

February 29, 2011

Via Electronic Filing

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Re: Public Utility District No. 1 of Snohomish County, Washington, FERC Project No. 12690-000; Final Pilot License Application for the Admiralty

Inlet Pilot Tidal Project

Dear Secretary Bose:

Public Utility District No. 1 of Snohomish County, Washington ("the District") encloses for filing the attached Application for a Hydrokinetic Pilot Project License for the Admiralty Inlet Pilot Tidal Project ("Project"). The attached Final License Application is being filed pursuant to the Federal Energy Regulatory Commission's ("Commission") July 7, 2011, letter order approving the District's request to use the pilot licensing process, which provides for an expedited process that may result in a final licensing decision by the Commission in as few as six months.

The District is excited to be submitting the enclosed Final License Application after investigating the tidal energy resource in and around Puget Sound for more than five and a half years. Agencies, tribes, and other stakeholders have devoted significant resources and expertise to this Project, greatly assisting the development of all aspects of the Project and helping create a Project that allows for the investigation of tidal energy while protecting the natural resources within Puget Sound. This effort resulted in the District's filing of a Draft License Application for the Project in December 2009.

The District continued to work with agencies and stakeholders throughout 2010 and 2011 to further refine the details of the Project, identify the potential impacts from its operation, and finalize the monitoring plans required to safeguard the public and environmental resources. On August 6, 2010, the District received a request from the Commission for additional information about the Project, stating that the information would allow the Commission to fully evaluate the proposed Project and allow for the expeditious processing of the final license application once submitted.

The District is now poised to install Project facilities near the end of 2013. In order to accomplish this schedule, the District must receive its Commission license within the six month timeframe described in the Commission's pilot licensing whitepaper, and complete the remaining permitting and contractual obligations shortly thereafter. However, without a prompt review of the District's Final License Application from the Commission, the District will have no chance to meet the 2013 installation window.

Successful tidal energy demonstration at Admiralty Inlet may enable significant commercial development of hydrokinetic energy elsewhere in Puget Sound and in other regions of the country, resulting in important benefits for both the northwest region and the country as a whole. The Project is already globally recognized as one of the leading marine energy efforts in the United States, and has substantial support throughout the region.

The Final License Application includes four volumes. Volume I includes the Initial Statement, an Executive Summary, the Pilot Process Justification and Process Plan, and Exhibits A, F, and G. Volume II consists of Exhibit E. Volume III includes the District's proposed monitoring plans and record of consultation, and Volume IV consists of the District's Draft Biological Assessment.

The District is making the Final License Application available to the persons on the attached distribution list and by posting the Final License Application on the District's website at http://www.snopud.com/PowerSupply/tidal.ashx?p=1155. In addition, in accordance with 18 C.F.R. § 5.18(a)(3), the District is notifying owners of land within and adjacent to the Project boundary, as well as the entities listed in the Initial Statement, of the filing of the Final License Application by certified mail. Finally, the District is publishing notice of the filing of the Final License Application, pursuant to 18 C.F.R. § 5.17(d)(2), in a newspaper of general circulation in Island County, where the Project is located, and will promptly provide the Commission with proof of publication of the notice.

The District looks forward to working with the Commission and stakeholders to ensure timely issuance of a pilot license for the Project. If you have any questions regarding the District's Final License Application and accompanying documents, please contact Craig Collar, Senior Manager, Energy Resource Development, at (425) 783-1825, or cwcollar@snopud.com.

Thank you for your assistance in this matter.

