The Deepwater Port Act: Understanding the Licensing Process

LT Ken Kusano*

**U.S. Coast Guard Headquarters (G-MSO-5); Deepwater Ports Standards Division, Washington, D.C.*

Abstract

When crude oil prices recently spiked above $45 a barrel, the energy shortages intensified the public's concerns and prompted policy makers to further act on alternative resources. As economists forecast domestic natural gas production shortages, mitigation efforts have been concentrated on the importation of liquefied natural gas. The Deepwater Port Act (DWPA) of 1974, as amended, established a licensing process for ownership, construction and operation of manmade structures beyond the U.S. territorial sea. Since its passage, the DWPA has been modified twice to streamline the application process and to promote the offshore importation of natural gas in addition to oil. Advantages of a deepwater port are to minimize safety and security risks associated with onshore facilities. The DWPA requires the Secretary of Transportation to designate an adjacent coastal state and obtain consent of the Governor for license approval. This paper will discuss how the U.S. Coast Guard works in cooperation with the California State Lands Commission to ensure compliance with the National Environmental Policy Act and California Environmental Quality Act.

Deepwater Ports Standards Division (G-MSO-5):

"The Director of Standards is committed to the development of initiatives, policies and regulations designed to enhance maritime safety and preserve the marine environment through the cooperative efforts of partnerships between the Coast Guard, the marine community and the public." - Joseph J. Angelo, Director

The Deepwater Port Standards Division is responsible for developing and maintaining regulations and standards for deepwater ports (DWP). Current regulatory projects include the Temporary Interim Rule for DWP in 33 Code of Federal Regulations Subchapter NN. Specifically, Subchapter NN updates existing rules and supplements provisions for natural gas. The passage of the Maritime Transportation Security Act of 2002 (MTSA), which added natural gas to the Deepwater Port Act, heightened interest within the energy industry to develop DWP. As of September 2004, eight DWP license applications have been received since the MTSA was signed into law in November 2002.

The Demand for Energy and Natural Gas:

Federal and State policy makers have examined ways to ensure an adequate and reliable energy supply for the U.S. economy. They have proposed diverse methods in meeting America's energy needs. One option in meeting the energy shortage is through the use of natural gas. Natural gas consumption is expected to increase 38% by 2025, while domestic production of natural gas will decrease. To ensure affordable and reliable natural gas for the U.S. economy, the energy suppliers will need to expand key components of the nation's energy infrastructure.

It is anticipated that North American natural gas production will provide only 75% of long term U.S. needs through 2025. Importation of natural gas will likely provide approximately 17% of the U.S. demand in 2025. The Energy Information Administration's *Annual Energy Outlook - 2004* reported that net natural gas imports are expected to increase from 0.2 trillion cubic feet in 2002 to 4.8 trillion cubic feet in 2025. During that time frame, an average annual increase of 3.2% is projected. Facility expansion at four of the existing onshore natural gas terminals have been initiated; yet, additional facilities will be required to meet that demand. Currently, majority of the proposed projects have been initiated in the Gulf Coast.

Properties of LNG:

LNG stands for liquefied natural gas. LNG is natural gas cooled to a temperature of approximately minus 260°F at atmospheric pressure at which point it condenses to a liquid. It is composed primarily of methane, with small amounts of other liquefied petroleum gases. As a cryogenic liquid, LNG is odorless, colorless, non-corrosive and non-toxic. LNG is neither flammable nor explosive; however, when LNG is regasified, the vapors are flammable only in concentrations of 5 to 15 percent natural gas when mixed with air. Although flammable, natural gas will not explode in an unconfined environment.

Natural gas can be imported to the United States from distant sources in the form of LNG. Since LNG occupies only a fraction of the volume of natural gas, and takes up less space in a 600 to 1 ratio, it is more economical to transport across large distances and can be stored in larger quantities. Liquefying natural gas makes it feasible to transport natural gas by ship and store it in preparation for vaporization and delivery to remote markets.

LNG supplies come primarily from locations where large gas discoveries have been made, primarily in Algeria, Indonesia, Trinidad, Nigeria, Malaysia, Qatar, Oman and Australia. A limited quantity of LNG is produced in Alaska for importation as well. Typically, these locations are remote from areas of high natural gas demand and the use of pipeline would be infeasible.

