



Department of Energy
Washington, DC 20585

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MEMORANDUM FOR DIRECTORS

FROM: DAVID CRANE
UNDER SECRETARY FOR INFRASTRUCTURE

SUBJECT: CONSIDERATIONS FOR COMMERCIALIZATION AND
FINANCING OF DOE'S LARGE CAPITAL PROJECTS

The clean energy transition-based industrial strategy articulated by Secretary Granholm emphasizes the need to attract private capital through Department of Energy (DOE) programs supporting clean energy investment. The Secretary noted that the more than \$100 billion of Bipartisan Infrastructure Law and Inflation Reduction Act funding to be deployed through financial assistance (including grants and cooperative agreements), prizes, rebates and other government funding across 60 programs is a good start, but not, by itself, a sufficient investment given estimates of \$300-350 billion per year of investment necessary to fully fund the clean energy transition.

Filling the multi-hundred-billion dollar annual clean energy investment gap requires the DOE to focus on important elements of capital formation: ensuring that the terms of the DOE grant and cooperative agreement awards, particularly for large capital projects greater than \$50 million, are sufficiently attractive that project sponsors commit the \$150-200 billion of private sector funds pledged during the selection processes; structuring these projects commercially and financially in a manner that is recognizable and replicable by the private sector, resulting in follow-on projects that are not dependent on DOE funding; and protecting taxpayer dollars against unreasonable risks and consequences of project failure, including risks associated with the failure to obtain a social license to operate or inability to secure a skilled workforce. It is part of the mandate of the DOE to take appropriate risks, and mitigating those risks sufficiently to make projects attractive to the private sector.

Given the number of awarded projects and intentional selection of projects across a wide risk spectrum, it is inevitable that some projects will not go forward and some will not perform to expectation. This is to be expected and not itself a deterrent to private sector-led commercial liftoff. A more concerning scenario is the failure of a program to achieve liftoff because DOE award terms with recipients of financial assistance (hereafter referred to as "project sponsors") do not provide a pathway for selected major infrastructure projects to obtain the necessary financing to be successfully built. Providing consistency across program offices with simple and efficient solutions will facilitate the necessary private capital formation.

This memorandum provides policy direction and clarity to Under Secretary for Infrastructure (S3) program offices, and their contracting and grants offices and officers on the following five matters:

1. DOE's tangible property interest acquired in connection with its financial assistance;
2. Non-federal cost share;
3. Codification of community benefits plans into measurable commitments during the award phase;
4. Program income; and
5. Data collected during the period of award performance.

This is not an exhaustive list of common issues with material impact on commercialization of technologies and the financing of projects. Our intention is to update and expand this list as other such issues are identified. As issues surface across S3 programs, a joint approach and consistency will be beneficial to all programs interfacing with the private sector and finance community recognizing that distinct office missions may require some variation. This memorandum outlines key policy priorities and identifies pathways to achieve these priorities.

Tangible Property Interest

DOE regulations establish that tangible property—real property and personal property including equipment—that is partially funded by DOE is subject to an undivided reversionary interest equal to DOE's contribution towards the project. While this construct has been the standard for DOE financial assistance awards to ensure the protection of taxpayer dollars, DOE's interest in the award property may be disruptive for the types of infrastructure projects funded by S3 programs offices. Thus, a pathway must be established to enable encumbrances for debt financing during the award period for large capital projects funded by DOE. DOE regulations already allow us to approve the use of the award property as collateral. Separately, the Department has statutory authority to vest title to property. For example, Section 309 of the Consolidated Appropriations Act, 2023, authorizes the Secretary to vest unconditional title at the end of the award period for research, development, and importantly, demonstration and deployment projects. Given the number of BIL/IRA projects greater than \$50 million, and the unprecedented level of private sector co-funding required for project success, it is important to provide an approach to DOE's use of its property interest to protect taxpayer interests and ensure project success while being workable for projects to attract private sector financing. The approach should include predictable and consistent rules, tailored to large infrastructure projects that will reduce contracting burden and facilitate project success.

