this kind of a structure, straight on top of 24 25 inimicality.

And I don't want to suggest that CFIUS is

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1 a perfect solution. There are many things that are wrong with CFIUS including the multiplicity of agencies 2 and also the fact that once you've negotiated an 3 agreement it tends to stick as it is and it becomes hard 4 5 to make changes in it, which means that, you know, you're stuck with things as they look to you ten years ago. Why 6 7 don't I stop there and answer any questions? CHAIRMAN BURNS: Thank you. 8 Since Mr. 9 O'Keefe hasn't been able to join us as yet, I think what we are going to do originally we had scheduled a short 10 11 break. I think we're going to skip the break and just proceed to questions with the panelists that we have 12 here and I believe I'll start off. 13 14 COMMISSIONER SVINICKI: Excuse me, Mr. 15 Chairman. When Mr. O'Keefe arrives will we just recognize him in the order of questioning to hear or 16 17 should we just have him join for the questions? I quess 18 it depends on if he makes it. 19 CHAIRMAN BURNS: Yeah, it depends. Have 20 we heard - gotten any word as yet? MS. VIETTI-COOK: No. I mean, we knew he 21 22 was going to be running late. That's why he was -23 CHAIRMAN BURNS: Yeah. Yeah, and I think 24 there's some traffic issues as well going on. So, you 25 know, maybe we'll see what -26 COMMISSIONER SVINICKI: I'm fine with

recognizing him when he arrives.

CHAIRMAN BURNS: 2 Yeah, yeah. When he I'll start. I found it interesting, I 3 comes, yeah. think, the comment Mr. Lynn had is that, and this is, 4 5 I think, certainly the position the Commission finds itself, is essentially we're dealing in terms of the 6 7 actual statutory or regulatory or, really, statutory framework probably statutes that go back quite a ways 8 when I was about one year old, I would say, when the 9 10 Atomic Energy Act of 1954 was enacted. 11 I take it that's essentially what we have 12 - the circumstance you have in the defense industry and elsewhere, I take it, correct? 13 Yeah. How has - has that provided or has that 14 15 created any challenges in dealing with these older statutory frameworks in terms of adapting to modernity, 16 17 if you will - adapting to those circumstances we faced 18 in the 1990s or the 2000s or the teens, and anyone can

19 address that.

20 MR. SIMS: I'd like to and then - I'll start 21 with that because that's kind of my daily life and 22 dealing with those changes.

If you recall, part of my statement I talked about the changing security environment and how that has forced us, really, to change how we look at this situation. Do we have old laws? You know, the

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1	Executive Order 12829 was signed in 1992, I think, or
2	1993.
3	So it's more than two decades old and,
4	interestingly enough, right now today we are - at the
5	National Security Council level we have convened an
6	interagency group to look at that because the structure
7	has changed.
8	The rules of two decades ago are not the
9	same. There are too many gray areas in the executive
10	order now. The National Industrial Security Program
11	operating manual that we operate on is based on a
12	two-decade-old executive order in which the things that
13	we're dealing with today don't exist.
14	For example, cyber - I think you all
15	mentioned cyber. The word cyber does not even appear
16	- cyber threat does not appear in the executive order
17	nor does it appear in today's NISPOM, the operating
18	manual.
19	We know that. We've been doing patchwork
20	- you know, doing conforming changes to that, and now
21	we're looking at a wholesale relook to try to alleviate
22	some of those gray areas.
23	So we have recognized in the Defense
24	Department, in the national security business is that
25	the landscape have changed. A colleague of mine in
26	which I know you all know, Mr. Brett Lambert, about three

1 years ago as we were working together when he was on the AT&L there - Acquisition Technology & Logistics staff 2 at DoD - he said something to me that made me relook how 3 we do business, and this was about - I was about a year 4 5 into the job and he said Stan, you know, the world we're in now there's three things that are challenges. 6 7 He says, first of all, our defense business is increasingly more globalized. It is increasingly 8 9 more commercialized, and what Secretary Lynn said that 10 we don't purpose build things for the Defense Department 11 anymore - we're kind of off the shelf - that's the 12 commercialization of it. third 13 And then the one is we are 14 increasingly - this business is increasingly more 15 financially complex. Now, when he said those three things to me my eyes rolled back and I said oh, my 16 17 qoodness, and I thought - I internalized it and said, 18 every one of those three things have risk in it and which 19 I now have to evolve - our agency have to evolve to manage 20 the risk in those three things - the globalization of 21 it, the commercialization of our supply chains and then 22 the financial complexity of that. And so ever since he said that - we were 23 24 doing it but I kind of reinvigorated our energy and our 25 processes that these two ladies deal with every day. 26 They have to take a look at that.

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1	And then - and then Mr. Baker mentioned my
2	greatest one, risk, and he - we have a risk equation.
3	I've been doing - managing risk forever and he talked
4	about it's a function of threat vulnerability,
5	consequence and value, and in essence that's what we do
6	every day.
7	All of my operational directors they manage
8	that risk in those - in those three areas. So what I
9	will tell you is that we've got to change our regulations
10	and in some cases, I would suggest, this country we're
11	going to have to change some laws because the laws we
12	wrote back in 1954 just do not apply in some cases in
13	today's environment.
14	CHAIRMAN BURNS: Okay. Thank you. I
15	want to welcome Mr. O'Keefe to the panel. If you're
16	prepared I'll let you go ahead and make your remarks and
17	then we'll proceed back to our questioning. Thank you.
18	MR. O'KEEFE: Thank you very much, Mr.
19	Chairman. I can't imagine what I could possibly add to
20	the proceedings and the distinguished panel you've
21	already assembled and heard from.
22	And so, you know, batting sweep up here -
23	you know, it isn't clean up, it's sweep up and it's the
24	last in the order - there's virtually no way I'm going
25	to be able to provide any other insight that I'm sure
26	you've already heard.

And just having heard Director Sims' comment here as it pertains to the currency of the existing statute that is a very profound comment, particularly coming from a gentleman who is charged with the responsibility of trying to then figure out how to enforce that range of challenges in a different environment.

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So I guess I would just quickly add to, you 8 9 know, what I've seen as prepared testimony as well as 10 the commentary that I have heard that the challenges are 11 twofold of trying to establish anything that resembles 12 a foreign ownership control influence domination - any terminology you want to use that would suggest that 13 there is a different approach there is, first of all, 14 15 that there is.