LNG is transported in large, specially engineered ships. These ships are double hulled and can have a cargo capacity of 125,000 cubic meters or more. These LNG carriers are fitted with a special cryogenic cargo containment system inside the inner hull to maintain the LNG at atmospheric pressure and minus 260°F. Currently, there are 167 ships in the

worldwide LNG fleet and more 70 are on order to meet anticipated future demand. LNG has been handled safely for decades; however, the industry is not without incidents and has maintained a relatively enviable safety record. Worldwide, there are currently 17 LNG export liquefaction facilities and 40 import regasification terminals handling approximately 120 million metric tons of LNG annually. There are currently about 200 storage facilities worldwide, some operating since the mid 60's.

Actions to Expedite Energy-Related Projects:

Given that various agencies and economists have documented the increasing demand for energy, actions to expedite energy availability was identified and implemented. By the authority vested in the President by the Constitution, Executive Order (EO) 13212 "Actions to Expedite Energy-Related Projects" was signed on May 18, 2001 (Federal Register Vol. 66, No. 99, pg 28357). The EO sets forth Administration policy that executive departments and agencies must take appropriate actions, to the extent consistent with applicable laws, to expedite projects that will increase the production, transmission or conservation of energy. Additionally, EO 13212 directs agencies to expedite their reviews of authorizations or permits for energy-related projects and to take other actions necessary to accelerate the completion of such projects. Albeit, agencies shall ensure that safety, public health and environmental protection is maintained.

History of the Deepwater Port Act: (Title 33 U.S. Code Chapter 29, 1501 et seq.)

In 1974, Congress passed the Deepwater Port Act (DWPA) to:

- authorize and regulate the location, ownership, construction and operation of deepwater ports in waters beyond the territorial limits of the United States;
- provide protection of the marine and coastal environment by preventing or minimizing any adverse impact which might occur as a consequence of the port;
- protect the interests of the United States and those of adjacent coastal States in the location, construction and operation of deepwater ports;
- protect the rights and responsibilities of States and communities to regulate growth, determine land use and otherwise protect the environment in accordance with law;
- promote the construction and operation of deepwater ports as a safe and effective means of importing oil into the United States and transporting oil from the Outer Continental Shelf (OCS) while minimizing tanker traffic and the risks attendant thereto; and
- promote oil or natural gas production on the OCS by affording an economic and safe means of transportation of OCS oil or natural gas to the United States mainland.

A deepwater port is defined as any manmade structure, including pipeline, located beyond the State's seaward boundaries intended for use as a port or terminal for transportation, storage or further handling of oil or natural gas. Since the passage of the DWPA of 1974, the only operational deepwater port in existence today is the Louisiana Offshore Oil Port (LOOP). Congress recognized the competition the deepwater ports encountered with alternative modes of transportation and amended the Act in 1996. The primary purpose of the 1996 Amendments were to assure that the regulations in the DWPA were not more burdensome or stringent than necessary in comparison to the

regulations of other modes of importing or transporting oil. To lessen the burden, it also promoted innovation, flexibility and efficiency in the preparation and processing of the license. In addition to the streamlining process, the Secretary of Transportation delegated responsibilities for processing licenses to the U.S. Coast Guard and Maritime Administration (MARAD).

In 2000, due to the Amendments in 1996, the importation of natural gas, which would utilize offshore structures, was proposed by industry to the U.S. Coast Guard. Prior to this, the DWPA solely considered crude oil and did not specifically allow the importation of natural gas. Subsequent to dialogue in clarifying jurisdictional roles and procedures for the application process, Coast Guard proceeded with proposing legislative changes to the DWPA. Unfortunately, the tragic events of September 11, 2001 changed the focus of the entire country in regard to public safety.

Following the events of 9/11, potential security threats were analyzed throughout the United States in all forms of transportation and industries. Soon after, Congress implemented a legislation entitled the Maritime Transportation Security Act of 2002 (MTSA). In doing so, Congress assessed the risks that affected the maritime environment that included the potential hazards of LNG. In November 2002, the President signed the MTSA formally amending the DWPA to extend the definition of deepwater ports to include natural gas facilities, implement measures to improve vessel and facility security.

The Deepwater Port Act Licensing Process:

The U.S. Secretary of Transportation delegated the processing of an application for a deepwater port to the MARAD and U.S. Coast Guard. Even with the implementation and transfer into the Department of Homeland Security, U.S. Coast Guard has retained its authority and role in processing these applications. The authority to issue, transfer, amend or reinstate a license for the construction and operation of a deepwater port remained with the MARAD through the issuance of a Record of Decision (ROD). The U.S. Coast Guard, in accordance with Section 6 of the DWPA, retained the role of establishing the environmental review criteria for evaluating a proposed deepwater port. In conjunction with the statutory timeline of the DWPA of 1974, as amended, the MARAD and U.S. Coast Guard must abide by the National Environmental Policy Act (NEPA) (Section 102(2)(c)), as implemented by the Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations Parts 1500-1508) and other applicable regulations.

