United States Senate

WASHINGTON, D.C. 20510

August 2, 2013

The Honorable Allison M. Macfarlane Chairman U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Dear Chairman Macfarlane,

I write to express my concerns regarding the Nuclear Regulatory Commission's (NRC) request for comment regarding its consideration of changes to its guidance on foreign ownership of nuclear licenses. A look at the text and legislative history of the two major statutes on atomic energy demand that the NRC continue to maintain strict and strong restrictions on foreign ownership and raise questions as to whether any change could be made absent Congressional direction. But even if the NRC did have the authority to act unilaterally, a review of the rules governing foreign ownership of two other key industries – broadcasting and airlines – reveals that the NRC could maintain strong restrictions on foreign ownership of nuclear power plant licenses or even strengthen its foreign ownership rules and remain consistent with other analogous federal policies. In fact, it is my belief that the Commission should set forth rules that prohibit a company from possessing a nuclear power plant license if foreign entities own or control more than 25% of the voting interest of the entity seeking to possess the license.

The NRC's current regulations state that "any person who is a citizen, national, or agent of a foreign country, or any corporation, or other entity which the Commission knows or has reason to believe is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, shall be ineligible to apply for and obtain a license," in accord with the United States Code. The current regulations explicitly prohibit a foreign entity from having total control of a nuclear license. The regulations have also been interpreted to make granting licenses to entities with foreign ownership above 50% extremely difficult. Indeed, one commenter at a recent public meeting held by the NRC argued that the interpretations make it "de facto illegal" for the NRC to grant a license to an entity which is majority foreign owned.

On June 3, 2013, the NRC requested written public comment on its regulatory requirements "related to foreign ownership, control, or domination of commercial nuclear power plants." In particular, the NRC requested comments about "foreign ownership, control or domination issues up to and including 10 percent indirect foreign ownership; criteria for

^{1 10} C.F.R. § 50.38.

² 42 U.S.C. § 2133(d).

³ Michael Mariotte, "Foreign Ownership, Control, *Or* Domination of U.S. Nuclear Reactors," Slideshow at Public Meeting of U.S. Nuclear Regulatory Commission, Nuclear Information and Resource Service, June 19, 2013, (hereinafter "Slideshow"), available at http://pbadupws.nrc.gov/docs/ML1316/ML13169A180.pdf.

U.S. Nuclear Regulatory Commission Page Two of Nine August, 2, 2013

assessing proposed plans or actions to negate direct or indirect foreign ownership or foreign financing of more than 50 percent but less than 100 percent," and "the availability of alternative methods such as license conditions for resolving" foreign ownership, control, or domination issues. The Federal Register notice indicates that this request for comment on foreign ownership regulations originally arose from a request for a license for a particular plant; specifically, from the Commission's decision against granting a nuclear license for the Calvert Cliffs Nuclear Power Plant to an entity that was 85% owned by the government of France.

It is clear that the proposals to loosen the foreign ownership restrictions the NRC is considering would violate the law and are also in conflict with both the text and legislative history of the guiding statutes of the Commission. Moreover, a decision to loosen foreign ownership restrictions would additionally be in conflict with similar prohibitions on foreign ownership within other key sectors.

1. The NRC is prohibited by law from licensing nuclear reactors to foreign entities.

The text of the Atomic Energy Act of 1954, the Act which governs the NRC and nuclear energy more broadly – contains a firm restriction on the issuance of nuclear power plant licenses to foreign entities. According to Section 103 of the Act,

No license under this section may be given to any person or activities which are not under or within the jurisdiction of the United States No license may be issued to an alien or any corporation or other entity if the Commission knows or has reason to believe it is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. In any event, no license may be issued to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security or to the health and safety of the public.⁷

This statute was not the first to include such a prohibition. The Atomic Energy Act of 1946, the first comprehensive legislation on nuclear power and the immediate predecessor to the 1954 Act, also had restrictions on granting sensitive nuclear material to foreign persons:

⁴ 78 Fed. Reg. 33122, June 3, 2013.

⁵ Id.

⁶ See Notice of Issuance of Determination Letter, In the Matter of Calvert Cliffs 3 Nuclear Projects, LLC, and Unistar Nuclear Operating Services, LLC (Calvert Cliffs Nuclear Power Plant, Unit 3), Docket No. 52-016, April 8, 2011, at page 2, available at http://www.nirs.org/nukerelapse/calvert/NRCforeigndeterminationletter.pdf.

