

Active West Coast Hydrokinetic Projects

Tuesday, March 22, 2011

Report developed by the Pacific Fishery Management Council

	Project	Date preliminary permit issued	Location and description	Current status	Technology and power output
California					
P-13376	Del Mar Landing Project (Sonoma County Water Agency)*	7/9/2009	Study location is 14.3 sq nautical miles. Three miles off the coast of Sonoma County, in state waters. Water depths of 20-50 meters.	Progress suspended pending funding. On 3/21/2011, FERC asked applicant why projects should not be suspended. Preliminary permits may be cancelled if NOI and Draft License Applications are not filed by July 8, 2011.	Pilot project (5 mW or less). Looking at oscillating water column & buoy-type devices, including Pelamis. Initially, 2-5 MW. Eventually, 40-200 MW.
	Last updated: 3/21/2011				
P-13378	Fort Ross Project North (Sonoma County Water Agency)*	7/9/2009	Study area is 10.4 square nm.	Progress suspended pending funding. On 3/21/2011, FERC asked applicant why projects should not be suspended. Preliminary permits may be cancelled if NOI and Draft License Applications are not filed by July 8, 2011.	
	Last updated: 3/21/2011				
P-13377	Fort Ross South Project South (Sonoma County Water Agency)*	7/9/2009	Study area is 15.3 square nm. In state waters off Sonoma County, near Fort Ross, 20-50 m deep.	Progress suspended pending funding. On 3/21/2011, FERC asked applicant why projects should not be suspended. Preliminary permits may be cancelled if NOI and Draft License Applications are not filed by July 8, 2011.	Pilot project. Initially 2-5 MW; eventually 40-200 MW.
	Last updated: 3/21/2011				

* = FERC-related activity since last report. FERC = Federal Energy Regulatory Commission. MMS = Minerals Management Service. MW = megawatts. nm = nautical miles. NMFS = National Marine Fisheries Service. NOI = Notice of Intent. OCS = Outer Continental Shelf. PAD = Preliminary Application Document. TLP = Traditional Licensing Process. WEC = wave energy conversion device.

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P-13641	PGE Central Coast WaveConnect Project	5/14/2010	Study area: 45 square miles off Santa Barbara County, in depths ranging from 36 to 300 feet of water	PGE submitted app for prelim permit October 2009. Morro Bay Commercial Fishermen's Organization, NMFS, others commented/submitted motions to intervene. Submitted 6-month progress report 10/2010. No activity since then. Aim to file PAD in May 2011.	Multiple arrays of wave energy conversion devices. 100 MW
	Last updated: 3/21/2011				
P-12585	San Francisco Bay Tidal Energy Project (Golden Gate Energy)*	2/4/2010	San Francisco Bay. Footprint not specified.	The City of San Francisco compiled a notice of intervention and protest, citing environmental and process reasons. (They apparently want to build wave project on same site). FERC granted new (repeat) preliminary permit. Issued progress report on 1/28/2011. Conducting studies and consultations. Status report says they have consulted with PFMC, but this has not occurred yet. Plan to file NOI/PAD in March 2011.	60 turbines/square mile, 1000 mW
	Last updated: 3/21/2011				