Statutory Timeline of DWPA:

The DWPA license review process is driven by a series of legally mandated deadlines, totaling a maximum of 356 calendar days from the date that the application is filed. The DWPA mandates that there be a single NEPA process for all Federal agencies in the license application review process. Hence, there is a need to fully incorporate all of the necessary information and analysis to meet Federal and State environmental requirements, as well as concerns by the public, in the one NEPA document. The

granting of the Federal or State permits or other authorities based on the NEPA analysis may occur at a later date. However, the NEPA process for the license application review must conclude that the proposal is substantially in compliance.

- The U.S. Coast Guard has a maximum of 21 calendar days from the date of application submittal to perform a completeness review. If determined complete, the USCG then has a maximum of 5 calendar days to publish a Notice of Application filing in the Federal Register.
- The Federal Register notice triggers a maximum 240 day period in which to perform an application review, complete a NEPA process and hold a final public hearing.
- The DWPA mandates that there be at least one public hearing in each adjacent coastal State for each application. The final public hearing must occur no later than 240 days after the publication of the Notice of Application in the Federal Register.
- The final public hearing then triggers a maximum 90 calendar day deadline for the Administrator of MARAD to make a ROD on whether to grant, grant with conditions or deny the application.

This 90-day period is divided into two 45-day periods. Federal agencies and the Governor of the adjacent coastal State(s) have 45 days after the final public hearing to make their final comments on the application. The Administrator of MARAD has a subsequent 45 days to issue the ROD. There will be one ROD for the EIS and for the application.

All together, these various periods of time consume a total of 356 calendar days from the date that an application is submitted to the USCG. See Figure 1.

NEPA:

As previously discussed, the DWPA also mandates strict compliance with NEPA. Congress passed NEPA in 1969 to address concerns about environmental quality. NEPA established a national policy for attaining harmony between the public and nature, for promoting efforts to eliminate damage to the environment, and for better understanding of ecological systems and natural resources. NEPA is composed of two major objectives:

- Ensure that Federal agencies consider the potential environmental effects of proposed programs, projects and actions before initiating them.
- To inform the public and to encourage and facilitate public involvement in Federal agency activities that affects the quality of the human environment.

Within the NEPA regulations, the U.S. Coast Guard must prepare an Environmental Impact Statement (EIS) or Environmental Analysis (EA) in evaluating the proposed project license application. An EIS is a detailed public document with the primary purpose of ensuring that the requirements and goals of NEPA are incorporated into programs and actions. An EIS is required to "provide a basis of consideration and inform decision-makers and the public of the reasonable alternatives."

NEPA requires Federal agencies to consider environmental impacts that may result from a proposed action, to inform the public of potential impacts and alternatives and to facilitate public involvement in the assessment process. The EIS will describe in detail the nature and extent of the environmental impacts of the proposed action and alternatives, and will discuss appropriate mitigation measures for any adverse impacts. The EIS will include, among other matters, discussions of the purpose and need for the proposed action, a description of alternatives to the proposed action, a description of the affected environment and an evaluation of the environmental impacts of the proposed action and alternatives.

In maintaining consistency with NEPA and the DWPA, the MARAD and U.S. Coast Guard must also consider alternative means to construct and operate a deepwater port. The joint review will extend to matters such as the specific location of the port, technical design review, topside equipment layout, technologies for storing and regasification of LNG and methods of port construction. During review of the operational requirements, U.S. Coast Guard will evaluate the facility and security manuals to ensure compliance with the MTSA. In accordance with NEPA, the Deepwater Ports Standards Division has incorporated several public input tools to encourage interested parties to submit comments, questions and related information for inclusion in the EIS.

