

CalWave

Water Power Innovation Showcase



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xWave Architecture



Installation and maintenance on the surface.



Operations and shelter fully submerged!



Key Features

Scalable Farms (1 to 500+ MW)

Operates Fully Submerged

Autonomous Control & Shutdown

Data Driven / Adaptive Controls

~40-50% Capacity Factor

Designed to Operate 20+ Years

Active load management

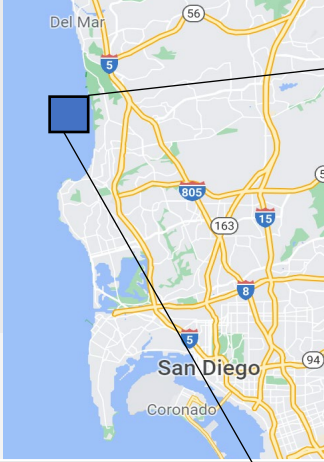
Hours operational offshore:
>7000 hours continuous,
>99% uptime



x1 Ocean Pilot – 2021 – 2022, San Diego, CA



Location: SIO, San Diego
Goal: 6 months
Duration: 10 months



Scripps Pier, CalWave deployment site



#	Test objective
1	Installation & recovery procedures
2	Operations
3	Autonomous controls
4	Performance
5	Reliability
6	Survivability



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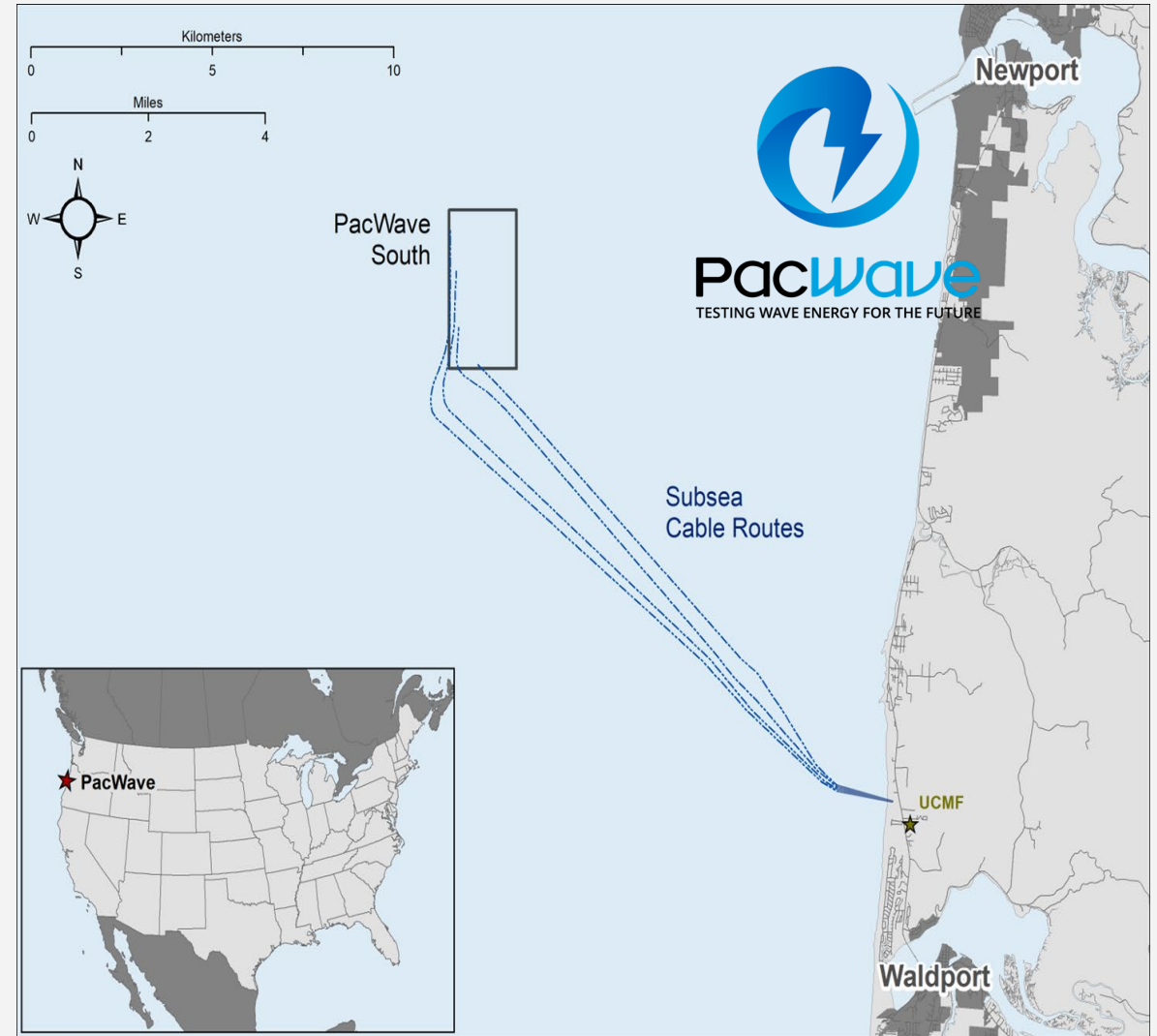
CalWave grid pilot

#	Item	Status
1	Full System & Controls Co-Optimization	✓
2	Data-driven/Adaptive Controls	✓
3	Detailed PTO, WEC, and Mooring Design	✓
4	IEC/IEEE/DNV conformity achieved	✓
5	Interconnection studies	✓
6	At-Scale PTO HIL Test Rig (In-House), Construction, Anchor	2024
5	WEC Deployment at PacWave	2025-26



Goal: 2 years grid connect, IEC & PPA

CALWAVE



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