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P-13679	San Onofre OWEC Electricity Farm*	10/29/10	Adjacent to San Onofre nuclear power plant, less than 3 nm off coast south of San Clemente. Area affected: 1.93 square nm. Less than 25 feet in depth. Plan to use nuclear power infrastructure (plant being decommissioned).	Preliminary permit issued 10/10; NMFS commented 12/10; FERC rejected notice of intent and PAD 12/10 because applicant did not conduct consultations and meet other requirements; applicant submitted revised PAD 2/11; applicant planning stakeholder meeting on 3/31/11.	OWEG (Ocean Wave Energy Generation) devices. Experimental technology that uses wheels, a conveyor belt, and water buckets. 11,443 units generating 13% of California's 2007 energy generation capacity.
	Last updated: 3/22/2011	PAD submitted		Conducting meetings with stakeholders.	
Oregon					
P-12749	Coos Bay OPT Wave Park*	8/10/2010	Coos Bay, OR. 200 PowerBuoys in rows parallel to the beach, 25-40 fm deep. Currently, 1 mile wide by 5 miles long; eventually smaller. 2.5 miles from shore.	Submitted PAD 3/7/08. New prelim permit granted 8/10/2010. Submitted progress report 3/1/2011. Current discussions relate to power transmissions, etc.	200-400 buoys, 100 mW; annual generation of 276,000 megawatt-hours
	Last updated: 3/21/2011	PAD submitted			
P-12743	Douglas County Project (Douglas County)*	10/06/2010	Winchester Bay. Project would be powered by wave-driven air currents created by infrastructure built into existing jetty; installed capacity of 3MW. Applying for 50-year license.	Submitted six-month report 10/19/2009. Conducting wave tank modeling of different sites. Preliminary permit (second one) granted 10/06/10. Schedule of activities was due in November but was not submitted. On March 11, FERC notified applicant that the schedule must be submitted within 30 days or permit will be revoked.	One jetty-based structure
	Last updated: 3/21/2011	PAD submitted			

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Needs MMS lease	Principle Power Offshore Wind Project		Off Oceanside & Netarts, OR. Project will begin with a single WindFloat floating turbine (243 feet); eventually plan to expand to "an entire offshore wind farm, covering 12 to 15 square miles and capable of generating 150 to 200 megawatts."	In 2008, Principle Power signed MOUs with Tillamook Intergovernmental Development Entity (TIDE) and Tillamook PUD. 9/2010 - PP and TIDE held contract negotiations and public workshop. Principle Power now working on project in Portugal. No news on Tillamook project. Need MMS lease/license.	30 wind turbines, 5 MW each (150 MW)
	Last updated: 3/21/2011				
P-12713	Reedsport OPT Wave Park*		Reedsport, 2.5 miles off coast. 204-225' depth. Footprint: 0.25 sq. miles. Sandy bottom. Each PowerBuoy would have diameter of 36 sq feet and extend 30 feet above the water.	Much new activity. PFMC has commented twice on this project. Environmental assessment released Dec. 2010. Formal consultations with NFMS, USFWS. (Comment period closed). Project continues to move forward.	10 OPT PowerBuoys (50 mw), in 3-4 rows.
	Last updated: 3/21/2011	PAD submitted			
P-13666	Reedsport OPT Wave Park, Phase III*	3/15/2011	Off Douglas County, 2.5 miles off Reedsport, in water 25-35 fathoms deep. Footprint 1x5 miles.	Applied for preliminary permit 2/1/2010. Many motions to intervene. Permit issued 3/15/2011.	100 PowerBuoys (50 MW) adjacent to Phase I project (P-12713). 2.5 mile long subsea transmission cable.
	Last updated: 3/21/2011				

Washington

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P-12690	Admiralty Inlet (Snohomish PUD)*	7/8/2010	Admiralty Inlet, Puget Sound. Bay/estuary habitat; 60-100 m deep; bottom is scoured pebbles and sand; much shipping & commercial traffic.	Continues moving forward. Submitted PAD 1/31/08. Second prelim permit issued July 2010. Submitted progress report 12/29/10. Consulted with NMFS and other agencies. Conducted ROV work in area. Planning for laying undersea cable.	Two 10-meter, 500 kW open-center turbines (OpenHydro Group), mounted on submerged foundations (underwater). Less than 5 MW.
	Last updated: 3/21/2011	PAD submitted		Continuing studies and planning for deployment.	
P-12687	Deception Pass (Snohomish PUD)*	8/24/2010	Deception Pass, Puget Sound. Bay/estuary habitat; 30 m deep; rocky seafloor; mainly recreational use.	New preliminary permit issued Aug 2010 (old one expired). Plans to move forward with Admiralty Inlet project first. Filed progress report 12/29/2010. Progress focuses on Admiralty Inlet.	Four 66-foot turbines, 1.6 megawatts each, 25 feet above sea floor. 6.4 MW; 20.7 gigawatts annually
	Last updated: 3/21/2011	PAD submitted		Snohomish PUD intends to pursue a pilot license for a project in Admiralty Inlet first, and then apply that learning to a project in Deception Pass.	

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