You have to come to the first conclusion 16 17 that there is a regulatory requirement that from the 18 get-go that that be controlled just by the mere existence of the fact that it is not considered to be 19 20 an organic or U.S. or domestic or heritage or any of the 21 other terms that are used to define U.S. companies and that that is definitionally bad. That's the first 22 major determination. 23

It also implies very implicitly that there is an absence of trust unless it is under a certain set of conditions. So if those two, you know, are met in

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1	the first instance you then determine there must be some
2	unique regulatory requirement that goes with this.
3	Then the second major hurdle is to
4	determine how enforceable could any compliance regimen
5	be in working through this. In my judgment, in the time
6	I've spent in industry on the receiving end of the
7	government's regulatory environment this is about as
8	good as it gets right now with the Defense Department.
9	It has never been as good. It has never
10	been more open, never been more transparent, never been
11	more understandable in terms of what the requirements
12	are, the expectations, how they're going to operate.
13	It's been just as good as it gets.
14	But it starts with the first proposition
15	again, which is is it really necessary and that
16	determination is made by others than those who have to
17	administer the regulatory environment which industry
18	must operate to do business with the Defense Department
19	if you are not a chartered company in the United States.
20	But to the extent that there is a real
21	imperative for it it assumes that there is a way that
22	you can control the technology, you can control the
23	transfer of it and that there's a necessity to do so,
24	and that's always a questionable proposition in this
25	world of globalization that exists today.
26	The number of pure organic U.S. only do

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1	business here in the United States and therefore we can
2	completely control every element of this is such a
3	minimum number and, more importantly, that environment
4	almost assures technological obsolescence, which we
5	have a perfect control over but it is obsolete.
6	And so therefore, you know, the
7	opportunities for real innovation, technology sharing,
8	all that is so limited as to be more difficult to enforce
9	than any other factor.
10	So beyond that, again, I would associate
11	directly with the prepared statements I have seen and
12	the commentary I think that has been already offered to
13	suggest that, you know, great care must be established
14	in order to - or determined to answer those two questions
15	first.
16	Is it really a regulatory environment that
17	it's imperative to do so? Is there some overriding
18	reason why something needs to be done to make that work,
19	and number two, what is an enforceable mechanism in
20	which the consequences will be determined to be
21	acceptable relative to the outcome of what you're trying
22	to achieve.
23	I thank you, Mr. Chairman, members of the
24	commission, for the opportunity to be here.
25	CHAIRMAN BURNS: Thanks very much. I'll
26	go back - I think I have about half my question time left.

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1	But a couple others - one other question
2	that I think Mr. Baker mentioned, for example, in the
3	CFIUS reviews that there's a threshold at least - let's
4	say a 5 percent or about 5 percent threshold.
5	One of the issues I think that the
6	Commission is looking at or one of the issues that's been
7	raised is are there absolute thresholds, or not absolute
8	thresholds but absolute percentages or targets at which
9	one reaches a decision that - for in our terms or the
10	FOCD can't be met, and I'd appreciate commentary from
11	any of you with respect to that or how it works and
12	elsewhere, looking at, as I say, an absolute, I guess,
13	ceiling is the right word - right word for it.
14	MR. BAKER: I will say I think in the CFIUS
15	world when we were asked for - can you give us more
16	certainty, can you tell us for sure that 9 percent that
17	we never have to worry about, and I was always very
18	resistant to that because of my fear of about the
19	creativity and just astonishing smarts that people like
20	Paul brought to the table and the ability to restructure
21	the arrangement so that you had control but you still
22	met some arbitrary number, and that was always the
23	worry.
24	Suppose it was a 9 - you had a 9 percent
25	ownership interest but a separate contractual ability
26	to name members of the board or name the CEO.

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1	At that point you start to say well, yeah,
2	they met the 10 percent rule but we still actually want
3	to be able to review this transaction.
4	DR. HAMRE: Could I speak to this?
5	CHAIRMAN BURNS: Yes, absolutely.
6	DR. HAMRE: I think the problem of a single
7	criteria is that, you know, the threats we face aren't
8	uniform. So if the Sovereign Wealth Fund of Norway
9	wants to invest in nuclear power that isn't a big risk.
10	You know, but if a - you know, a rather new
11	financial intermediary in a country that isn't well
12	regulated wants to become an investor I would want more
13	control about structuring the mitigation for that.
14	So I would - I know it's easier to say 80
15	percent or 2 percent or 50 percent or something. But
16	it's - but the risk isn't granular. I mean, it's very
17	lumpy. It's very uneven, and we just would do ourselves
18	a disservice to just make it a rule.
19	Because we're going to block out good
20	people and we're not really going to solve the security
21	problem. So I think you have to look at this in a more
22	nuanced way.
23	MR. SIMS: If I could.
24	CHAIRMAN BURNS: Certainly.
25	MR. SIMS: We don't - in DSS we don't deal
26	in absolutes, if you will. We just look at the

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1	situation and I echo what Dr. Hamre says. You know, we
2	manage risk and we try to deal mostly with the
3	unacceptable risk.
4	That's the - that's the - what we try to
5	define what is unacceptable to the defense industrial
6	base or the national industrial base and then try to deal
7	with that.
8	We've got our standard type templates of
9	agreements and they are focused, as I said, based on the
10	percent of ownership or control and so we tailor each
11	of the agreements, as Secretary Lynn said, to the
12	situation.
13	Now, we do treat foreign government control
14	of a company differently than we do of the ownership -
15	or I'm sorry, foreign government owned - if we have a
16	company that is foreign government owned we look at it
17	a little bit tougher and there are some strict legal
18	requirements that we must meet if we're going to allow
19	them access to classified national security
20	information.
21	And so that regiment is pretty steep, but
22	it still doesn't absolutely shut them out. We can
23	actually put them in there because we can put mitigation
24	agreements around if there is a challenge.
25	But there are some things that we say the
26	risk is too great to accept that, and I can think of some

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1	of the issues on the CFIUS where we've said no, you can't
2	do it.
3	I'll give you a good example. The State
4	Department - they produced our foreign - our passports.
5	I don't think we would let another foreign country that
6	doesn't have a good relationship with us get into the
7	business of producing our passports. That's one - an
8	example.
9	That may be an absolute no. That risk is
10	just not - and it doesn't matter what country it is.
11	Doesn't matter if it was, you know, the U.K. or the
12	Canadians.
13	We just don't do that. So if you're
14	looking for an absolute case - that maybe that's a simple
15	example but there are very few of those real absolute
16	cases.
17	If you hone in on what's the risk and what
18	are you really concerned about, as Secretary O'Keefe
19	said, and then hone in on that and then build a
20	mitigation agreement around that.
21	DR. HAMRE: Could I just point out?
22	Secretary O'Keefe and Secretary Lynn both ran
23	companies that had foreign government ownership and
24	they had to find strategies - we're working with Stan
25	- where we could manage that.
26	So it is very possible to do that.

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1	CHAIRMAN BURNS: Thank you. Thank you.
2	Commissioner Svinicki?
3	COMMISSIONER SVINICKI: Well, thank you
4	all. Gosh, I knew that we had, based on your experience
5	base, a really wonderful distinguished panel here but
6	you've thrown out so many thoughts that I want to react
7	to.
8	What I'm going to do is just talk for a bit
9	and then I'm going to open it for reaction to what I've
10	talked about. I just have some very broad themes here.
11	I want to begin by saying some of you do have
12	some knowledge of our Atomic Energy Act structure.
13	Chairman Burns was very precise in his opening statement
14	that we have under the Atomic Energy Act what I consider
15	to be a really wonderful for the American people double
16	safety net because we have FOCD and then we have, under
17	rules of statutory construction, really a separate
18	finding that we make on inimicality.
19	But I think that the strength of that
20	structure - it is antiquated but the strength of it is
21	that I think it gives us a double backstop because
22	working in wanting to safeguard American national
23	security, of course, I think we have a tremendous amount
24	of flexibility.
25	Now, broad authorities for government
26	agencies are beneficial. The one thing, though, that

