Proposed Language to Create an Advanced Front-End Engineering & Design (FEED) Grant Program under Title 17 of the Energy Policy Act of 2005 (P.L. 109-58; 42 USC Sec. 16511, et. seq.)

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AFCC Request:

AFCC requests that the Committees of Energy and Commerce and Energy and Natural Resources consider amending Title XVII of the Energy Policy Act of 2005 (P.L. 109-58; 42 USC Sec. 16511, et. seq.) by:

(1) adding a definition for "Grant" at the end of Section 1701, and
(2) adding a new Sec. 1706 to provide grant funding on a 50-50 cost-share basis to companies pursuing commercial-scale projects that will use innovative, first-of-their-kind technologies, with the grant proceeds used to complete the front-end engineering and design (FEED) that is necessary for the projected to advance toward construction and qualify for a loan guarantee under the Title XVII Innovative Technologies Program.

AFCC requests that Title XVII be amended as follows:

By adding at the end of Sec. 1701. DEFINITIONS:

(6) GRANT. – The term "grant" means a financial award using a competitive process as set forth in 10 CFR 600, Subpart A.

and by adding at the end of the Title:

Sec. 1706. GRANTS FOR ADVANCED FRONT-END ENGINEERING AND DESIGN.

(a) IN GENERAL. – The Secretary shall establish a grant program within the Loan Programs Office to provide grants to projects that meet or will meet the eligibility requirements under Sec. 1703, with the grant funds used for the completion of advanced engineering, design, and other pre-construction activities that are necessary to proceed with applying for a Guarantee under 10 CFR 609 and to build a facility or facilities using innovative technologies.

(b) REQUIREMENTS. – Grants awarded under this Section shall:

(1) be limited to projects that meet or will meet the eligibility requirements under Sec. 1703;
(2) be awarded on a 50-50 cost share basis; and
(3) provide the grantee with the option, upon completion of grant-funded activities, of either applying or not applying for a Guarantee under this Title.

(c) APPLICATIONS. – The Secretary shall establish a competitive application process as provided under 10 CFR 600.

(d) AUTHORIZATION OF APPROPRIATIONS. – Funding for grants under this Section shall be annually renewing and shall come from the interest payments received by the Treasury Department during the previous fiscal year from the repayment of loan obligations awarded under this Title.

AFCC's Justification / Rationale for This Request:

Financing innovative, disruptive technologies is not something private sector lenders readily embrace nor do very often.

This is because projects that are using something that is brand new, unproven, and never done before have a high degree of risk, which traditional lenders and sources of equity are – with very few exceptions – unwilling to assume.

Three programs have been established by Congress to address this challenge – to bridge the "valley of death" that has claimed far too many promising, game-changing technologies, processes, and materials that could have benefited the American economy and public:

- The *Department of Energy's Title 17 Innovative Technologies Loan Guarantee Program*
- The *Department of Energy's Advanced Technologies Vehicle Manufacturing Loan program,* and
- The *Department of Agriculture's Section 9003 Biorefinery, Renewable Chemical, and Biobased Manufacturing Assistance Loan Guarantee program*

As each new technology, process, and material is commercialized and deployed:

- jobs are created
- the economies of local communities are boosted
- community tax receipts are generated
- the public benefits, and
- the U.S. becomes a global leader and innovator in the development and deployment of these technologies, processes, and materials

While the programs created by Congress provide a critical bridge for being able to commercialize innovations, there still is another **"valley of death"** that can stop a promising innovation in its tracks before it reaches the point where it can apply for one of the loan guarantee programs.

This other "valley of death" is the pre-construction costs – the engineering, design, and permitting that must be carried out before a project can qualify for and can apply for one of the new-technology loan or loan guarantee programs.

The funds necessary to carry out the pre-construction steps that must be fully in place to build a facility is some of the hardest money to raise:

- Banks do not provide loans for activities that do not generate revenues to pay off their loans
- Investors often are wary of projects that have new, first-of-their-kind, never-commercialized-before technologies without a successful, previously established money-generating return on investment
- Thus, when they do invest, they take large bites out of equity to mitigate their risk .

These are the reasons AFCC is asking that a grant program be created within the Department of Energy's Loan Program Office to assist with the critical, must-complete pre-construction costs on a cost-share basis.

All the struggles and investments that are necessary to advance an innovation through each of the Technology Readiness Levels (TRLs) -- research, development, testing, validation, prototyping, and piloting stages – will be for naught unless the innovation can be deployed so that the Nation can benefit.

Without a path to commercialization, no innovation advanced through R&D will be able to become reality.

Funding for the grant program being proposed by AFCC can be drawn from the $250+ million in annual interest payments that currently are being paid to the Treasury on current Title 17 and ATVM loans, revenues that will increase as more projects are able to complete their pre-construction steps and apply for the Title 17 and ATVM loans.