United States Senate

July 10, 2020

The Honorable Adam Boehler
Chief Executive Officer
U.S. International Development Finance Corporation
1100 New York Avenue, NW
Washington, D.C. 20527

Dear Mr. Boehler,

We are writing to urge the U.S. International Development Finance Corporation (DFC) to maintain its prohibition against financing international nuclear energy projects. The June 10, 2020, proposal to remove this prohibition from the DFC's Environmental and Social Policies and Procedures (ESPP) would represent a serious and impractical departure from longstanding precedent.[1] International nuclear power projects described by DFC are not a cost-competitive form of zero-carbon energy, remain unproven, will divert funds from higher-priority low-income countries, and are not supported by other development banks. DFC financing of overseas nuclear reactors may offshore the physical risks associated nuclear power, but they would keep U.S. taxpayers on the hook for the steep financial ones.

New nuclear power projects are outcompeted by and far harder to construct than other existing zero-carbon energy sources, making them an ineffective technology to use in meeting the sustainable development goal of the DFC. For example, two new nuclear units under construction at the Vogtle plant in Georgia were supposed to go online in 2016 and 2017; the total cost of the project now exceeds $27 billion, including $12 billion in federally guaranteed loans, and it appears unlikely even to meet the delayed in-service dates of 2021 and 2022.[2] The levelized cost of new nuclear energy in 2019 was $155 per megawatt-hour, nearly four times higher than that for new utility-scale solar or wind ($40 and $41 per megawatt-hour, respectively).[3] Small modular reactors (SMRs) seem unlikely to fare much better than large light water reactors, as one early SMR bid in the United States came in with an artificial cap set at more than three times the cost per kilowatt of renewable generation and storage.[4]

---

[1] *DFC Begins Public Comment Period on Proposed Change to Nuclear Energy Policy*, U.S. International Development Finance Corporation (Jun. 10, 2020), https://www.dfc.gov/media/press-releases/dfc-begins-public-comment-period-proposed-change-nuclear-energy-policy.

[2] Matt Kempner, *Georgia Vogtle nuclear report: more delays, $1B in extra costs, flaws*, Atlanta Journal-Constitution (Jun. 6, 2020), https://www.ajc.com/news/local/georgia-vogtle-nuclear-report-more-delays-extra-costs-flaws/mBxlgXiDcf0SIaTFr0cZXL/.

[3] *Lazard's Levelized Cost of Energy Analysis—Version 13.0*, Lazard (Nov. 2019), https://www.lazard.com/media/451086/lazards-levelized-cost-of-energy-version-130-vf.pdf.

[4] Lois Parshley, *When It Comes to Nuclear Power, Could Smaller Be Better?* Yale Environment360 (Feb. 19, 2020), https://e360.yale.edu/features/when-it-comes-to-nuclear-power-could-smaller-be-better.

Furthermore, the DFC should not be dedicating its limited financing to unproven technologies that present both safety and security risks. Pushing experimental research and development is not part of the DFC's mandate. To date, no SMRs have been successfully brought to market in the United States, leaving substantial questions about how this technology would work in foreign markets. Additionally, research indicates that SMRs produce at least equivalent amounts of radioactive waste per kilowatt hour to conventional nuclear reactors, and the spent fuel they generate could have a higher risk of proliferation because of its high fissile content.[5] The financial costs of safety, security, and waste disposal typically get transferred to host countries which are likely less able to ensure proper amelioration and mitigation.

Moreover, lifting the DFC's prohibition against financing nuclear power would likely direct more funding toward wealthier countries, instead of to the countries that the DFC was created to help. DFC-supported nuclear projects would be likely based in central and eastern Europe or the Middle East – where countries have expressed interest and have recently proposed projects.[6] Investments in these countries will divert much-needed funds from low-income and lower middle-income countries which currently lack the capacity and expertise to build, operate, and decommission nuclear projects.

Finally, if this prohibition is lifted, the DFC would be isolated among multilateral and bilateral development banks in supporting nuclear projects. The World Bank, the Asian Development Bank, the African Development Bank, and major European development finance institutions are unequivocally opposed to financing such projects. If the DFC is the only major development finance institution to be involved in nuclear power, the DFC will not be able to collaborate and share capital burdens with other development banks on these types of projects. This not only puts the DFC out of step with the rest of the development finance world, but also means that DFC will need to carry more financial risk.

With these concerns in mind, we respectfully request written responses to the following questions regarding this proposed rule change by July 31, 2020:

1. The DFC is being stretched thin in its first year of operation — still learning how to responsibly implement the dramatically expanded set of financing tools that Congress authorized under the BUILD Act, while taking on new responsibilities including Afghanistan reconstruction and responding domestically to the pandemic. Why is DFC seeking to lift the restriction on financial support for nuclear power at this moment, particularly given that new high-risk initiatives will require special staff attention and due diligence?