Sincerely,

Steven J. Klein General Manager

Company Name Federal Agencies:	First Name	<u>Last Name</u>	<u>Title</u>	Address Line 1	Address Line 2	<u>City</u>	<u>State</u>	ZIP Code	Work Phone E-mail Address
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Puyallup Tribal Council	The Honorable Herman	Dillon	Chair	3009 East Portland Avenue		Tacoma,	WA	98404	253/573-7835 NO E-MAIL ADDRESS
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WA State Dept. of Natural Resources	Larry	Dominguez	Draduat Calag % I agging						360/902-1718 <u>Larry.dominguez@dnr.wa.gov</u>
WA State Dept. of Natural Resources	Jim	Speaks	Product Sales & Leasing		+		13.7 A	+	jim.speaks@dnr.wa.gov
WA State Dept. of Natural Resources	Terry	Carten	Aquatia Landa Organ Strait District		+		WA	+	360/854-2846 terry.carten@dnr.wa.gov
WA State Dept. of Natural Resources	JoAnn Elizabeth	Gustafson	Aquatic Lands, Orcas Strait District	1111 Washington Street SE	PO Box 47027	Olympia	13.7 A	98504	360/854-2832 joann.gustafson@dnr.wa.gov
WA State Dept. of Natural Resources ** Washington State Ferries	Kojo	Fordjour	Aquatic Resources Program Environmental Program Manager	1901 - 3rd Avenue, Suite 500	FO DOX 4/02/	Olympia, Seattle,	W A	98504 98121	<u>elizabeth.ellis@wadnr.gov</u> Fordjok@wsdot.wa.gov
Washington State Ferries Washington State Ferries	Michelle	Elling	Senior Environmental Coordinator	2901 - 3rd Avenue, Suite 500		Seattle,	WA	98121-1012	206/515-3400 ellingm@wsdot.wa.gov
Washington State Ferries Washington State Ferries	Steve	Beadle	Schol Environmental Coolullator	2901 - 3rd Avenue Suite 500	<u> </u>	Seattle,	WA	98121	BeadleS@WSDOT.WA.GOV
WA State Transportation & Public Construction Division	Mark S.	Lyon, Esq.	Assistant Attorney General	7141 Cleanwater Drive SW	PO Box 40113	Olympia,	WA	98504-0013	360/586-0641 <u>markl1@atg.wa.gov</u>
Washington State Inter Agency Committee	Jim	Eychaner	2 2000 mile 1 morney Gonerus	PO Box 40917	I O DON TOTTO	Olympia,	WA	98504-0917	360/902-3011 jime@iac.wa.gov
WA State Dept. of Fish & Wildlife, Region 4	Bob	Everitt	Regional Director	16018 Mill Creek Blvd.		Mill Creek,	WA		425/775-1311 <u>everirde@dfw.wa.gov</u>
Some Dept. of Figure 4 finding, Region 7	200	2,01111	110010111111111111111111111111111111111	10010 IIIII CICOR DIVU.		TVIIII CICCK,	1111	70012 1270	