NEPA Process:

NEPA requires Federal agencies to document the potential environmental impacts of their proposed projects and policies. During the NEPA process, Agencies consider issues ranging from air quality and biological impacts to cultural resources and socioeconomic impacts. The NEPA process for an EIS will include the following steps:

- **Conduct Public Scoping Meetings:** In this phase of the project, the U.S. Coast Guard and MARAD request the public to provide feedback on the proposed project, potential environmental impacts and analysis methods. Those announcements will appear in the Federal Register, local newspapers and letters sent to Federal regional agencies, State agencies, Federally recognized Indian Tribes, non-governmental organizations and interested citizens who have requested to be informed of U.S. Coast Guard actions in their area. Public scoping is critical for determining the issues that will be discussed in the EIS and the way in which the study is going to be conducted.
- **Prepare a Draft EIS:** The Draft EIS is the first version of the formal document. It is available for public review on the Federal public docket libraries. The Draft EIS is also distributed to Federal, State, regional agencies, private citizens and local organizations. The U.S. Coast Guard and MARAD will hold a joint public meeting to provide citizens an opportunity to make formal oral and/or written comments concerning the Draft EIS. Again, the announcements appear in the Federal Register and local newspapers, Federal regional agencies, State agencies and anyone who has requested to be notified of these documents. Resource experts will be present to answer questions; additionally, the public will have means to enter comments and concerns into the official record.
- **Prepare a Final EIS:** After the close of the comment period on the Draft EIS, U.S. Coast Guard and MARAD will prepare a Final EIS to document the manner in which

comments received have been considered. A Notice of Availability of the Final EIS will appear in the Federal Register in the same process as the Draft EIS.

CSLC and the CEQA Process:

The NEPA mandates that local, State and Federal agencies within the affected areas be given the opportunity to comment on proposed actions. These other agencies are asked to identify specific areas or issues that the U.S. Coast Guard must address. Additionally, the DWPA requires only one NEPA document be produced from the license application. The California Environmental Quality Act (CEQA) deems the deepwater port projects to have "substantial adverse impact". Pursuant to CEQA, California has determined that the California State Lands Commission (CSLC) will be the Lead State Agency on all DWP's identified as being the Adjacent Coastal State.

To avoid duplication of staff resources and share expertise that will mutually benefit of all parties, a single EIS and Environmental Impact Report (EIR) will be published. The U.S. Coast Guard and MARAD have executed a Memorandum of Agreement to define in detail the roles and responsibilities for all proposed deepwater ports within California's jurisdiction. All environmental actions will adhere to the NEPA statutory timeline established in the DWPA.

Participating Federal Agencies:

In addition to CSLC being a cooperating agency, Federal Agencies with regulatory responsibilities relevant to deepwater ports in the OCS participate during the DWPA process. A Memorandum of Understanding (MOU) has been issued to define responsibilities for each agency and facilitate timely processing of applications. Following are excerpts from the MOU:

- **U.S. DEPARTMENT OF COMMERCE (DOC):** NOAA Fisheries, within DOC, is responsible for a variety of activities in marine and coastal ecosystems as mandated by several statutes and authorities. These activities include managing protected species, managing commercial and recreational fisheries, and protecting marine and coastal habitats. These activities are conducted pursuant to a number of environmental laws including the Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), Magnuson-Stevens Fishery Conservation and Management Act, and the Fish and Wildlife Coordination Act (FWCA). Deepwater port construction and operation in coastal and/or ocean areas may overlap with several NOAA responsibilities depending on the location and type of project proposed. Federal agencies authorizing activities that may affect any of these resources are required to consult with NOAA Fisheries regarding adverse affects to these resources and habitats upon which they depend. The National Ocean Service (NOS), also within DOC's NOAA, is responsible for various coastal and ocean programs that may be relevant to deepwater ports. The NOS administers the Coastal Zone Management Act (CZMA) and approves and works with states to implement comprehensive Coastal Management Programs and National Estuarine Research Reserves and mediates disputes regarding CZMA issues. Under CZMA section 307(c)(3)(A),

applicable states must concur with consistency certifications submitted with deepwater port applications before Federal agencies can issue their approvals. NOS also manage designated National Marine Sanctuaries (NMS) and coastal protection and restoration activities. While oil and gas activities are mostly prohibited within NMS, pursuant to Section 304(d) of the National Marine Sanctuaries Act, Federal actions near NMS may require consultation with the Secretary of Commerce. NOS also may be able to provide technical assistance related to nautical charts, coastal observing stations, GIS capabilities, and tide and current information.