⁷ Atomic Energy Act of 1954 (as amended), codified in the United States Code at 42 U.S.C. § 2133, available at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0980/v1/sr0980v1.pdf#page=13.

U.S. Nuclear Regulatory Commission Page Three of Nine August, 2, 2013

The Commission shall not -(1) distribute any fissionable material to (A) any person for a use which us not under or within the jurisdiction of the United States, (B) any foreign government, or (C) any person within the United States if, in the opinion of the Commission, the distribution of such fissionable material to such person would be inimical to the common defense and security.⁸

Thus, the restriction on foreign access to critical elements of nuclear power has existed for as long as laws regarding nuclear power have existed.

Of course, the 1954 Act does not merely forbid the issuance of licenses to foreign entities. It goes a step farther and precludes the issuance of a license even to any entity that the NRC "knows or has reason to believe" is "owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government." The plain text of the statute, which is the first thing any court reviews when engaging in statutory construction, makes clear that nuclear power plant licenses are to be restricted from being licensed to foreign persons, without exception. In fact, it clearly commands that the NRC should not issue licenses to any corporation that is majority controlled, directly or indirectly, by foreign entities. So strong is the prohibition that the NRC is forbidden from issuing a license even to a corporation that the Commission has reason to believe is dominated by a foreign entity. This ban applies to more than just majority foreign ownership, however.

My review demonstrates that there are few examples in our federal laws of such a broad, unmitigated prohibition against foreign ownership. Contrary to the claims of some commenters at the June 19, 2013 public comment meeting, this statutory ban cannot be overridden by rulemakings from the Commission unless the Commission intends to violate the law and defy the clearly expressed will of the Congress.⁹

2. The legislative history of the Atomic Energy Act provides further evidence that Congress did not intend to provide discretion to alter foreign licensing restrictions to the NRC.

The Atomic Energy Act of 1954's prohibition on foreign licensing of nuclear reactors is fairly well known. What is less well-known is that the body of legislative history on this provision offers additional support to the idea that the NRC must maintain broad, strong restrictions on foreign ownership of nuclear licenses. Given the strong language in the statute against making licenses available to foreign owners of nuclear reactors, we should assume that if any Member of Congress had any concerns about such a broad proscription that Member would have voiced it during consideration of the Atomic Energy Act of 1954. Yet, staff with the

⁸ Atomic Energy Act of 1946, Section 5(d), available at http://www.osti.gov/atomicenergyact.pdf; see also Section 7(c) ("No license may be given to any person for activities which are not under or within the jurisdiction of the United States, to any foreign government, or to any person within the United States if, in the opinion of the Commission, the issuance of a license to such person would be inimical to the common defense and security.").

⁹ See Slideshow, Pages 10-11.

U.S. Nuclear Regulatory Commission Page Four of Nine August, 2, 2013

Congressional Research Service has reviewed the legislative history of the Act and informed my staff that they did not identify any statements on the subject of foreign ownership of licenses when the Act was considered on the Floor. Additionally, during 18 hearings on the bill in Committee prior to passage, not one Member even broached the subject of foreign ownership of licenses [see Appendix for a list of these hearings].

The topic of foreign ownership did come up via outside witness testimony. Specifically, a few outside witnesses testified on the draft legislation in 1954 that a provision prohibiting the issuance of licenses to any company whose stock is more than 5 percent controlled by a foreign entity was unworkable as a practical matter because it would be difficult to determine, on an ongoing basis, the identities and nationalities of all shareholders in a company in order to know whether 5 percent of them were foreign entities. ¹⁰ One witness recommended that the provision be changed from an explicit 5 percent restriction on ownership to a provision that restricted ownership to companies that are dominated or controlled by foreign entities, a recommendation that was accepted in the enacted version of the Act. ¹¹ Yet, given that this change was apparently made due to practical and not philosophical reasons, it appears that the original intent of Congress was to greatly restrict foreign ownership. Indeed, an argument could be made that Congress viewed foreign domination or control as a situation where more than 5 percent of a company's stock is owned by a foreign entity.