Company Name	First Name	Last Name	<u>Title</u>	Address Line 1	Address Line 2	<u>City</u>	<u>State</u>	ZIP Code	Work Phone E-mail Address
** WA State Department of Fish and Wildlife	Mark A.	Hunter	Habitat Program	600 Capitol Way N		Olympia,	WA		360/902-2542 <u>huntermah@dfw.wa.gov</u>
** Office of the Commissioner of Public Lands	Peter	Goldmark	Commissioner of Public Lands	1111 Washington Street SE	PO Box 47001	Olympia,	WA	98504	360/902-1004 <u>cpl@dnr.wa.gov</u>
WA State Board of Pilotage Commissioners	Peggy	Larson	Administrator	2901 Third Avenue		Seattle,	WA	98121	206/515-3904 <u>larsonp@wsdot.wa.gov</u>
State Parks:	Josh.	Houtt	Doub Dongon	41220 SP 20		Ook Horbon	337 A	09277 2024	260/675 2417 is all hartt@norder was now
Deception Pass State Park	Jack Von	Hartt	Park Ranger Park Manager	41229 SR 20 1280 Engle Road		Oak Harbor,	WA	98277-2924 98239	360/675-2417 <u>jack.hartt@parks.wa.gov</u> 360/678-4519 fort.casey@parks.wa.gov
** Fort Casey State Park Fort Flagler State Park	Ken Mike	Hageman Zimmerman	Park Ranger Park Ranger	10451 Flagler Road		Coupeville, Nordland,	WA	98358	360/385-1259 fort.flagler@parks.wa.gov
Fort Ward State Park	Mlee	Barlow	Park Ranger	2241 Pleasant Beach Drive NE		Bainbridge Island,	WA	98110	206/842-4041 fay.bainbridge@parks.wa.gov
Fort Worden State Park	Kate	Burke	Park Manager	200 Battery Way		Port Townsend,	WA	98368	360/385-4730 <u>Kate.Burke@parks.wa.gov</u>
Fort Worden State Park	Anne	Murphy	Executive Director, Port Townsend Marine Science Center	200 Battery Way		Port Townsend,	WA	98368	360/385-4730 <u>info@ptmsc.org</u>
South Whidbey State Park			Park Ranger	4128 S. Smugglers Cove Road		Freeland,	WA	98249	360/321-4559 NO E-MAIL ADDRESS
						,			
Cities/Towns:									
City of Anacortes	The Honorable Dean	Maxwell	Mayor	904 - 6th Street	PO Box 547	Anacortes,	WA	98221	360/299-1950 <u>dean@cityofanacortes.org</u>
City of Anacortes, Anacortes Municipal Building	Ian	Munce	City Attorney	904 - 6th Street	PO Box 547	Anacortes,	WA	98221-0547	360/293-1912 <u>ian@cityofanacortes.org</u>
City of Arlington	Bill	Blake	Community Development	238 N. Olympic Avenue		Arlington,	WA	98223	360/403-3551 bblake@ci.arlington.wa.us
City of Bellingham	The Honorable Tim	Douglas	Mayor	210 Lottie Street		Bellingham,	WA	98225-4089	360/676-6979 <u>tdouglas@cob.org</u>
City of Bellingham	Dick	McKinley	Public Works Director	322 N. Commercial Street, Suite 210	DO D 00012	Bellingham,	WA	98225	360/676-6961 <u>rmckinley@cob.org</u>
City of Bellevue	The Honorable Grant	Degginger	Mayor	450 - 110th Avenue NE	PO Box 90012	Bellevue,	WA	98009	425/452-7810 gdegginger@bellevue.wa.gov
City of Bremerton City of Burien	The Honorable Cary The Honorable Joan	Bozeman McGilton	Mayor Mayor	345 - 6th Street, Suite 600 415 SW 150th Street		Bremerton, Burien,	WA WA	98337 98166	360/473-5290 <u>cbozeman@ci.bremerton.wa.us</u> 206/248-5515 <u>joanm@ci.burien.wa.us</u>
City of Burlington	The Honorable Roger "Gus"	Tieerdsma	Mayor	900 Fairhaven Avenue		Burlington,	WA WA	98166	360/755-0531 <u>joanm@ci.burlen.wa.us</u> cityhall@ci.burlington.wa.us
City of Des Moines	The Honorable Bob	Sheckler	Mayor	21630 - 11th Avenue South		Des Moines,	WA	98198-6398	206/878-4595 bsheckler@desmoineswa.gov