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1	they tend not to create is great clarity for applicants
2	and seekers of licenses and permits.
3	One of the proposals that our Commission
4	concretely has in front to it - us right now is our staff
5	has recommended that we consider looking at the guidance
6	that we have.
7	We use what we call a standard review plan
8	for our experts if they receive an FOCD issue that they
9	need to review. One of our staff's recommendations to
10	our Commission is that perhaps we inject more clarity
11	and we modernize and update that guidance.
12	But a number of you have offered a caution
13	that really these things need to be looked at case by
14	case. As a matter of fact, some of you were just
15	responding in that vein to Chairman Burns.
16	So I would be interested to hear if any of
17	you have thoughts on that kind of sweet spot of providing
18	clarify for those who are in the business of saying are
19	projects likely to get permission to go forward but at
20	the same time having something that is flexible enough
21	to look at different structures.
22	Again, under the Atomic Energy Act the one
23	thing that we interpret to be prohibited is direct
24	foreign ownership and, of course, 100 percent direct
25	and, of course, we have historically, going back to the
26	Atomic Energy Commission, interpreted indirect. The

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1	statute doesn't say direct or indirect.
2	It's my understanding that in the defense
3	- in the mitigation plans there have been successful
4	mitigations against 100 percent direct foreign
5	ownership, which is something I'd be interested in
6	hearing a little bit more about even though, again, our
7	interpretation that the Atomic Energy Act doesn't
8	permit that.
9	How does one, you know, look at enforcement
10	and implementation of these extremely intrusive
11	mitigation plans? That's another area that I don't
12	think, and perhaps DSS has some things to offer on that
13	topic.
14	I think the final thing is kind of a soft
15	point if any of you - and I think many of you would have
16	experience with this. I don't rival Mr. Sims' 36 years
17	but I'm coming up on 25 years of working in the system
18	of being around these national security issues where,
19	you know, the saying no is kind of the easiest reflex.
20	People who work in national security tend
21	to be deeply patriotic. It is a cultural view that we
22	want to be extremely protective of U.S. national
23	interests.
24	Some of you have commented though that the
25	just say no mentality is not without consequences of its
26	own, particularly in the modern age.

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1	But I would be interested if any of you have
2	had to kind of not just move regulations or guidance but
3	move kind of organizational culture and forgetting, you
4	know, people who work in this field do so for a personal
5	commitment and purpose.
6	And what are cautions you would offer if we
7	opened the door of saying let's take our standard review
8	plans - let's put more clarity and specificity in there?
9	How does one navigate the issue of a culture
10	that is kind of prophylactically just closing the door
11	and putting its arms around it to say no?
12	So those are a lot of thoughts some of you
13	have been jotting down so I just open it now if any of
14	you would like to react to that. And Mr. Sims, I think
15	a number of them were in your wheelhouse so if you'd like
16	to start.
17	MR. SIMS: I don't think anything you said
18	is outside of our wheelhouse because we deal in that
19	every day. A couple points about the clarity.
20	Clarity is important, and I'll look at it
21	from a standpoint of a lot of what we've had to do in
22	DSS to encourage foreign investment where we know we
23	need that technology in the U.S. is that - and I have
24	personally had to talk to foreign owners of the
25	companies because they don't have the same clarity about
26	what am I getting into if I buy this -

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1	COMMISSIONER SVINICKI: Sometimes you
2	prohibit them from visiting their own facilities.
3	Isn't that correct?
4	MR. SIMS: We do. There are some that -
5	when you say prohibit we have visitation rules. We have
6	a lot of rules about if you want to get into the national
7	industrial security business we do have a lot of rules.
8	And so we do. We prohibit some of the
9	accesses that they have and in some cases we prohibit
10	all of the access they have. But our visitation rules
11	kind of control a little bit of that.
12	But back to my point about clarity, I spend
13	time - my agency and my workforce spend time in training
14	the foreign owner in what are you getting into - do you
15	really want to invest in this because there are rules.
16	Flexibility - as I told you before, we have
17	a lot of flexibility on how we - how we put in place these
18	mitigation agreements. We have our standard
19	templates, if you will, but then we get to inject -
20	remember that number eight?
21	Anything in there that we feel that may
22	impact that influence? Because see, controlling
23	ownership is pretty easy to determine by your
24	documentation. That influence thing you really got to
25	understand. And then the culture - I got to talk about
26	that and I would say that for the last four years I've

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1	been in this position the one thing that I started on
2	day one was changing the culture of my workforce in how
3	we do our oversight business.
4	We have a program that we call Partnership
5	with Industry - Partnership with Industry. It's as
6	simple as that. We need the industrial base.
7	It's the engine for our economy. It is the
8	engine, and we also need the technology that our
9	industrial base provides to us and the government
10	doesn't produce national security. Industry does.
11	And so if you take that mind set, we've got to treat them
12	as part of our national security team and then we've got
13	to hold them accountable for safeguarding those things
14	that have been trusted to them.
15	These are American companies that just
16	happen to be bought by foreign interests and there are
17	some - there are a lot of 100 percent owned companies
18	in the National Industrial Security program.
19	There are a lot of them. We just put
20	mitigation agreements in place to make sure we manage
21	the risk that we're worried about.
22	And then what I'll tell you is when you talk
23	about risk - you say the caution - I would submit to you
24	that the level of risk that a country or any group is
25	comfortable with is throttled by understanding - the
26	understanding of what you're dealing with and that's

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where we come in.

We deal with this every day. We do take the threat assessments that are provided to us by the National Intel Council. We do look at the risk assessments that are done by the Defense Intelligence Agency.

We are part of the CFIUS committee. We look at every CFIUS case to see if that merger acquisition involves national security interests. We look at every one of them.

About 50 percent of them are the Department of Defense and about 25 percent of them actually involves - or maybe it's 15 percent of them actually involves cleared contractors. Those are already in the National Industrial Security program.

So I guess we're a little bit more comfortable with managing risk because we deal with it every day. We look at it. We have some expertise in it, and then we collaborate with the interagency and our intelligence partners.

And by the way, my background in the Army I was an operational intelligence officer. So I've been managing risk within the foreign space all of my life and so this is just a different nuance when you look at it from a security standpoint on the national basis. So I don't know if that helped you but -

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1	COMMISSIONER SVINICKI: No, that is very
2	helpful. Dr. Hamre, did you also want to comment?
3	DR. HAMRE: Yes, Commissioner Svinicki.
4	I'd like to address the last question raised, which was
5	this culture of no in bureaucracies. That's what
6	bureaucracies do, you know, I mean, and -
7	COMMISSIONER SVINICKI: Well, and I
8	sometimes relate it to my - you know, again, I began as
9	an entry level engineer in the government and, you know,
10	the career upside of saying yes, you know, there's not
11	a lot for you when you sign off on something and the
12	career potential down sides of saying it at the end of
13	the day.
14	So it's a fundamental tension that exists
15	in permitting and licensing activities is that - but at
16	the end of the day it can't always be no and so it's
17	something, I think, everybody struggles with.
18	DR. HAMRE: Well, that's right, and
19	honestly we train bureaucrats to keep inside the lines
20	of legality. I mean, you don't want a bureaucracy
21	that's, you know - and we're a democracy.
22	So you don't want a bureaucracy that says
23	I don't agree with that law - I think that law is probably
24	not right - I think we're going to do it this way.
25	So we want bureaucrats to stay firmly
26	inside - firmly inside legal boundaries. The problem