The legislative history of hearings on the Atomic Energy Act of 1946 is similarly spare on the subject of foreign ownership of licenses; still, what little legislative history is available offers further support for a strict reading of Section 103. Based on research, it appears that the idea to restrict nuclear plant licenses to not just foreign entities but also certain domestic persons came from the United States Navy. Specifically, in a hearing before the House Committee on Military Affair on June 12, 1946, a representative of the Navy offered the following testimony in support of restricting nuclear materials to persons who might be a risk to national security:

Also of great importance to the Navy are the provisions of sections 5(a)(4), 5(c)(2), 5(d)(1) and 7(c) under which the Commission apparently would be unable to prohibit the distribution of fissionable or other materials and licenses to persons within the boundaries of the United States on the ground that they are deemed to be undesirable from the national security viewpoint. It is extremely important that the Commission have the specific authority within its discretion to refuse to distribute fissionable or other material to residents of the United States of

¹⁰ Additionally, one witness stated that "even if we were able to determine the nationality of our share owners, there is no feasible means by which we could prevent 5 percent of our stock from being purchased by aliens. Since the citizenship provision is inflexible and mandatory, a foreign government could, at relatively small cost, knock a company out of the atomic energy business through open-market purchases of its stock." See Hearings on S. 3323 and H.R. 8862 to Amend the Atomic Energy Act of 1946, Joint Committee on Atomic Energy, 83rd Congress, June 2, 3, 4, 5, 8, 17, and 18, 1954, pages 328.

¹¹ See Hearings on S. 3323 and H.R. 8862 to Amend the Atomic Energy Act of 1946, Joint Committee on Atomic Energy, 83rd Congress, June 2, 3, 4, 5, 8, 17, and 18, 1954, pages 227-228, 327-328, and 464.

U.S. Nuclear Regulatory Commission Page Five of Nine August, 2, 2013

questionable loyalty. Therefore, the Navy urges that the words "or to persons within the jurisdiction of the United States where issuance thereof would be inimical to the common defense and security" be inserted at the end of section 5(d)(1), page 21, line 20; and section 7(c), page 26, line 5.

Again, this edit was apparently accepted without any comment from any Committee Member, and it appears that this addition could also provide a basis for potential future restrictions of licenses to even some Americans that are found to be of questionable loyalty or to whom the issuance of a nuclear reactor license could be inimical to the common defense and security. That such a broad grant of authority to restrict materials related to nuclear power even to American citizens received neither critique nor comment from Members of Congress tells us volumes. After all, we should expect that Congress would have greater concern about the rights of American citizens to access nuclear power and licenses for nuclear power than the rights of foreign entities. As a result, Congress' acceptance of the Navy's recommendation indicates that Congress also accepted that there should be a broad, strong restriction on the issuance of nuclear licenses to foreign entities.

3. Similar bans on foreign ownership in key sectors exist.

Although the text and legislative history of the Atomic Energy Acts of 1946 and 1954 provide more than sufficient evidence that the Commission must by law maintain strong restrictions on foreign ownership of licenses, this issue should not be analyzed in a vacuum. Instead, the Commission would be informed by also reviewing foreign ownership rules for other domestic industries that have such restrictions on foreign ownership. Yet, a review of such rules in two industries that are very sensitive to foreign ownership – broadcasting and airlines – reveals that the Commission's current restrictions on nuclear license ownership are comparable to those that govern other key sectors. If anything, a comparison of these sectors indicates that the Commission's current rules on foreign ownership should not be loosened – they should be strengthened.

Much like the nuclear industry, restrictions on foreign ownership of elements of the broadcasting and airline industries are set forth in statute. Under the Communications Act of 1934 and subsequent amendments:

No broadcast or common carrier or aeronautical en route or aeronautical fixed radio station license shall be granted to or held by --

- (1) any alien or the representative of any alien;
- (2) any corporation organized under the laws of any foreign government;
- (3) any corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any other corporation organized under the laws of a foreign country;

U.S. Nuclear Regulatory Commission Page Six of Nine August, 2, 2013

(4) any corporation directly or indirectly controlled by any other corporation of which more than one-fourth the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representatives thereof, or by any corporation organized under the laws of a foreign country, if the [Federal Communications] Commission finds that the public interest will be served by the refusal or revocation of such license. 12

Although the use of specific number cut-offs for stock ownership renders this set of restrictions slightly different from Section 310(d) of the Atomic Energy Act of 1954, the prohibition against ownership of broadcast carriers is broadly in line with restrictions on nuclear licenses. Both statutes prohibit ownership to foreign corporations and aliens. Both statutes seek to prevent ownership of licenses to domestic corporations that are owned or directly controlled by foreign entities. And both statutes seek to limit ownership of licenses to domestic corporations that are indirectly controlled by foreign entities.