** City of Everett	The Honorable Ray	Stephanson	Mayor	2930 Wetmore Avenue		Everett,	WA	98201	425/257-7112 rstephanson@ci.everett.wa.us
** City of Edmonds	The Honorable Gary	Haakenson	Mayor	121 - 5th Avenue		Edmonds,	WA	98020	425/771-0247 haakenson@ci.edmonds.wa.us
City of Friday Harbor	The Honorable David	Jones	Mayor	60 Second Street	PO Box 219	Friday Harbor,	WA	98250	360/378-8996
City of Mercer Island	The Honorable Bryan	Cairns	Mayor	9611 SE 36th Street		Mercer Island,	WA	98040	206/236-5323 bryan.cairns@mercergov.org
City of Normandy Park	The Honorable Shawn	McEvoy	Mayor	801 SW 174th Street		Normandy Park,	WA	98166	206/248-7603 <u>shawn.mcevoy@ci.normandy-park.wa.us</u>
City of Tukwila	The Honorable Steve	Mullet	Mayor	6200 Southcenter Blvd.		Tukwila,	WA	98188	206/433-1805 <u>tukwila@ci.tukwila.wa.us</u>
City of Kenmore	The Honorable Randy	Eastwood	Mayor	6700 NE 181st Street	PO Box 82607	Kenmore,	WA	98028-0607	425/398-8900 <u>cityhall@ci.kenmore.wa.us</u>
City of Kirkland	The Honorable Jim	Lauinger	Mayor	123 Fifth Avenue		Kirkland,	WA	98033	425/587-3000 jlauinger@ci.kirkland.wa.us
City of Mountlake Terrace	The Honorable Jerry	Smith	Mayor	23204 - 58th Avenue W	PO Box 72	Mountlake Terrace	, WA	98043	425/744-6206 <u>cityhall@ci.mlt.wa.us</u>
City of Port Townsend	David G.	Timmons	City Manager	250 Madison Street	7000	Port Townsend,	WA	98368	360/379-5047 <u>dtimmons@cityofpt.us</u>
** City of Lynnwood	The Honorable Don	Gough	Mayor	19100 - 44th Avenue W	PO Box 5008	Lynnwood,	WA	98046	425/670-6613 <u>dgough@ci.lynnwood.wa.us</u>
City of Mount Vernon	The Honorable Bud The Honorable Joe	Norris	Mayor	910 Cleveland Avenue 4480 Chennault Beach Road	PO Box 809	Mount Vernon,	WA	98273	360/336-6211 <u>mvmayor@ci.mount-vernon.wa.us</u>
** City of Mukilteo ** City of Oak Harbor	The Honorable Patricia	Marine Cohen	Mayor Mayor	865 SE Barrington Drive		Mukilteo, Oak Harbor,	WA	98275 98277	425/355-4141 <u>mukilteo@ci.mukilteo.wa.us</u> 360/279-4503 <u>mayor@oakharbor.org</u>
City of Port Orchard	The Honorable Kim E.	Abel	Mayor	216 Prospect Street		Port Orchard,	WΔ	98366	360/876-4409 cityhall@ci.port-orchard.wa.us
** City of Port Townsend	The Honorable Mark	Welch	Mayor	250 Madison Street		Port Townsend,	WA	98368	360/379-5047 citycouncil@cityofpt.us
City of Port Townsend	John P.	Watts, Esq.	City Attorney	250 Madison Street No. 201		Port Townsend,	WA	98368	360/379-5048 jwatts@cityofpt.us
City of Port Townsend	Judy	Surber	Shoreline Planner, Development Services Dept.			Port Townsend,	WA	98368	360/379-5084 jsurber@cityofpt.us
** City of Poulsbo	The Honorable Kathryn	Quade	Mayor	19050 Jensen Way NE	PO Box 98	Poulsbo,	WA	98370	360/779-3901 kquade@cityofpoulsbo.com
City of SeaTac	The Honorable Gene	Fisher	Mayor	4800 South 188th Street		SeaTac,	WA	98188	206/973-4800 <u>info@ci.seatac.wa.us</u>
City of Seattle	The Honorable Greg	Nickels	Mayor	600 Fourth Avenue		Seattle,	WA	98104	206/386-1234 <u>mayors.office@ci.seattle.wa.us</u>
City of Shoreline	The Honorable Robert	Ransom	Mayor	17544 Midvale Avenue North		Shoreline,	WA	98133	206/546-1303 <u>rransom@ci.shoreline.wa.us</u>
** City of Stanwood	The Honorable Dianne	White	Mayor	10220 - 270th NW		Stanwood,	WA	98292	360/629-2181 melissa@ci.stanwood.wa.us
Challen County Marine Personness Committee	D!J	Da - 1	WCII Danah Watahan Cara Pari	222 E. Ad. Survey, S. 1, 15		D (A 1	77.7 A	00272	260/565 2610 16 16 1
Clallam County Marine Resources Committee	David The Honorable John	Freed	WSU Beach Watcher Coordinator Commissioner	223 E. 4th Street, Suite 15 1 NE 7th Street	PO Box 5000	Port Angeles,	WA	98362 98239	360/565-2619 <u>dfreed@wsu.edu</u> 360/679-7354 <u>district3@co.island.wa.us</u>
