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(57) Abstract :
Hybrid Offshore Renewable Energy Integrated Semi-Submersible Platform A hybrid offshore renewable energy integrated semi-submersible platform (SSP) (100) is disclosed. The SSP (100) includes a main central column (202), a plurality of offset columns (204A-204N), a plurality of connecting braces (208), and bottom pontoons (210), and the plurality of Wave Energy Converters (WECs) (106). A top portion of the main central column (202) is configured with the horizontal axis wind turbine (102). A bottom portion of the main central column (202) which is submerged inside water is configured with a tidal turbine (220). At least four (206A-206N) of the plurality of offset columns 204A-204N are configured with moonpools. The moonpools includes Oscillating Water Columns (OWCs). The plurality of Wave Energy Converters (WECs) that is configured to a top outer braces of the SSP 100 through mechanical arms, a top outer area of the plurality of offset columns 204A-204N, and the bottom portion of the main central column 202.

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