- **U.S. DEPARTMENT OF DEFENSE (DOD):** The DOD, through the Office of the Deputy Under Secretary of Defense (Installations and Environment) Installations, Requirements and Management Directorate, will coordinate deepwater port license applications within the Department. DOD officials will review the applications for determination of impact on the Department's activities. DOD will notify Participating Agencies of any areas of concern and participate in any necessary discussions to adequately address DOD issues related to the proposed project. The Army Corps of Engineers (ACOE) is responsible for the administration of laws for the protection and preservation of waters of the United States, including wetlands. Pursuant to the requirements of section 10 of the Rivers and Harbors Act of 1899, and section 404 of the Federal Water Pollution Control Act (FWPCA; also known as the Clean Water Act), the ACOE may issue authorizations for the discharge of dredged or fill material into navigable waters, including wetlands.
- **U.S. DEPARTMENT OF ENERGY (DOE):** The DOE is charged with developing and coordinating national energy policy. In addition, DOE regulates the commodity import and export of natural gas, including LNG, under section 3 of the Natural Gas Act (NGA, 15 U.S.C. § 717(b)).
- **U.S. DEPARTMENT OF THE INTERIOR (DOI)**: The Minerals Management Service (MMS), within DOI, is responsible for issuing and enforcing regulations to promote safe operations, environmental protection and resource conservation for all mineral exploration, development, and production activities located in the OCS. In this role, MMS administers leasing and minerals royalty programs, oversees facility permitting, conducts NEPA analysis (e.g. air quality, archeology, biological impacts, socio-economic impacts, etc.), grants pipeline rights-of-way through submerged portions of the OCS, performs facility inspections (including safety related items as authorized by the USCG), maintains databases of facility (fixed, floating, and submerged) locations and attribute data, approves oil spill response plans, administers an operator bonding program, and engages in appropriate engineering and oil spill research. Under the DWPA, as amended, the Secretary of the Interior is also responsible for determining the fair market rental value of the "...subsoil and seabed of the OCS of the U.S. to be utilized by the deepwater port, including the fair market rental value of the right-of-way necessary for the pipeline segment of the port located on such subsoil and seabed." The Fish and Wildlife Service (FWS), within DOI, is responsible for the conservation, protection and enhancement of fish, wildlife, plants and their habitats. Pursuant to a number of environmental laws, including the ESA, MMPA, Migratory Bird Treaty Act, the FWCA, and the Coastal Barrier Resources Act FWS has principal trust responsibility for protecting and conserving migratory birds, certain threatened and endangered species, certain marine mammals, inter-

jurisdictional fish and certain coastal habitats. FWS manages the National Wildlife Refuge System (NWRS). The agencies processing the application for Federal licenses are required to consult with the FWS on projects potentially affecting any of these resources. The FWS also consults on projects potentially affecting fresh water or marine resources and water quality. In addition, the FWS may authorize use by permit for areas within the NWRS.

- **U.S. DEPARTMENT OF STATE (DOS)**: The DOS is responsible for providing its views on the adequacy of any deepwater port license application and its effects on programs within its jurisdiction.
- **U.S. DEPARTMENT OF TRANSPORTATION (DOT):** Research and Special Programs Administration (RSPA), has been delegated authority from the Secretary of Transportation under the DWPA to exercise powers and perform duties relating to the establishment, enforcement and review of regulations concerning the safe construction, operation or maintenance of deepwater port pipelines on Federal lands and the OCS. In addition, under 49 U.S.C. 60101, RSPA establishes Federal standards, through it's Office of Pipeline Safety, for siting, design, construction, equipment, personnel qualifications and training, public education, fire protection, and security for LNG facilities under 49 C.F.R. Part 193.
- **U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)**: The EPA is responsible for administering a wide variety of environmental laws. The responsibilities of EPA relevant to licensing of deepwater ports are primarily associated with assuring such deepwater ports conform with all applicable provisions of the Clean Air Act (CAA), as amended; the FWPCA, as amended; and the Marine Protection, Research, and Sanctuaries Act, as amended. EPA provides such assurance through communication with U.S. Coast Guard and MARAD and through independent issuance of the permits that those laws require. If within 45 days of the last public hearing on a proposed license for a designated application area (DWPA § 4(c)(6)), the EPA Administrator informs the Secretary of Transportation that the deepwater port will not conform to all applicable statutory and regulatory requirements under these statutes, the Secretary may not issue the license. In addition, under section 309 of the CAA, EPA publicly evaluates the completeness and adequacy of environmental impact statements (EISs) prepared by other Federal agencies and, if it finds a proposed project environmentally unsatisfactory from the standpoint of public health or welfare, or environmental quality, refers the matter to CEQ. Based on this NEPA oversight authority, EPA may refer an Environmental Assessment (EA)/Finding of No Significant Impact (FNSI) to CEQ if the underlying action requires an EIS or is unsatisfactory from the standpoint of public health or welfare, or environmental quality.
- **FEDERAL ENERGY REGULATORY COMMISSION (FERC)**: The FERC is responsible for authorizing the construction and operation of interstate natural gas pipelines. It issues certificates of public convenience and necessity for such pipelines under section 7 of the NGA and authorizes the construction and siting of facilities for the import or export of natural gas under section 3 of the NGA, including onshore LNG facilities. For natural gas deepwater ports, FERC will retain jurisdiction over any third-party offshore facilities not proposed or approved for construction as part of

the deepwater port as well as any facilities to the landward side of the high water mark.