Island County Board of Commissioners Island County Board of Commissioners	The Honorable John The Honorable Mike	Dean Shelton	Commissioner Commissioner	1 NE 7th Street 1 NE 7th Street	PO Box 5000 PO Box 5000	Coupeville, Coupeville,	WA WA	98239	360/679-7354 <u>district3@co.island.wa.us</u> 360/679-7354 <u>district1@co.island.wa.us</u>
Island County Board of Commissioners Island County Board of Commissioners	The Honorable William L. "Mac		Commissioner	1 NE 7th Street 1 NE 7th Street	PO Box 5000 PO Box 5000	Coupeville,	WA	98239	360/679-7354 district2@co.island.wa.us district2@co.island.wa.us
** Island County Commissioners Office	Ingrid	Smith	Coordinator	1 TG / di Succi	1 O DOX 3000	Coupeville,	WA	70237	IngridS@co.island.wa.us
** Island County Marine Resources Committee	Dick	Toft	Chair, Island County Marine Resources Committee	101 NE 6th Street	PO Box 5000	Coupeville,	WA	98239	360/679-7327 dtoft@whidbey.net
Island County Marine Resources Committee	Rex	Porter	Executive Director	101 NE 6th Street	PO Box 5000	Coupeville,	WA	98239	360/679-7327 portergroup@whidbey.net
** Island County Planning Department	Phil	Bakke, AICP	Director	PO Box 5000		Coupeville,	WA	98239	360/679-7309 philb@co.island.wa.us
Island County Planning Department	Kimberley	Bredensteiner	Salmon Recovery Coordinator	PO Box 5000		Coupeville,	WA	98239	360/240-5543 <u>kimb@co.island.wa.us</u>
Jefferson County	The Honorable John	Fischbach	Administrator	1820 Jefferson Street	PO Box 1220	Port Townsend,	WA	98368	360/385-9100 jfischbach@co.jefferson.wa.us
Jefferson County Natural Resources Division	Neil	Harrington	Environmental Health Specialist	615 Sheridan Street		Port Townsend,	WA	98368	360/385-9444 <u>nharrington@co.jefferson.wa.us</u>
Jefferson County Natural Resources Division	Tami	Pokorny	Environmental Health Specialist	615 Sheridan Street		Port Townsend,	WA	98368	360/385-9444 tpokorny@co.jefferson.wa.us
Jefferson County Marine Resources Committee	Pat	Pearson	WSU Water Quality Field Agent	201 West Pattison		Port Hadlock,	WA	98339	360/379-5610 pearsonp@wsu.edu
Jefferson County Planning Commission	Michelle	McConnell	Shoreline Project Coordinator	1820 Jefferson Street		Port Townsend,	WA	98368	360/379-4484 mmcconnell@co.jefferson.wa.us
Jefferson County Dept. of Community Development	Karen L.	Barrows	Assistant Planner, Long Range Planning Division	621 Sheridan Street		Port Townsend,	WA	98368	360/379-4482 kbarrows@co.jefferson.wa.us
King County	The Honorable Ron	Sims	Executive	516 Third Avenue		Seattle,	WA	98104	206/296-4040 <u>ron.sims@metrokc.gov</u>
Kitsap County	The Honorable Stave	Angel	Commissioner	614 Division Street, MS-4		Port Orchard,	WA	98366	360/337-7146 <u>jangel@co.kitsap.wa.us</u>
Kitsap County	The Honorable Steve	Bauer	Commissioner	614 Division Street, MS-4		Port Orchard,	WA	98366	360/337-7146
Kitsap County Kitsap County	The Honorable Josh	Brown Buonnano Grennan	Commissioner Kitsap County Administrator	614 Division Street, MS-4 614 Division Street, MS-4		Port Orchard	WA WA	98366 98366	360/337-7146 JWBrown@co.kitsap.wa.us NBGrennan@co.kitsap.wa.us
Kitsap County Kitsap County	Nancy					Port Orchard,			
Kitsap County	Jim	Bolger	Kitsap County Dept. of Cummunity Development	614 Division Street, MS-36		Port Orchard,	WA	98366	Jbolger@co.kitsap.wa.us

