

\*This PDF represents a temporary holdover document until I receive amendment text, that reflects the following, from Legislative Counsel\*

- Innovative Shipyard Project
  - The Secretary shall collaborate with the Nuclear Regulatory Commission, the Department of Energy, the Nuclear Reactor Innovation Center (NRIC) of the Department of Energy, the Marine Administration of the Department of Transportation, and other relevant agencies, to carry out the Innovative Shipyard Project—a program that calls for the development and construction of two DOD-owned and operated-innovative shipyards.
    - Innovative shipyard—one that incorporates emerging energy technologies, including advanced nuclear reactors, to enhance the shipyard’s efficiency and effectiveness.
      - Advanced nuclear reactor—incorporate the definition of advanced nuclear reactor from H.R. 2938 from the 118<sup>th</sup> Congress (+ could be a land-based or water-based reactor)
    - Other Emerging technologies that the innovative shipyard may incorporate: advanced manufacturing; 3D printing; artificial intelligence; robotics; etc.
  - Four-step Milestone-based Funding Approach
    - Funding shall be disbursed into the Innovative Shipyard Project Trust Fund (see below) as the Secretary meets milestones as described below.
      - In other words:
        - Milestone #1: Within 120 days after enactment of this Act, the Secretary, in consultation with MARAD, NRIC, and the Department of Energy, shall accumulate, finalize, and submit a detailed list of at least 15 different domestic locations to Congress that could incorporate the innovative shipyard project.
          - Such domestic locations may include: retired shipyards/vacant shipyards/DOD owned shipyards/MARAD owned shipyards
            - Background: There are currently 4 active naval shipyards that are used to repair/maintain the Navy’s nuclear-powered ships. There are also 7 Naval shipyards that have closed over the years—these might be intriguing options to consider.
              - Also, many private-sector shipyards have closed in past decades.
      - Once the detailed list of at least 15 different domestic locations is submitted to Congress, 20% of the funding will be for the Innovative Shipyard Project, and such funding allocated may be held in an Innovative Shipyard Project Trust Fund—to be used for the purposes of completing the innovative shipyard project

- Innovative Shipyard Project Trust Fund: At each stage of the Innovative Shipyard Project, once a milestone is completed, such corresponding percentage of money (e.g., 20%) shall be provided to the Trust Fund. Within the Trust Fund, the funding shall be split into half, with one half of such funding to be used for one of the two subprojects (i.e., one of the two selectees listed below)\*\*\*
    - This will be the same throughout, once a milestone is completed.
- Milestone #2: Within 150 days after enactment of this act, once the Secretary submits the list of at least 15 potential locations that could be utilized for the Innovative Shipyard Concept, the Secretary shall issue to the public a notice of opportunity to submit design concepts for each of the innovative shipyard subprojects.
  - The agencies that are consulting with the Secretary, other than the NRC, shall be encouraged to promote industry engagement in this design submission opportunity.
    - After issuance of the notice of opportunity, industry has 365 days to submit a design for the innovative shipyard project.
    - After the design submission timeline closes, the Secretary will have 45 days to select and finalize two different innovative shipyard design concepts, one for each subproject.
- 20% of the funding will be allocated for the Innovative Shipyard Project once the two design concepts are finalized and approved by the Secretary (in consultation with the above agencies).
  - \*\*\*The Secretary shall select two innovative shipyard concept designs (i.e. selectees) (with no one entity selected for more than one subproject), based on the following criteria:
    - The proposed site location, including the condition of facilities and equipment on such proposed site location;
    - The proposed utilization of advanced nuclear technology;
    - The proposed utilization of other emerging technologies;
    - Estimated cost, including estimated amount of non-federal funding provided;

- Any other criteria the Secretary determines relevant and appropriate.
  - Milestone #3: 15% of the funding shall be allocated for each subproject once all regulatory processes relating to such subproject are adequately completed to enable the subproject to move forward with construction, as determined by the Secretary.
  - Milestone #4: The remainder of the funding (5%) will be allocated for each subproject once the subproject is approved and officially opens for operation.
  - Shot Clock for Funding—All funding authorized under this Act (and not already provided to the Trust Fund) shall expire and be returned to the Treasury within 10 years after enactment of this Act.
- Considerations associated with carrying out the Innovative Shipyard Project
  - The Secretary shall collaborate with the Secretary of the Navy to incorporate lessons learned from the Naval Nuclear Propulsion Program into the Innovative Shipyard Project.
  - The Secretary shall consult with DOE and industry stakeholders to develop appropriate regulations to allow the Department of Defense to license, construct, operate, maintain, and decommission, such technology utilized under the Innovative Shipyard Project.
  - The Secretary shall evaluate the feasibility of utilizing Innovative Shipyards developed under the Innovate Shipyard Project for defense purposes, but whenever feasible, to also utilize such innovative shipyards for the purpose of constructing, repairing, storing, and decommissioning DOD owned marinized nuclear technology, including floating nuclear barges, anchored nuclear platforms, nuclear-powered vessels, etc.
    - Also can use the shipyards to store advanced nuclear technology, say to house such reactors in the event they are deployed to assist with natural disaster response efforts (see below)
    - Also how such shipyards can be utilized to “berth” nuclear-powered vessels.
  - The Secretary shall collaborate with the DOD Manufacturing Innovation Institutes when carrying out the Innovative Shipyard Project.
  - The Secretary shall evaluate the use of the DOD’s defense standardization program (DSP) to assist with standardizing components to be utilized when constructing shipyards developed under the Innovative Shipyard.
  - Dual Use Cases of Advanced Nuclear Technology Innovative Shipyards
    - The Secretary shall collaborate and carry out appropriate regulatory actions, in consultation with the Chairman of the Nuclear Regulatory Commission, NRC, and the Secretary of

Energy to allow for alternative products produced from advanced nuclear technology at such innovative shipyard, other than electricity, to be sold to the commercial market.

- Priority—DOD has priority claim (cf. selling to the commercial market) to use any alternative product produced from advanced nuclear technology for DOD purposes.
- Potential Alternative Products That May Be Produced From Advanced Nuclear Technology
  - Hydrogen; alternative sustainable fuels; ammonia; potable water produced nuclear-powered desalination; etc.
- The Secretary shall oversee all actions relating to the potential sale of alternative products produced from advanced nuclear technology on DOD installations.
  - The Secretary shall explore §50.22 and implement appropriate regulations, in relation to §50.22, for DOD advanced nuclear technology.
- Any such profits from selling an alternative product generated from advanced nuclear technology at innovative shipyards that's sold to the commercial market shall be put into the Innovative Shipyard Project Trust Fund
  - The Secretary shall use these profits to assist with paying for the upkeep and additional deployment of advanced nuclear technology at innovative shipyards, and any other purpose the Secretary deems appropriate.
  - Once the 10 year shot clock occurs, any profits received from selling alternative products produced under this section shall remain in the Innovative Shipyard Project Trust Fund until the Secretary takes the funding out.
- Such alternative products may be produced from either land-based advanced nuclear reactors or marinized advanced nuclear reactors