



Aug. 17, 2026

JFE Engineering Corporation

Shimizu Corporation

TEPCO Renewable Power, Incorporated

Eurus Energy Holdings Corporation

Selected by NEDO for "Next-Generation Floating Offshore Wind Power System Demonstration Study (Development of Next-Generation Technologies to Promote the Introduction of Floating Offshore Wind Power Generation)"

JFE Engineering Corporation, Shimizu Corporation, TEPCO Renewable Power, Incorporated, Eurus Energy Holdings Corporation, and Nippon Kaiji Kyokai (ClassNK) have been selected for the "Next-Generation Floating Offshore Wind Power System Demonstration Study solicitation by the New Energy and Industrial Technology Development Organization (NEDO) with their proposal to develop pin connection and grouted connection technologies for modular floaters.

Under the "7th Strategic Energy Plan"*¹, approved by the Cabinet in February 2025, renewable energy is positioned as a primary power source. Additionally, the "Vision for Offshore Wind Power Industry (2nd)"*², released in August of the same year, targets the formation of floating offshore wind power projects totaling 15 GW or more by 2040, necessitating technology development for full-scale deployment and expansion from 2030 onward. To promote the widespread adoption of floating offshore wind power, it is essential to establish technologies adapted to the unique meteorological and oceanographic conditions of the waters surrounding Japan and to domestic ports, while also building a supply chain.

In this project, a "semi-submersible" floating structure will be adopted. This design offers high resistance to wind and wave motion and can be constructed using existing domestic shipyards, steel bridge and offshore steel structure fabrication plants, and port yards. In addition, pin connection and grouted connection technologies*³ ("Proposed Technologies") will be introduced to connect structural

members, aiming to reduce costs through efficient assembly. To this end, the five parties will conduct studies and evaluations on the application of the Proposed Technologies and compile technical information to support the development of guidelines for mass production in Japan.

The Proposed Technologies, namely pin connections and grouted connections, are widely established in fields such as civil engineering and construction. A floating structure incorporating these technologies has already received preliminary evaluation from DNV^{*4}

, an international certification body, and mass production will become feasible once the design is adapted to Japan's domestic environment and supply chain.

A key advantage of this floating structure incorporating the Proposed Technologies is that its components are designed in shapes and sizes manufacturable by a wide range of steel pipe manufacturers and steel structure fabricators. Adopting these Proposed Technologies enables production by leveraging existing plant equipment and expertise. Moreover, since numerous companies can undertake component manufacturing, this approach will strengthen the domestic supply chain.

Furthermore, assembly using the Proposed Technologies is less susceptible to on-site environmental conditions, enabling more efficient assembly operations at port yards. The reduced size of the structural members also minimizes the space required for temporary storage, making assembly feasible even at relatively compact ports.

Through this project, the five parties will advance the evaluation of the Proposed Technologies regarding safety, reliability, and cost effectiveness, while establishing design methodologies and quality control standards for manufacturing and construction. By pooling the expertise and technologies of all parties, we aim to accelerate the widespread adoption of floating offshore wind power generation and contribute to the realization of a carbon-neutral society.

*1: [Strategic Energy Plan | Agency for Natural Resources and Energy](#)

*2: [Vision for Offshore Wind Power Industry \(2nd\) \[Industrial Strategy for Floating Offshore Wind Power, etc.\]](#)

(Reference: Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure, Transport and Tourism)

*3: A technology that secures structural members by injecting filling material (grout) into gaps

*4: DNV (Headquarters: Oslo, Norway), established in 1864, is one of the world's largest

independent international third-party certification bodies and a classification society.

Modular Floater Incorporating Pin Connection and Grouted Connection Technologies (conceptual illustration)

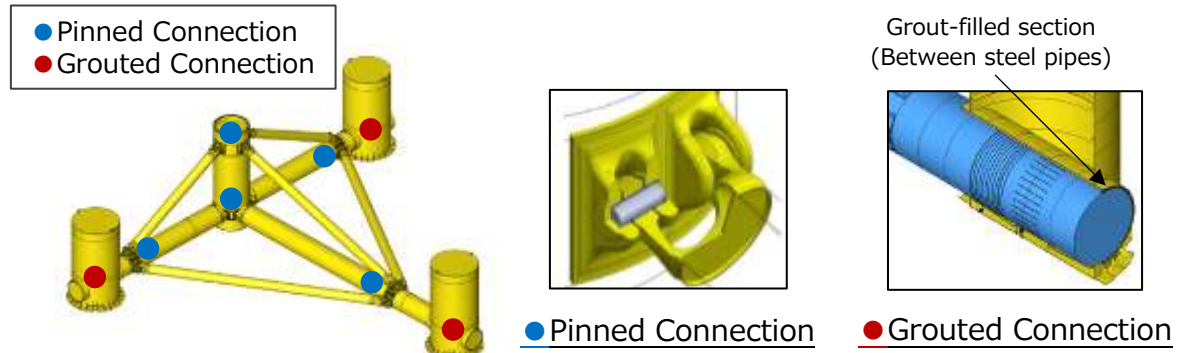


Image courtesy of Stiesdal Offshore A/S

Dimensions for a 15 MW-class wind turbine (reference values)

Width: 110 m, Length: 90 m, Height: 30 m

[Project Overview]

Selected theme	Development of Pin Connection and Grouted Connection Technologies for Modular Floaters
Period	July 2026 to March 2028 (planned)
Principal roles of participating companies	[JFE Engineering Corporation] ● Establishing a production infrastructure for floaters incorporating the Proposed Technologies [Shimizu Corporation] ● Evaluating construction quality control methods for grouted connections and port assembly layouts for floaters incorporating the Proposed Technologies [TEPCO Renewable Power, Incorporated] ● Assessment of the Suitability and Commercial Viability of Floating Platforms Incorporating the Proposed Technologies under Japan's Meteorological and Oceanographic Conditions [Eurus Energy Holdings Corporation] ● Evaluating critical analysis conditions and load cases in the design of floaters incorporating the Proposed Technologies [Nippon Kaiji Kyokai (ClassNK)] ● Defining material requirements for the Proposed Technologies and assessing design and construction technologies for their introduction in Japan

[Company Profiles]

JFE Engineering Corporation

Established	April 2003
Head office	2-2-3 Uchisaiwaicho, Chiyoda-ku, Tokyo
Representative	Kazuyoshi Fukuda, President and CEO
Main lines of business	Engineering services in the environmental, energy, and infrastructure sectors

Shimizu Corporation

Founded	1804
Head office	2-16-1 Kyobashi, Chuo-ku, Tokyo
Representative	Tatsuya Shimmura, President and Representative Director
Main lines of business	Contracting for building, civil engineering, and other construction works (general contracting)

TEPCO Renewable Power, Incorporated

Established	October 1, 2019
Head office	1-1-3 Uchisaiwaicho, Chiyoda-ku, Tokyo
Representative	Shinsuke Inoue, President
Main lines of business	Renewable energy power generation, etc.

Eurus Energy Holdings Corporation

Established	November 1, 2001
Head office	Otemachi First Square West Tower, 1-5-1, Otemachi, Chiyoda-ku, Tokyo
Representative	Tetsuya Suwabe, President and CEO
Main lines of business	Wind and solar power, storage, and sales, etc.