Company Name	First Name	Last Name	<u>Title</u>	Address Line 1	Address Line 2	City	State	ZIP Code	Work Phone E-mail Address
San Juan County	Randall K.	Gaylord, Esq.	Prosecuting Attorney	350 Court Street	PO Box 760	Friday Harbor,	WA	98250	360/378-4101 randyg@co.san-juan.wa.us
San Juan County Pomona Grange #50	Richard	Civille	Legislative Chairperson	152 - 1st Street N	TO BOX 700	Friday Harbor,	WA	98250	360/378-6632 pomona@islandgrange.org
San Juan County Council	The Honorable Alan	Lichter	Councilman	350 Court Street #1		Friday Harbor,	WA	98250	360/370-7474 alanl@co.san-juan.wa.us
San Juan County Council	The Honorable Kevin M. M.	Ranker	Councilman	350 Court Street #1		Friday Harbor,	WA	98250	360/370-7473 <u>kevinr@co.san-juan.wa.us</u>
San Juan County Council	The Honorable Bob	Myhr	Councilman	350 Court Street #1		Friday Harbor,	WA	98250	360/378-2898 bobm@co.san-juan.wa.us
San Juan County Marine Resources Committee	Mary	Knackstedt	Coordinator	PO Box 947	512 Guard Street	Friday Harbor,	WA	98250	360/378-1095 maryk@co.san-juan.wa.us
Skagit County	Gary	Rowe	Administrator	Administration Building	1801 Continental Place Suite 100	Mount Vernon,	WA	98273	360/336-9300 garyr@co.skagit.wa.us
Skagit County Administration Building	Dan	Berentson	Skagit County Communications Director / Community Liaison	1800 Continental Place	1001 Commentar 1 Mee State 100	Mount Vernon,	WA	98273	360/419-3461 danb@co.skagit.wa.us
Skagit County Planning and Development Services	Betsy	Stevenson	Senior Planner	1800 Continental Place		Mount Vernon,	WA	98273	360/336-9410 pds@co.skagit.wa.us
Snohomish County Planning Department	Will	Hall	Division Manager	3000 Rockefeller Avenue	M/S 604	Everett,	WA	98201	will.hall@co.snohomish.wa.us
Snohomish County Marine Resources Committee	Stef	Frenzl	Marine Resource Steward	3000 Rockefeller Avenue	1110 001	Everett,	WA	98201	425/388-6466 Stephan.Frenzl@co.snohomish.wa.us
Snohomish County Surface Water Management	Tim	Walls	WRIA 7 Salmon Recovery Coordinator	3000 Rockefeller Avenue		Everett,	WA	98201	425-388-3464 Timothy.Walls@co.snohomish.wa.us
Snohomish County Surface Water Management	Sean	Edwards	WRIA 5 Salmon Recovery Coordinator	3000 Rockefeller Avenue		Everett,	WA	98201	425/388-3464 Sean.Edwards@co.snohomish.wa.us
Whatcom County Planning and Development Services	Hal H.	Hart	Director	5280 Northwest Road		Bellingham,	WA	98227	360/676-6907 pds@co.whatcom.wa.us
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Port Districts:									
Port of Anacortes	Bob	Hyde	Executive Director	PO Box 297		Anacortes,	WA	98221	360/293-3134 hyde@portofanacortes.com
Port of Bellingham	James S.	Darling	Executive Director	PO Box 1677		Bellingham,	WA	98227	360/676-2500 jimd@portofbellingham.com
Port of Bremerton	Ken	Atteberry	Chief Executive Officer	8550 SW State Highway 3		Port Orchard,	WA	98367	360/674-2381 kena@portofbremerton.org