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1	is the world is changing all the time and the laws don't
2	change dynamically.
3	I personally think every one of our - you
4	know, CFIUS, the NISPOM stuff, I think it's all in some
5	ways obsolete but I wouldn't want to go to the Congress
6	right now because we've got parties that want to kill
7	the other party by being more paranoid and frightened
8	about threats than the other guy.
9	So it will get worse if we were to try to
10	get cleaner legislation. So the only way you solve it,
11	and these guys - Bill was the example. Secretary Lynn
12	was the example. He had a broken DSS. It was - it was
13	the organization that said no.
14	They didn't even say no. They just didn't
15	say anything. You know, they just sat like a lump and
16	refused to even to respond. So it's what it is. It's
17	a -
18	COMMISSIONER SVINICKI: To be clear, Mr.
19	Sims was not there at the time.
20	DR. HAMRE: No, he was trying to come in at
21	that and Bill put him in the job to reform it. It's -
22	what it is it's leadership. It's people who are
23	politically accountable to the citizens. You,
24	Secretaries you're accountable to the citizens.
25	You have to lead your bureaucracy to think
26	in new ways, to think about what is the balance, and it's

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1	not going to come organically out of a bureaucracy. It
2	didn't in DoD. It's coming from people that say we've
3	got - the world is different than this and we're going
4	to lead it to a new path of understanding.
5	I hate most of the frameworks we have right
6	now because I don't think they give good security. We
7	need better security because the world is more
8	complicated. These simplistic rules that we're
9	applying are not adequate security.
10	Like on security clearances - good grief,
11	we have a process whereas the spy fills out his own form
12	- his application form and then we - and then we go to
13	the lowest -
14	COMMISSIONER SVINICKI: That's a problem,
15	thankfully, we don't - my colleagues and I on this side
16	of the table don't have to solve and I'm over my time.
17	But I really appreciate - I know the culture
18	piece is a soft piece but without getting the culture
19	aligned then things don't happen.
20	So I appreciate your acknowledgment of
21	that. Thank you. Thank you, Mr. Chairman.
22	MR. LYNN: Can I just add one point to your
23	- I agree with John and Stan on the culture. Just on
24	your clarity point I think there's also an addition you
25	ought to think about.
26	You do need clarity and that's very

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1	important. You also need perceived fairness,
2	particularly when you're dealing with foreign entities.
3	One of the challenges in the FOCI regime is from Europe
4	or Asia or whatever this looks like a rigged game and
5	that's very, very damaging.
6	And so I think as you think about clarity
7	think as well about fairness and to make sure that that
8	perception of fairness is well understood - that there
9	are rules, they're followed, we have processes but
10	they're not designed to keep out investment, keep out
11	foreign ownership. They're designed to keep - protect
12	things, keep certain things in.
13	Because if you don't - if you're not able
14	to do that the system itself becomes very damaging even
15	if it's clear.
16	COMMISSIONER SVINICKI: Thank you. Thank
17	you again.
18	CHAIRMAN BURNS: Commissioner Ostendorff.
19	COMMISSIONER OSTENDORFF: Thank you,
20	Chairman. Thank you all for being here. I really
21	think your participation and dialogue is helping to -
22	sort of as a catalyst for our thinking before we make
23	a significant decision here going forward. So thank
24	you for your engagement.
25	I'm going to make just a couple of very
26	brief comments and I'm just going to set up a question

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1	that I want to give everybody a chance to respond to.
2	I know that Dr. Hamre talked about how
3	international participation is strengthening the
4	enterprise in the United States. Dr. Hamre has been
5	engaged in talking about the synergies and part of the
6	speeches I've heard him give, synergies between the
7	naval reactors program, DOE's nuclear weapons program,
8	commercial nuclear technology in the United States, et
9	cetera, and he's been a key thought leader in that area.
10	I've heard discussions from Secretary Lynn
11	associated with what are we trying to protect? Is it
12	critical defense technologies that might be of use to
13	an adversary and how does that tee up post-Cold War?
14	I'm reminded 38 years ago when I reported
15	as a Rickover ensign to my first submarine to go on
16	ballistic missile patrol the very first hour we were in
17	international waters being harassed by Soviet AGIs off
18	the coast of Spain and then I served on five submarines
19	after that all attack submarines.
20	But a lot of the Cold War era defense
21	messages you're talking about are different today. I
22	mean, we're certainly not in a bipolar world and as Stan
23	mentioned the cyber security threat is a key thing.
24	Mr. Baker mentioned comments along the
25	lines of what is the threat - what is the vulnerability.
26	Chairman Burns, in his initial question, referred to the

1 1954 Atomic Energy Act Section 103d that deals with Foreign Ownership Control and Domination and the 2 prohibitions on inimicality of common defense and 3 security that recognizes that that was a 60-year-old 4 5 statute. So here's the question I ask. If we were writing the statute - a statute 6 7 today or perhaps trying to develop the legislative history in the Congressional Record, for what problem 8 9 are we trying to solve? What are we trying to fix? What is the 10 11 threat? And I'll get to that in just a second with a 12 question to you. When I got here in 2010 I was struck by the Vogtle and Summer projects for the AP 1000 relying 13 upon heavy steel forgings coming from Korea and Japan 14 15 - Doosan Heavy Industries of Doosan, Korea, and Japan Steel Works in Sapporo to provide these major vessels 16 17 for commercial nuclear power plants. 18 I was stunned by that - the fact that we 19 don't do that in the United States today. Yet, in the 20 1970s on USS George Bancroft I walked back in the engine 21 room in the submarine and saw all the GE and Westinghouse 22 technology. 23 So with that kind of background, I wanted 24 to ask this group what - you know, today we're looking at - what are we concerned about is probably not sharing 25 26 the critical technologies because everybody has the

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1	commercial nuclear technology that wants it, basically,
2	at one level as far as built programs in India, China,
3	Russia, Korea and other countries.
4	Are we concerned about espionage,
5	sabotage, somebody not properly taking care of a plant
6	if they're the foreign owner of a U.S. nuclear plant?
7	I'm trying to help frame what is the
8	high-level principle that should help inform us as to
9	how we look at the FOCD issue and inimicality.
10	What are we concerned about protecting and
11	what is the threat? So I'll start with Dr. Hamre.
12	DR. HAMRE: I can only give examples. I
13	can't reduce it to a principle. But we - because of the
14	capacity of cyber hacking one of the great worries I have
15	is opening up the control systems of nuclear power
16	plants to internet technologies.
17	Right now they're all - first of all,
18	they're 30 years old and they're analog and, you know,
19	they're not wired and they're not connected.
20	But, you know, the next generation we're
21	going to have increasing, you know, connection for
22	efficiency purposes to open cyber systems and the
23	vulnerability.
24	So that would be a place I'd want to really
25	focus on and make sure that we design procedures that
26	don't let a foreign owner introduce a control system