Yet, there are subtle differences. First, the Communications Act allows the Federal Communications Commission ("FCC") to restrict broadcast licenses only to those companies whose stock is more than 25% owned by foreign entities if the Commission "finds that the public interest will be served by the refusal" of a license. There is no such exemptive power provided to the NRC in the Atomic Energy Act. This distinction suggests that the NRC should be even more parsimonious than the FCC in doling out licenses to foreign companies which are substantially foreign owned.

More importantly, by establishing a 25% cut-off in subsection 4, the Communications Act implies that indirect control can occur at this level of stock ownership. Given that the national security risks of a foreign entity controlling a nuclear plant are greater than those associated with a foreign entity controlling a broadcaster, we should read this difference as implying that indirect foreign control of a company seeking a nuclear license could still occur with less than 25% foreign control of a company's stock. The NRC should ensure that its current rules regarding foreign ownership of nuclear licenses are at least broadly in line with other sectors'. As Michael Mariotte said during the June 19, 2013 public meeting on this issue, witnesses to congressional hearings on nuclear licenses argued that the FCC Act should be used as a guiding precedent for licenses partially owned or controlled by foreign entities, a fact that offers further support for a limit of foreign ownership at 25%. ¹³

¹² 47 U.S.C. 310(b) Notably, this 75% limit on voting interest is not a recent invention, but dates back to one of the earliest aviation laws, the Civil Aeronautics Act of 1938.

¹³ See Statement of Michael Mariotte, Transcript of Public Meeting on Foreign Ownership, Control or Domination, June 19, 2013, at page 92, available at http://pbadupws.nrc.gov/docs/ML1318/ML13184A091.pdf; see also, Slideshow at 7.

U.S. Nuclear Regulatory Commission Page Seven of Nine August, 2, 2013

Similarly, under current aviation law, no person may be an air carrier unless that person is a citizen of the United States, and there are significant restrictions on who may be a citizen.

In fact, "citizen of the United States" means—

- (A) an individual who is a citizen of the United States;
- (B) a partnership each of whose partners is an individual who is a citizen of the United States; or
- (C) a corporation or association organized under the laws of the United States or a State, the District of Columbia, or a territory or possession of the United States, of which the president and at least two-thirds of the board of directors and other managing officers are citizens of the United States, which is under the actual control of citizens of the United States, and in which at least 75 percent of the voting interest is owned or controlled by persons that are citizens of the United States. ¹⁵

Much like with broadcast law, the aviation restrictions on foreign ownership show that the current regime on ownership of nuclear licenses is not unduly strict by comparison. Yet, it is worth drawing attention to a discrepancy between foreign ownership of airlines and foreign ownership of nuclear licenses. Our current aviation laws prohibit foreign entities from owning 25% of a domestic airline, but the NRC allows a company that is 50% owned by foreign investors to have a nuclear license. The United States government currently restricts foreign ownership of airlines for the same prime reason we restrict foreign ownership of nuclear plants: concern about foreign access to a critical sector. Yet, it defies reason to suggest that we should be more concerned about foreign ownership of airlines than of nuclear plants; the risks associated with a rogue foreign person, company, or government gaining control of a nuclear plant or using its technology to develop or enable a nuclear weapons program are far greater than those associated with a rogue actor owning an airline. Nuclear plants can cause horrific damage to property and people in the event of an accident or act of sabotage. As evidenced in Fukushima, a single nuclear power plant meltdown could devastate millions of square miles of this country. Additionally, nuclear weapons programs in several countries, including India and Pakistan, began through access to civilian nuclear technology. 16 The fact that the Commission is currently more lenient with foreign ownership of its nuclear reactor licenses than the airline industry is shocking. In fact, this double standard stands as evidence that the Commission should not loosen its restrictions on foreign ownership of licenses, but should tighten its current restrictions and adopt the 25% limit.

Given the text of the Atomic Energy Act of 1954, the legislative history of the Atomic Energy Acts of 1946 and 1954, and the current restrictions on foreign ownership of both the broadcasting and airline industries, I do not believe this Commission should initiate a rulemaking

^{14 49} U.S.C. § 40102(2).

^{15 49} U.S.C. § 40102(15); see also 49 U.S.C. § 41101 (providing additional detail about the granting of licenses). 16 See, e.g., Edward J. Markey and Douglas C. Waller, "Nuclear Peril: The Politics of Proliferation," 1982.