- **COUNCIL ON ENVIRONMENTAL QUALITY (CEQ)**: The CEQ was established within the Executive Office of the President in 1969 by NEPA. Its purpose is to formulate and recommend national policies to promote the improvement of the quality of the environment. CEQ has issued regulations (40 C.F.R. Parts 1500 through 1508) applicable to Federal agencies implementing NEPA.

License Issuance & Record of Decision:

The construction and operation of the deepwater port must be in the national interest and consistent with national security and other national policy goals and objectives. The national interest shall also consider the energy sufficiency and environmental quality. The energy needs have been evaluated using forecasts, such as the DOE's Annual Energy Outlook, for the purposes of the EIS; equally, the following environmental and financial standards will be considered.

- The applicant must be financially responsible and able to meet the requirements of section 1016 of the Oil Pollution Act of 1990 (the 33 U.S.C. §§2701 et seq.; 104 Stat 484).
- The applicant must be financially able to construct, own, and operate the deepwater port.
- The applicant must also provide a financial guarantee or bond sufficient to meet cost for removal of components of the deepwater port upon the termination or revocation of the license.

It must be determined that the applicant can and will comply with relevant laws, regulations, and license conditions. As part of this requirement the applicant must provide, in writing, its intended compliance with related laws, regulations, and conditions. The deepwater port should not unreasonably interfere with international navigation or other reasonable uses of the high seas, as defined by treaty, convention, or customary international law.

In accordance with the environmental review criteria, it must be determined that the applicant will construct and operate the deepwater port using the best available technology, so as to prevent or minimize adverse impact on the marine environment. The application must also properly address all applicable provisions of the Clean Air Act, as amended, the Federal Water Pollution Control Act, as amended, and the Marine Protection, Research and Sanctuaries Act, as amended.

The Governor of the adjacent coastal State or States, pursuant to section 1508 of the DWPA, must approve the issuance of a deepwater port license. A no response or silence on proposed deepwater port designate an automatic approval. The adjacent coastal State to which the deepwater port is to be directly connected by pipeline must have an approved coastal zone management program pursuant to the Coastal Zone Management Act of 1972.

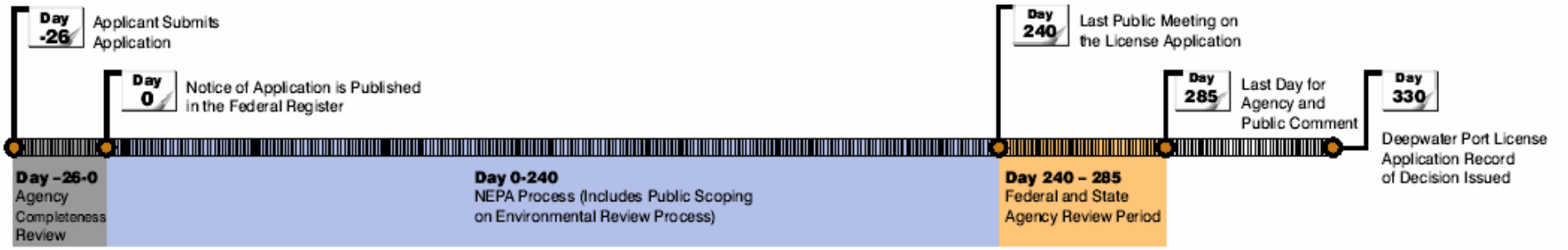
Day -26
Applicant Submits Application
Day 0
Notice of Application is Published in the Federal Register
Day 240
Last Public Meeting on the License Application
Day 285
Last Day for Agency and Public Comment
Day 330
Deepwater Port License Application Record of Decision Issued
Day -26-0
Agency Completeness Review
Day 0-240
NEPA Process (Includes Public Scoping on Environmental Review Process)
Day 240 – 285
Federal and State Agency Review Period

Figure 1