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1	that becomes a back door way where you can get access
2	to the actual operation of a plant.
3	I'm not worried if - about putting payroll
4	records, you know, into the cloud. But I certainly
5	don't want to have the controls to the reactor in the
6	cloud, as an example.
7	You guys are looking at small modular
8	reactors. I'm a big, big proponent. I think we should
9	do this. I would want to see fire walls because some
10	of the guys that make - that are proposing SMRs also make
11	them for the Navy.
12	There are some design issue that I'd just
13	- we just have to ensure there's no permeability between
14	a commercial SMR and what we do for the Navy.
15	So, I mean, I can think of examples for you.
16	I do not think there is any risk to have a foreign owner
17	own part of a power generating plant.
18	You know, I mean, I've spent six years on
19	an advisory committee only one time and it was really
20	a misunderstanding.
21	I mean, this is a business transaction.
22	You know, having a foreign entity run an enrichment
23	facility - I mean, you guys wrestled with that.
24	You said yes. There's much more risk with
25	that because you're dealing with enriched material.
26	So you want to know that there are controls

around the record keeping - you know, that there can't be diversion of material, that there can't be enrichment beyond certain levels. So there - I think you have to be very focused on those threats, Commissioner.

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It's not a single rule but there are definitely things that we have to design rules to mitigate and I put them in the nature of cyber. I put them in the nature of design, especially where it has military application, and then certainly compliance procedures that are central to our nonproliferation regime.

COMMISSIONER OSTENDORFF: Mr. Murphy?

I think the facts 13 MR. MURPHY: Yeah. matter and maybe that can create clarity. It also can 14 15 cut the other way. But, you know, if you state the 16 things that you're concerned about and then say well, 17 who you are now starts to matter you can get the clarity. 18 For example, if we take the case of Calvert Cliffs 3, EDF was going to build an EPR. We can't say 19 20 that the concern about foreign ownership was technology 21 leaking out of the United States. That would be 22 ridiculous.

They're already building an EPR in France. They're EDF. They're the biggest nuclear operator out there. So, you know, then you start to say, well, what can I do with that.

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1	There has to be a different reason why I
2	don't want them to own the whole thing because when we
3	look at the rules now there's a presumption that
4	foreign is bad because we say a foreign cannot control,
5	right.
6	It's not just - so there's always a
7	presumption well, if you own 100 percent and you're a
8	foreigner that's no. Should we look at that? Should
9	we say well, why.
10	I mean, if you have a domestic operator, if
11	you have an accounts program so the money flows through
12	then it doesn't get to the equity before the operators
13	properly, you know, fund it for all its needs and you
14	have controls on how the funds flow why couldn't you have
15	a wholly owned foreign plant?
16	But there's a presumption right now that
17	that's an absolute no so somebody made a judgment. So
18	then you say well, how do we now move off of that
19	continuum and that's where it gets very murky.
20	But then you have to really look at well,
21	what are we trying to protect against. If it's a
22	foreign nuclear technology provider we can't say well,
23	I'm worried about the technology leaving the country.
24	That doesn't make sense. If we're saying
25	well, I'm worried about, you know, them not having
26	operators - that, you know, they may go home, you know,

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1	we represented U.S. Ex-Im and KEXIM for the UAE deal,
2	right.
3	A key aspect of that is well, it's a Korean
4	plant - Koreans are coming here - do we really think that
5	over time the Koreans are going to run this plant
6	forever. No. You would be foolish to think that.
7	So what did we look at? Well, what's your
8	succession plan over time? How are you going to
9	transition that over time. You know, so there might be
10	a concern - there might be an answer to that that can
11	occur maybe not today but over time and you monitor it.
12	But I think that by articulating what your
13	concerns are and saying these are the things we look at,
14	and depending on how you line up institutionally against
15	this concern that will start giving us more clarity on
16	the answers.
17	MR. BAKER: Can I express a little bit of
18	skepticism about the oh, it's 1954 - how can you expect
19	it to work? Maybe because I was seven.
20	The Federal Communications Commission has
21	a 1934 Communications Act which restricts licensing to
22	foreign carriers - requires licenses for foreign
23	carriers, which they have managed to make work, and the
24	way they do it is similar to CFIUS.
25	They defer to the national security
26	agencies of the executive branch on what the risks are

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1	and what the mitigation terms ought to be and they draft
2	a whole set of license conditions and they just drop them
3	into the license and I approve the licenses with those
4	conditions if they think that that's a plausible
5	outcome.
6	And so they have managed to make this work
7	and I wouldn't be surprised if you could, with a
8	combination of regulatory and inimicality analysis make
9	your existing statute work for you.
10	MR. SIMS: Mr. Commissioner, if I could -
11	I don't want to give a bunch of examples but I think what
12	we have done in DSS is that - you asked the question what
13	is the threat.
14	We used to ask that too. But I would submit
15	to you that's really not the optimal question. The
16	question really is what's the risk - what's the risk.
17	Not the threat because, as I've said
18	before, risk is a function of four distinct elements and
19	that's threat, vulnerability, value and consequence.
20	And so - and we're so wedded to that
21	construct of what we do because at the end of the day
22	we can't prevent risk. We can only manage risk.
23	And so we have designed our entire
24	operation and our agency around that risk equation and
25	I've told - like I've said before, every one of my
26	directors if you can't tell me that define what you do

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1	you're either trying to identify what the threat is,
2	you're either trying to identify and look at the
3	vulnerabilities, you are analyzing the value of our
4	technology to our adversaries and then - and the
5	consequences if they succeed in what they're trying to
6	do, and if you're not doing one of those four things
7	you're probably not doing anything to help us.
8	So whatever you come up with I think you've
9	got to really look at the risk because in some cases
10	there's limited and no risk.
11	Now, quite frankly, if there's no threat
12	obviously there is no risk. Okay. So everybody
13	focuses on the threat.
14	But if you don't put it in some type of risk
15	equation and then manage those elements of the risk it
16	helps us prioritize what we're going to look at. You
17	know, I'm from Arkansas. We say all pigs aren't equal.
18	So we don't treat all the pigs the same.
19	And so if we know what the threat is, we
20	understand the vulnerabilities around it, we've
21	absolutely got to understand the value and the
22	consequences of it and that kind of drives everything
23	else - the heavier the consequences, you know, the more
24	prioritized it is, et cetera, then we get at it.
25	So I would submit to you whatever you deal
26	with if you manage it - profile it around some type of

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1	risk equation in which that risk equation has been
2	around for a long time and works, it will probably get
3	you closer to probably where you think you ought to go
4	for the future.
5	COMMISSIONER OSTENDORFF: Chairman, I
6	think - I'm sorry - I think Mr. O'Keefe in the next time,
7	please.
8	MR. O'KEEFE: No, I was just going to
9	suggest that the focus of your question and as modified
10	I think appropriately by what Director Sims has
11	concentrated on is central to the entire effort.
12	What are you trying to accomplish? What
13	behavior are you trying to influence? And is it a
14	positive behavior? Are you trying to deter some
15	approach? Whatever it is, however you define that
16	ultimately - the threat, then the risk relative to it
17	- gives you the answer you're looking for.
18	But the challenge we're dealing with today
19	and I think one of the closest analogies I can think of
20	here in terms of what the scope of the Commission's
21	review is, of the NRC overall is far more in the lane
22	of a large scale systems engineering projects
23	orientation.
24	Sharp contrast to what Director Sims is
25	dealing with, which is a wide range of diverse how you
26	define the threat, how you define the risk. This is a