Port of Coupeville	James M.	Patton	Executive Director	PO Box 577		Coupeville,	WA	98239	306/678-5020 execjim@verizon.net
Port of Everett	John	Mohr	Executive Director	PO Box 538		Everett,	WA	98206	425/259-3164 johnm@portofeverett.com
Port of Friday Harbor	Steve	Simpson	Director	PO Box 889		Friday Harbor,	WA	98250	360/378-2688 steves@portfridayharbor.org
Port of Kingston	Tom	Berry	Harbormaster	PO Box 559		Kingston,	WA	98346	360/297-3545 ptkingston@aol.com
Port of Port Angeles	Bob	McChesney	Executive Director	PO Box 1350		Port Angeles,	WA	98362	360/457-8527 bobm@portofpa.com
Port of Port Townsend	Larry	Crockett	General Manager	PO Box 1180		Port Townsend,	WA	98368	360/385-0656 larry@portofpt.com
Port of Poulsbo	Kirk	Stickels	Manager	PO Box 732		Poulsbo,	WA	98370	360/779-3505 portofpoulsbo@yahoo.com
Port of Seattle	Tav	Yoshitani	Chief Executive Officer	PO Box 1209	2711 Alaskan Way	Seattle,	WA	98111	206/728-3000 yoshitani.t@portseattle.org
Port of Skagit County	Jerrold W.	Heller	Executive Director	PO Box 348	2711 Maskan Way	Burlington,	WA	98233	360/757-0011 posc@portofskagit.com
Tort of Skagit County	volicia III.	Tiener	Director	TO BOX 5 TO		Durington,	*****	70233	500/757 0011 pose c portoiskagit.com
Utilities/Energy Related:									
Hydropower Reform Coalition	Rebecca	Sherman	Northwest Coordinator	320 SW Stark Street	Suite 412	Portland,	OR	97204	503/827-8653 northwest@hydroreform.org
Northwest Energy Coalition	Mark	Tilstra	Transmission and Distribution	DEC STEEDS STATE STATES	30.00	1 01010110,	911	<i>y</i> , 2 0 .	Mtilstra@opalco.com
Northwest Energy Coalition	Marc	Krasnowsky	Communications Director	219 First Avenue South	Suite 100	Seattle,	WA	98104	206/621-0094 marc@nwenergy.org
Puget Sound Energy	Joe	Seabrook	Transmission and Distribution	21) I Hist II volido Soddi	Sale 100	Souther,	,,,,,	70101	425/462-3577 joe.seabrook@pse.com
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Law Firms/Consulting Firms:									
Foster Pepper PLLC	P. Stephen	DiJulio, Esq.	Attorney-at-Law	1111 Third Avenue, Suite 3400		Seattle,	WA	98101	206/447-4400 DIJUP@Foster.com
Foster Pepper PLLC	Joseph A.	Brogan, Esq.	Attorney-at-Law	1111 Third Avenue, Suite 3400		Seatte,	WA	98101	206/447-4400 <u>BROGJ@Foster.com</u>
Island County Prosecutor's Office	Gregory M.	Banks	Island County Prosecuting Attorney	PO Box 5000		Coupeville,	WA	98239-5000	360/679-7363 <u>gregb@co.island.wa.us</u>
K&L Gates	Craig	Trueblood	Partner	925 Fourth Avenue	Suite 2900	Seattle,	WA	98104	206/370-8368 craig.trueblood@klgates.com
Kitsap County Prosecuting Attorney's Office	Shelley	Kneip	Senior Deputy Prosecuting Attorney	614 Division Street, MS-35		Port Orchard,	WA	98366	Skneip@co.kitsap.wa.us
LaRoche & Associates	Gabrielle E.	LaRoche	Marine Resource Policy Shoreline & Watershed Planning	555 Blue Sky Drive		Port Townsend,	WA	98368	360/385-2559