U.S. Nuclear Regulatory Commission Page Eight of Nine August, 2, 2013

to relax its current limits on foreign ownership of nuclear reactors. Instead, I urge it to further restrict, rather than loosen, its current requirements to ensure that no reactor license can be issued to any entity or consortium in which 25% or more of voting interest is owned or controlled by foreign entities.

Finally, to better understand the issues surrounding foreign ownership, control or domination of nuclear power plant licenses, I request that you answer the following questions:

- 1) Is it NRC's legal position that there exists a specific statutory basis in either the Atomic Energy Act of 1946, the Atomic Energy Act of 1954, or legislative history connected to the passage of either act for allowing majority ownership or control of a nuclear plant license by a foreign entity? If so, please specify any such basis and provide copies of any legal opinions in support thereof. Please also provide me with copies of all NRC legal analysis related to any efforts to assess or identify a maximum percentage of foreign ownership or control of a nuclear reactor that would, in NRC's view, not be in violation of the Atomic Energy Act of 1946 or 1954.
- 2) Has the NRC sought or received guidance on foreign ownership, control, or domination issues from the FCC during the last 15 years? If so, please describe the content of that guidance.
- 3) Has the NRC sought or received guidance on foreign ownership, control, or domination issues from the Federal Aviation Administration during the last 15 years? If so, please describe the content of that guidance.
- 4) In the Federal Register notice from June 3, 2013 requesting comment on issues surrounding the foreign ownership, control, or domination of nuclear power plant licenses, you state that there will be a "Category 3 Public Meeting on June 19, 2013 to facilitate additional stakeholder engagement and input." Has the NRC scheduled more than one public meeting on this subject? If so, please list the dates and their locations. If the NRC has not scheduled more than one public meeting, please explain why not.
- 5) The proposed Commission rulemaking is not required by statute to be completed by a date certain. As a result, would you consider increasing the public comment period from just 60 days to 180 days to give all interested parties a full opportunity to comment upon the issue of foreign ownership, control or domination? If not, why not?
- 6) The June 3, 2013 Federal Register notice states that the Commission decided to ask staff for "a fresh assessment on issues relating to" foreign ownership, control, or domination as part of the process of considering whether a license should be granted for the "Calvert Cliffs Nuclear Power Plant, Unit 3." Why did that individual case, which involved the request for a nuclear license by an entity that was 85% owned by a foreign entity, prompt

U.S. Nuclear Regulatory Commission Page Nine of Nine August, 2, 2013

this reconsideration of the issues? Which Commissioner or Commissioners proposed this? Did the Commission vote on this matter? If so, how did each Commissioner vote?

Thank you very much for your attention to this important matter. Please have your staff contact Justin Slaughter or Michal Freedhoff of my staff at 202-224-2472 to update them on the Commission's plans and timeframe for implementation thereof, and please provide your response to this letter no later than Friday August 30, 2013. I additionally request that this letter be made part of the official rulemaking docket.

Sincerely,

Edward J. Markey United States Senator

Appendix: List of Committee Hearings Prior to Passage of the Atomic Energy Act of 1954

Amending the Atomic Energy Act. Part 1, *Joint Subcommittee on Legislation, Joint Committee on Atomic Energy*, 82nd Congress, February 19, 20, and 27, 1952 and March 10, 14, and 17, 1952.

Atomic Power Development and Private Enterprise, *Joint Committee on Atomic Energy*, 83rd Congress, June 24, 25, and 29, 1953 and July 1, 6, 9, 13, 15, 16, 20, 22, 23, 27, and 31, 1953.

Contribution of Atomic Energy to Agriculture, *Joint Subcommittee on Research and Development, Joint Committee on Atomic Energy*, 83rd Congress, March 31, 1954 and April 1, 1954.

- S. 3323 and H.R. 8862, To Amend the Atomic Energy Act of 1946, Part 1 of 2, *Joint Committee on Atomic Energy*, 83rd Congress, May 10-14 and 17-19, 1954.
- S. 3323 and H.R. 8862, To Amend the Atomic Energy Act of 1946, Part 2 of 2. *Joint Committee on Atomic Energy*, 83rd Congress, June 2-5, 8, 17, and 18, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 9, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 10, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 11, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 14, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 15, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 21, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 22, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 23, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 24, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 25, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 28, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 29, 1954.

To Amend the Atomic Energy Act of 1946, *Joint Committee on Atomic Energy*, 83rd Congress, June 30, 1954.