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1	little more definable. There's a lane here.
2	Now, there's a lot of challenges that come
3	with it, a lot of consequences for getting it wrong, and
4	there are any number of different issues that have to
5	be inventoried to make a determination.
6	But you've got a definable lane and the
7	closest analogy I can think of was one - at one point
8	I started on a federal advisory panel that was chaired
9	by Norm Augustine in which he posed exactly that point.
10	It was the precursor of what ultimately led
11	to the administration's export control rules and how
12	they wanted to modify that and amend it, and it was at
13	least or two prior to that unveiling of what the
14	administration's initiative was.
15	And he posed it exactly the right way - how
16	do you define what it is we're trying to accomplish here
17	and the final determination was the thing - the best
18	categorization is you're trying to mitigate, control or
19	at least influence the pace of technology transfer of
20	information, of intellectual property, all that.
21	And so the group was entitled the Deemed
22	Export Group by virtue of this nature of the
23	intellectual property technology transfer, et cetera,
24	focus which Norm Augustine, at the end of the
25	conversation, determined that we ought to change the
26	name of the panel to the Doomed Experts Group, okay.

1 He says, there's no way to accomplish the task short of what, I think, John Hamre laid out in his 2 comments in the beginning of this - you know, to answer 3 this question, which was you build higher fences and 4 5 walls around fewer and fewer things, once you've determined that that is the point of greatest 6 7 sensitivity. And, again, you've got a definable lane. 8 9 Large-scale systems engineering projects, great -10 that's what you're trying to motivate behavior in a 11 different direction as well as distribution of energy, 12 et cetera. There are ways to define what is probably 13 going to be a long list of things that you would consider 14 15 to be extremely sensitive, and then building the highest walls around those fewest objects as defined as 16 17 priorities. 18 That you really do want to preclude or you really want to motivate behavior differently is going 19 20 to be the most enforceable, as opposed to the incredibly 21 broad challenge that Director Sims has, which is to 22 cover the full range - a real challenge. Thank you. 23 CHAIRMAN BURNS: Thanks. Commissioner 24 Baran. 25 COMMISSIONER BARAN: Thank you, Mr. 26 Well, thank you all for being here. Chairman. This

has, I think, been a really great conversation and for us, I think, the back drop of the conversation is the Atomic Energy Act our guiding statute and the provisions of that act, which include a prohibition - foreign ownership control or domination of nuclear reactor And one of the values, I think, of having you all here is that you know how these issues are dealt with in other sectors that we're not as familiar, whether it's defense or aerospace or communications. And so I'd like to get a better sense of whether there are comparable constraints, prohibitions in these other sectors to what we have in the Atomic Energy Act or whether we are more constrained under our

statute than you all are or have been under the statutes you've operated under. Can folks talk about that?

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licensees.

MR. BAKER: Why don't I start. I think the straight out you may not have a foreign company in this industry is relatively rare and has largely disappeared in part because of WTO negotiations and the like.

21 Frankly, given where you've taken 103 22 already - the OCD rules - saying - well, what it really regulates is direct foreign ownership of the plant and 23 if it's indirect ownership - you know, the company sets 24 up a U.S. subsidiary and the U.S. subsidiary then does 25 26 it, it's a different rule - you've already set the stage

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1	if you decided to - you know, it's silly to have a
2	straight bar - to say okay, if you set up a U.S.
3	subsidiary we're going to go straight to inimicality.
4	Doesn't mean you're going to get approved
5	but you now are not foreign owned because it's a U.S.
6	company that we can reach and is subject to our
7	jurisdiction. That would be, obviously, a big change.
8	But it seems to me you could justify that under the law,
9	given your existing precedence.
10	DR. HAMRE: Could I just speak to the
11	broader problem I think that you face, which is the
12	Defense Department and the Treasury and others that have
13	been wrestling with CFIUS, NISPOM reform and all that,
14	they live in a political environment where they are
15	constantly engaging with Congress on an annual basis
16	over these tough questions.
17	So the test for them is ostensible - you
18	know, can they convince members of Congress that this
19	is sensible what they're trying to do. So they're not
20	trying to re-legislate to redefine the underlying
21	statute but they're constantly engaging in a way to say
22	look, we're wrestling with a problem - how would you do
23	this - how do you feel.
24	I think you've had a difficulty because,
25	first of all, we haven't built so many power plants here
26	recently and during that void, you know, the industry

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1	went global.
2	And you are at the pinnacle of leadership
3	but you operate in an environment where it's hard for
4	you to get the confidence you've got political backing
5	- not partisan backing, not Republican and Democrat -
6	but political backing that elected officials think
7	you're doing the right thing.
8	You haven't had enough banging back and
9	forth against them. Again, so this is a problem we're
10	wrestling with. So I think you do have a challenge. I
11	mean, it's not just the statute.
12	I think it's partly the way, you know, an
13	independent regulatory organization functions in our
14	constitutional democracy. So part of it, I think, has
15	to be well, like what you're doing here is, you know,
16	seeking the counsel of how other people have been
17	wrestling with it, use that as the basis for
18	conversations with Congress to say we're wrestling with
19	this - here's how these guys were doing it - here's what
20	we're struggling with.
21	Because I think it's really developing a
22	political consensus that you're mindful of the
23	challenges, that you're working within the constraints
24	of the law and you're using - you're doing your
25	leadership responsibility to interpret to our national

best interest at this point. So I really think - don't

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1	solve this once and for all through - in an	
2	administrative process with your staff.	
3	I think this is much more of an interactive	
4	process that you as leaders of a regulatory agency have	
5	to have with political authorities and that's the	
6	Congress and the Executive Branch.	
7	You say we're wrestling with this problem	
8	- here's how we think about it - we're taking leads from	
9	other people that have been wrestling with it.	
10	We're going to interpret it in this way now	
11	because we think that's consistent with what you gave	
12	us as a mandate when you wrote the Atomic Energy Act.	
13	Again, I think it's more of a process of what I think	
14	you have to do rather than - because if you were to go	
15	up right now to Congress and say we think we better	
16	revise this legislation because, you know, God and the	
17	angels couldn't help you, you know. I mean, what would	
18	happen in this town.	
19	So lead with - you know, you have the	
20	capacity, I think, to do this.	
21	COMMISSIONER BARAN: Thanks,	
22	MR. MURPHY: You know, when you look at	
23	countries that are start-up nuclear power programs,	
24	we're completely the opposite extreme, obviously.	
25	But when you look at what they're tasked to	
26	do, one of the things is to bring all the stakeholders	

together and have a conversation at the same time - a 1 lot of what's just been said - and that - so that 2 3 everybody's on the same page, that everybody understands what the goals are. 4 5 Personally, I don't think that compromises regulatory independence. But one of the things they do 6 7 they're writing laws. They're writing a national They're writing their regulatory 8 nuclear law. structure for the first time, their nuclear liability 9 10 - all these things. 11 And so it's being put together with a blank 12 sheet of paper. They have to make judgments as to, you know, how they want to interact with foreigners and 13 there's an inherent acknowledgment because they're 14 15 starting with nothing that they're going to need foreign participation to achieve their goals. 16 17 We're in a very different place. But I 18 think you can still draw examples from that because one of the things that has to be factored in that 19 20 conversation is engagement with the public and, you 21 know, as the safety organization - as the regulatory 22 organization this, I believe, is not something you do 23 by yourselves because part of this is if you go into a room, write the perfect regulation that's handed down 24 from Heaven before you and here it is the next day and 25 26 oh, my god, it's perfect -