[5] Lindsey Krall, *A Critical Analysis of The Nuclear Waste Management Consequences for Small Modular Reactors*, Stanford University (Jun. 4, 2020), https://fsi.stanford.edu/events/critical-analysis-nuclear-waste-management-consequences-small-modular-reactors.
[6] *Small Nuclear Power Reactors*, World Nuclear Association (June 2020), https://www.world-nuclear.org/information-library/nuclear-fuel-cycle/nuclear-power-reactors/small-nuclear-power-reactors.aspx.

2. On March 4, 2020, you testified that "managing taxpayer risk" is one of "three key aims set out for DFC by Congress."[7] Yet this rule change would allow for investment of taxpayer money in technologies that have not been deployed commercially, even in developed-country markets.
    a. How does DFC intend to assess risk on unproven technologies?
    b. Has the DFC or its predecessor agency, the Overseas Private Investment Corporation, ever taken on a similar technology risk by financing projects that use pre-commercial processes or technologies?

3. According to DFC guidelines, projects can be considered "high risk" when they exhibit "greater potential to impact large geographic areas outside of a project boundary or a large number of people living in nearby communities."[8]
    a. Does DFC believe that SMRs and microreactors would be high-risk projects in this or any other sense?
    b. How would private entity applicants for DFC financing demonstrate sufficient commitment and capacity to manage a nuclear accident in the operation of novel technologies?

4. Other development finance institutions are unlikely to join DFC in financing nuclear energy projects. On March 4, 2020, you testified that "[o]ur partnerships are vital, above all else, in promoting shared values and international norms."[9]
    a. Will the refusal from other banks to finance nuclear projects leave the United States isolated in terms of our ability to leverage our investments in cooperation with other funders?
    b. Is DFC comfortable bearing disproportionate risk on behalf of U.S. taxpayers on nuclear financing projects relative to other projects?

5. Proponents of U.S. nuclear exports recognize "the high capital costs of nuclear projects," but believe that DFC can help by "allowing loans in large sums—and providing loan guarantees to minimize risks associated with new nuclear power plants."[10]
    a. Is DFC willing to divert "large sums" away from other development-enhancing projects to support nuclear power projects?
    b. Does DFC believe it should relieve the nuclear industry of uniquely high financial risks by using loan guarantees or other measures to shift the burden to DFC and U.S. taxpayers?

---

[7] Adam S. Boehler, Testimony before the House Appropriations Subcommittee on State and Foreign Operations and Related Programs (Mar. 4, 2020), https://www.dfc.gov/testimony-DFC-HAP-03042020.
[8] DFC, *Environmental and Social Policy and Procedures* (January 2020), https://www.dfc.gov/sites/default/files/media/documents/DFC_ESPP_NUCLEAR_Redlines_for_NOTICE%20%286.10.2020%29.pdf.
[9] Adam S. Boehler, Testimony before the House Appropriations Subcommittee on State and Foreign Operations and Related Programs (Mar. 4, 2020), https://www.dfc.gov/testimony-DFC-HAP-03042020.
[10] Jennifer T. Gordon, *International co-financing of nuclear reactors between the United States and its allies* (Jan. 9, 2020), https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/international-co-financing-of-nuclear-reactors-between-the-united-states-and-its-allies/.

6. Did any companies request that the DFC remove the prohibition?
    a. If so, which?
    b. Does anyone on the DFC Board of Directors have a financial interest in any such companies?

7. Will you commit to sharing transcripts or credit review documents with Congress if nuclear energy projects are ever considered so that Congress can better understand DFC's approach to risk assessment?

8. As you testified on March 4, 2020, "[w]hen Congress established DFC, it intentionally included the word 'development' in the name to reinforce our core mission."[11] Given higher risks, higher costs, and the dearth of co-financing associated with nuclear energy projects, how would financing these projects instead of renewable energy and other projects advance that core mission of DFC?

9. The BUILD Act gives the DFC new authority to make equity investments in companies or projects. Is the DFC considering using this authority to take equity positions in foreign nuclear projects?

Removing the prohibition on nuclear financing would have serious impacts on the ability of DFC to meet its core mission, protect taxpayer money, and ensure it is investing in projects that prioritize the safety and well-being of the local population. We urge the DFC to respond to our questions about this proposal, and express our opposition to the proposed removal of the prohibition from the ESPP, as international nuclear power is not a cost-competitive sustainable form of energy, presents security risks, and is out of sync with the policies of other development banks. Moreover, this change will take the agency in the wrong direction, diverting funds away from countries most in need. Thank you for your consideration, and we look forward to your prompt response.

Sincerely,

Edward J. Markey
United States Senator

Bernard Sanders
United States Senator

[11] Adam S. Boehler, Testimony before the House Appropriations Subcommittee on State and Foreign Operations and Related Programs (Mar. 4, 2020), https://www.dfc.gov/testimony-DFC-HAP-03042020.