Therefore, if requested and necessary for project success, DOE will enter into one or more standardized Consent Agreement(s) with recipients and third-party lenders clarifying that DOE's interest in the property will not be senior to that of the lender but is expected to be on a *pari passu* basis. DOE is establishing an administrative process for the exercise of the Secretary's 309 authority, which will be delegated to the Heads of Departmental Elements for funding program offices under the Office of the Under Secretary for Infrastructure, to vest title in the property at the conclusion of the award period when specified program goals have been met. After disposition of DOE's reversionary interest, a continuing agreement between the recipient and DOE may remain in place, regardless of the success of the project or ongoing performance under the award, to ensure compliance with data reporting, community benefits commitments, intellectual property rights, continuation of the authorized use and ownership of property, and other such mutually negotiated obligations.

Non-Federal Cost Share

Fifty percent of cost share from DOE-funded demonstration and commercial activities must come from "non-federal" sources as per Section 988 of the Energy Policy Act of 2005. Non-federal cost-share is essential to "stretch the federal dollar" to maximize the impact of federal funding and is a necessary discipline to ensure that our projects are on the path to commercialization with project sponsors having

aligned incentives. While project sponsors may generally use the reduction in tax liability provided by tax credits as a means to fulfill their cost share obligations, it remains important for programs to consider all sources of project funding and revenue including tax credits, when determining the appropriate federal cost share, consistent with any cost-sharing legal obligations.

As a general matter of policy, programs must ensure project sponsors have sufficient “skin in the game.” The same policy imperative applies to large capital projects funded through DOE grants or cooperative agreements where LPO proceeds should not be permitted to meet cost share requirements. S3 program offices and contracting offices should take into consideration the following when evaluating overall financing of a project: (i) project definition for in-scope and out-of-scope, including discrete projects developed in multiple phases; (ii) valuation of non-federal in-kind contributions; and (iii) funding sources (e.g. tax credits), that may be considered non-federal cost share but may not constitute sufficient private sector skin in the game as a matter of policy.

Community Benefits

Commitments to measurable community benefits made by the project sponsors are an essential part of the award agreement and should be structured with clear deliverables and milestones. Community benefits may be translated into contractually binding commitments through the award negotiation process and are important components to ensure viability and success of projects by addressing permitting, social and environmental risks, securing a qualified workforce, and facilitating capital formation. As such, community benefits commitments may be allowable costs under the award or may be non-federal cost share if reasonable, allocable, and with a nexus to the project purpose. These commitments will become part of the awarded project’s go/no-go determination, and as discussed above, should remain in place after any vesting of DOE’s interests at the conclusion of the award. DOE is seeking to have community benefits become sustainable standards and as such, must consider the timing of project commitments, recognize market standards, and remain consistent with timing and magnitude of project expenditures during negotiation of awards.

Program Income

DOE is seeking to catalyze commercial liftoff. Whether a project leads to effective commercialization is dependent on the ability of companies to make a profit at some point in the future. While this is a matter for the private sector, the public sector (DOE) can create conditions that enhance the probability of commercial success. Program income may be used by recipients of DOE financial assistance to expand the project scope or meet cost share obligations until the end of the award. Program income earned is gross program income earned, excluding credits, less costs. Costs may include operating and maintenance costs, the cost of servicing debt and reserves, and the cost associated with the generation of program income earned that is not charged to the agreement or award.

Data Sharing

In order for DOE to facilitate the commercial liftoff of clean energy technologies across the S3 portfolio, programs may need to receive both technical and commercial data from awarded projects. DOE intends to analyze that data and release it to the marketplace in a sufficiently detailed but aggregated and anonymous form to provide important assistance to industry participants, new entrants, and third-party financiers while ensuring protection of any underlying sensitive information. This aggregated and anonymized data will provide critically valuable insights to ecosystem participants and help signal that the technology is sufficiently mature to be financed. For these analyses, DOE will likely seek data that includes technical and operational performance data; cost data; environmental, economic impact, and employment data; and

derived analytical data. While the DOE mission supports the dissemination of data and data analyses, it is critical that any such dissemination respects and protects proprietary and sensitive data of the project sponsors and that the Department receives appropriate permission at the time of negotiation, during the application process, or during performance if an unanticipated need should arise. DOE programs will maintain rigorous protection of proprietary and sensitive data.