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1	COMMISSIONER BARAN: That's exactly how we
2	do it, too.
3	MR. MURPHY: I've heard that. But, you
4	know, if at the same time on the government side - you
5	know, DOE, Commerce - you know, that there's also some
6	sort of a push to say this is okay, I think the two have
7	to go together.
8	When you look at what the U.K. has done,
9	which is similar to where we find ourselves, then the
10	first country, I'm not sitting here saying they've got
11	it perfect either.
12	But there was a lot of work done by the
13	government to talk about the value of nuclear, the need
14	for, you know, these projects to go forward. I mean,
15	they've gone to battle with the EU over this. But there
16	was definitely an engagement in terms of we need nuclear
17	- oh, by the way, the U.K. nuclear industry has fallen
18	in on itself - we need foreign participation.
19	We think it's okay that foreign - it was an
20	open discussion as opposed to just saying - you know,
21	the regulator going into a room and just crossing out
22	a few lines in a regulation, saying nothing to see here
23	- let's move on.
24	It was a much broader discussion and I think
25	that it's great that this discussion is happening here.
26	But I think it needs to be happening together with other

1 institutions in our government because if you guys write or handed the perfect regulation but there isn't the 2 dialogue on the other side, you then run the backlash 3 of somebody coming in and developing the project and 4 5 being a hue and cry from whomever because there hasn't been thought given to all the other things that need to 6 7 be done to make it all work - to reach the end goal that you're trying to achieve. 8 9 MR. LYNN: If I could just add one point, 10 maybe connect your question to Commissioner 11 Ostendorff's question of principle and kind of the absoluteness of the statute. 12 I think when the statute was written you 13 were worried - and Stan's terminology about three risks 14 - you were worried about technology leakage, you were 15 worried about potential accidents and you were worried 16 about malicious acts, some sort of -17 18 I think you're still worried about those same three risks but I think the order is reversed. 19 Ι 20 think that, you know, as John said you're only really 21 worried about technology leakage in very specified, you 22 know, maybe naval nuclear reactors. But the commercial technology is so much more proliferated than it was in 23 the '50s. 24 You know, accidents are always going to be, 25

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you know, a central function but I think the primary risk

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1	now has become more malicious acts either through cyber
2	or other.
3	And so as I think about how you interpret
4	this statute you ought to think about, you know, that
5	the order of risks has changed. They're all there but
6	the emphasis and the order has almost reversed.
7	COMMISSIONER BARAN: I'm going to push my
8	luck and ask - probably go over my time - just ask Mr.
9	Sims a few questions. So when you're doing a FOCI or
10	FOCI, whatever you call it, determination, am I right
11	in understanding that you're doing a single analysis
12	that takes into account all the relevant foreign
13	ownership and security issues at one time?
14	MR. SIMS: How do I answer it? First of
15	all, nothing is single in our world. We do an upfront
16	assessment as an entry into the program. Before we even
17	grant a facility clearance we run them through the
18	numbers, do our analysis, consult with the intelligence
19	agencies and all that, and so that gives us a snapshot
20	of time.
21	And that then tells us how much risk that
22	we are maybe assuming here. Then, based on that, then
23	we develop a mitigation plan that focuses on that risk
24	- for example, how do we want to have this wall.
25	But maybe there's some technology we
26	recommend to our companies - hey, look, you don't even

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1	want this to ever touch the Internet. It needs to be
2	on a separate system and it's simple as that.
3	And then once we figure that out then we put
4	in the implementation plan and then here's the key. We
5	exercise oversight and then we continuously monitor it.
6	We continuously monitor through our
7	routine audits, and those that have the greatest risk
8	we continually monitor them more routinely. So it's
9	that - it's that balance so it's not singular and that's
10	our cycle. I even got a slide here that shows you.
11	You know, I grew up in the world of the intel
12	cycle, how it keeps going. Well, we have an oversight
13	FOCI security cycle that we run through. We even call
14	it the FOCI life cycle, if you will, and they manage it
15	and they run it for us.
16	So it's not singular. It's constant. If
17	things change we change our procedures to meet whatever
18	risk that we're concerned about. That's the simplest
19	way I can - I can say.
20	COMMISSIONER BARAN: And at the same time,
21	thinking through what the appropriate mitigation
22	measures are. Is that - because this gets at this
23	question of regulatory clarity, I guess - is that
24	fundamentally a judgment call that you all have to make?
25	There's no - there's no formula where you
26	put in the criteria and it spits out the right

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1	mitigation.
2	MR. SIMS: It is a judgment call. But I
3	would submit to you as I said before, a very educated
4	judgment call based on what we've seen, what we deal
5	with.
6	We deal with all the - there's over 10,000
7	companies in the National Industrial Security Program
8	with over 13,000 facilities building some of the most
9	sensitive national security technology that we have in
10	this country.
11	Okay. That's a lot, and so that's why we
12	really do have to have a construct about how we - how
13	we prioritize things.
14	Let me say another thing about the law and
15	what we - what I find here. The Atomic Energy Act it
16	is the act and I agree, it may not be - might not be
17	absolutely obsolete. But the lack of agility in any law
18	or regulation it has a huge operational impact.
19	What I say is the world is changing, the
20	environment we're in, and we have to do things. But if
21	our regulations and our laws are not willing to be agile
22	enough to change with that operational necessity I think
23	we are going to find ourselves in, you know, in a pickle,
24	if you will.
25	COMMISSIONER BARAN: Thank you.
26	CHAIRMAN BURNS: Thank you all. Perhaps

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1	before I ask my Commissioners for any closing comment
2	are there any closing thoughts any of you would like to
3	share?
4	DR. HAMRE: Could I just say one thing, and
5	that is I do appreciate how hard it is to - you know,
6	you're at the very pinnacle of leadership on a very
7	inflexible law and I appreciate the complexity of that
8	for you.
9	I do think you need to reinterpret what
10	national security and what foreign control and
11	dominance means because it isn't - it is not about
12	ownership. It's much more complicated.
13	I think you - you're going to have to take
14	the lead on it and there's nobody that's going to do it
15	for you and I think you have to do it with the spirit
16	that you're trying to strengthen our security, not
17	weaken it.
18	I think if you let people define that, you
19	know, you're going to change the rules on percentage of
20	ownership and that's seen as you're weakening
21	something, that's - you're very vulnerable politically.
22	But if you're strengthening it, if you're
23	creating a process where you're going to strengthen
24	national security by your regulatory process in a
25	predictable way, the country would welcome that and
26	politically you will survive that process because the

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1	people on the Hill that's what they want you to do.
2	They want you to ensure that the - that the
3	NRC today is providing security that was intended back
4	in 1954. But it's a new world and you're the only people
5	who could possibly do that.
6	So I would encourage you to think about this
7	as a process. It does probably require some new
8	expertise that you have in - on the Commission staff.
9	I think you should draw on expertise that's in the
10	government that's already there.
11	But I think the way you have to do this -
12	because the law is too inflexible and you're just going
13	to have to lean forward.
14	Stewart indicated if you look at the
15	inimicality rules I think you've got an opening for it.
16	But politically you're going to have to show Americans
17	that you're actually strengthening our security and I
18	think if you do that I don't have any doubt that people
19	will support you.
20	MR. BAKER: I would add one thought to
21	that. Many of the rules that we're relying on now we're
22	relying on because we got rid of tougher, more
23	U.Sfocused rules like buy America or some of the
24	communications licensing in international
25	negotiations.
26	And, you know, if I know anything about the

European Union they are giving us nothing for free. You have to say to them we're thinking about this liberalization - what are you thinking about for our industry, and you need to ask industry what are your opportunities and what rules would you like to see relaxed abroad.

So you're now talking about something that is truly reciprocal. It might not be WTO, given the membership there, but there could be a number of relatively like-minded countries where you could agree to relax the formal restrictions while maintaining clear security rules and that would also help build a climate for making changes like this.

MR. O'KEEFE: Listening to the conversation this morning too sparked a thought that I had not considered prior to coming over.

One of the more interesting case studies that you may find on the challenge that you're confronting is one that pertains to the actual production construction and then ultimate operational delivery of what is now known as the International Space Station.

This is 16 nation states - the Russians, the Canadians, the Japanese, the United States, the European Space Agency representing all these EU folks who always want to know what's in it for them - you know,

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1	the whole combination - every element of this you can
2	imagine.
3	And you had to build what turned to be out
4	a \$100 billion project that's the size of three football
5	fields. It's a laboratory in space that operates
6	continuously - you know, 365 days a year 24/7, and on
7	board is always a half a dozen humans who are
8	representing U.S. astronauts, Russian cosmonauts,
9	Japanese, European, et cetera.
10	And all the information, as you might
11	imagine, that went into designing something that was a
12	standard production because we can't during the
13	assembly, you have components, modules, sections that
14	had to be installed while the platform is moving at
15	17,500 miles an hour by two people who are up there to
16	tack it on correctly.
17	So if you had anything - any engineering
18	specifications off by even a fraction the project was
19	lost, you can assume, a lot. So all of this required
20	a level of coordination, a level of technology transfer
21	because it was built in lots of places around the globe,
22	as you might imagine, and all of these individual
23	partners all insisted that individual pieces be built
24	where that may be - my component or my module, whatever
25	- be fabricated here, there or somewhere else. But it
26	all had to match an exacting specifications to do it and

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then it had to be operational.

This thing is probably - this capability is probability one invention away from being designated one of the world's, you know, wonders and it - hopefully it may end up turning that way.

But as it stands right now they've got to be able to operate this with a multitude of different folks who all, as you might imagine, represent nation states that have a very strong interest in some of the intelligence collection capabilities, the technical capabilities that can be drawn from that, the unique kind of performance characteristics of what comes from something that's operating 250 miles straight up in that kind of condition.

15 There was an awful lot that had to be 16 overcome to achieve that. That story is what may lead 17 to this because there was an awful lot of changes to the 18 restrictions that were in place - the regulatory framework, the legal limitations, all of it - in order 19 20 to actually gain that level of cooperation, and some 21 folks, I think, in Congress, certainly, sit back and 22 wonder why they ever agreed to it in the first place 23 given a couple of the different partners who are now 24 engaged and given our challenges with them.

25 That's a different time. But it's one 26 nonetheless that had to be overcome in order to even make

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1	this feasible to discuss something of that magnitude -
2	of that, you know, incredible engineering as well as
3	scientific expanse, and the currency of the information
4	that was to be relayed on a regular daily basis between
5	different nationalities and interests made it an
6	incredibly difficult challenge.
7	They were all overcome and ultimately it's
8	operating today because of that. That's an interesting
9	case study all by itself.
10	MR. BAKER: So you can do this as long as
11	you can sign Sandra Bullock and -
12	MR. O'KEEFE: Or maybe a little recruiting
13	mechanism, too.
14	DR. HAMRE: Start from that and then work
15	your way through it.
16	MR. BAKER: And we can start thinking of
17	which actors will play us, right?
18	MR. SIMS: Mr. Chairman and Commissioners,
19	as a final and a comment, and beyond what we've said here
20	today and what I've said, and in DSS certainly our
21	processes are not absolutely and they're not perfect.
22	But I do know that we as a country - we're
23	stronger if we operate as a national security team and
24	in that vein what I would say to you that DSS and the
25	Department of Defense we are - we are prepared.
26	We can offer you that we will offer you

1 whatever procedures we have and work with your staff and give you and let you look at whatever we got to help you 2 wrestle with this, and that's the only thing, I guess, 3 I can leave you with. 4 5 We're open. Your staff can link with us. We'll open our doors and let you see what we do and pick 6 7 and choose whatever you need to deal with this - as Dr. Hamre said, to have that conversation and build 8 confidence that you're trying 9 what to do is 10 strengthening our national security. So thank you 11 aqain. 12 CHAIRMAN BURNS: Well, thank you, Mr. I appreciate that offer. I think we work as a 13 Sims. government better when we learn from each other and 14 15 share. I think, Commissioner Svinicki, you wanted 16 17 to make a last statement? 18 COMMISSIONER SVINICKI: I did, and I 19 appreciate that, Mr. Chairman. And again, my thanks to 20 In reflecting on this discussion, which has all of you. 21 been extremely beneficial and our questions and answers 22 back and forth, we do have members of the public in the 23 audience and we are webcasting. Maybe this is my own 24 paranoia but I didn't want to leave an impression to 25 anyone tuning in that as an agency we are toiling 26 entirely in isolation on the issues of the threat -

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1	technology leakage, malicious acts and, I would add,
2	diversion of materials.
3	Our threat analysts and experts inside the
4	Nuclear Regulatory Commission, even though we are not
5	a Title 50, we're not part of the intelligence
6	community, they're engaging both drawing information
7	from that community and, I would say, feeding
8	information we have into that system on a daily basis
9	and our Commission, reinvigorated after the attacks of
10	9/11, revived a bit under our most recent former
11	chairman, Chairman MacFarlane, and continuing under
12	Chairman Burns in meetings we'll have soon.
13	As the leadership we meet directly with
14	counterparts from the intelligence community in closed
15	session.
16	So when we ask about the threat, I didn't
17	want to create an impression that for all enemies
18	foreign and domestic that we aren't on the job on
19	security. We are absolutely on the job of that issue
20	every day. Thank you, Mr. Chairman.
21	CHAIRMAN BURNS: Well, thank you all.
22	It's been a rich dialogue I think will help us as we
23	deliberate on the question of how we best implement our
24	responsibilities under the Atomic Energy Act.
25	And, again, I thank you all for being here
26	and contributing to this dialogue. Thank you and we are

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adjourned.				
	(Whereupon,	the	above-entitled	matter
concluded a	at 11:00 a.m.)			
			(Whereupon, the	(Whereupon, the above-entitled