Morisette, Schlosser, Jozwiak & McGaw	Mason D.	Morisset, Esq.	Attorney-at-Law	801 Second Avenue, Suite 1115		Seattle,	WA	98104	206/386-5200 m.morisset@msaj.com
Morisset, Schlosser, Ayer & Jozwiak	Anita	Castillo	Paralegal	1115 Norton Building	801 Second Avenue	Seattle,	WA	98104	a.castillo@msaj.com
PC Landing Corporation	Kurt	Johnson	Chief Financial Officer	319 Diablo Road	Suite 213	Danville	CA	94526	415/200-0308 kjohnson@pc1.com
Educational Institutions/Labs/Museums/Historical Reserves:									
Cascadia Research Collective	John	Calambokidis	Research Biologist	218-1/2 West 4th Avenue		Olympia,	WA	98501	360/943-7325 <u>calambokidis@cascadiaresearch.org</u>
** Ebey's Landing National Historical Reserve	Mark	Preiss	Reserver Manager	PO Box 774	162 Cemetary Road	Coupeville,	WA	98239	360/678-6084 mark_preiss@partner.nps.gov
North Cascade Institute	Saul	Weisberg, M.S.	Executive Director	810 Route 20	·	Sedro-Wooley,	WA	98284	360/856-5700 saul_weisberg@ncascades.org
Pacific Shellfish Institute	Dr. Daniel	Cheney	Executive Director	120 State Avenue NE	PMB #142	Olympia,	WA	98501	360/754-2741 cheney@pacshell.org
** Seattle Pacific University Camp Casey Conference Center	Darrell	Jacobson		1276 Engle Road		Coupeville,	WA	98239	866/661-6604 NO E-MAIL ADDRESS
The Whale Museum	Richard	Osborne, Ph.D.	Director	62 First Street N	PO Box 945	Friday Harbor,	WA	98250	360/378-4710 tracie@whalemuseum.org
University of Washington	Brian	Polagye				, ,			bpolagye@u.washington.edu
University of Washington	Philip	Malte, Ph.D.	Professor of Mechanical Engineering			Seattle,	WA		206/685-2171 malte@u.washington.edu
University of Washington	Kristen	Thyng	Doctoral Student			Seattle,	WA		206/919-0525 thyngkm@u.washington.edu
Alliances/Associations/Coalitions/Councils/Networks/Partnerships/Taskforces									
** American Waterways Operators (AWO)	Jason	Lewis	Vice President, Pacific Region	801 North Quincy Street, Suite 200		Arlington	VA	22203	703/841-9300 jlewis@vesselalliance.com
Association of Washington Business	Don	Brunell	President	PO Box 658		Olympia,	WA	98507-0658	360/943-1600 <u>donb@awb.org</u>
Association of Washington Cities	Stan	Finkelstein	Executive Director	1076 Franklin Street SE		Olympia,	WA	98501-1346	800/562-8981 <u>stanf@awcnet.org</u>
Audubon Washington	Nina	Carter	Executive Director	1411 - 4th Avenue, Suite 920		Seattle,	WA	98101-2204	206/652-2444 <u>ncarter@audubon.org</u>
Building Industry Association of Washington	Jeff	Hansel, GGB	President	PO Box 1909		Olympia,	WA	98507	360/352-7801 jeffh@biaw.com
Federation of Western Outdoor Clubs	Fran	Troje	WA State Vice-President	4257 - 123rd Ave SE		Bellevue,	WA	98006	206/322-3041 <u>ftroje@eskimo.com</u>
Friend of the San Juans	Kyle	Loring	Legal Director		PO Box 1344	Friday Harbor,	WA	98250	360/378-2319 kyle@sanjuans.org
Friends of Discovery Park	, ,	8	<u> </u>	PO Box 99662		Seattle,	WA	98199	206/283-8643 info@discoveryparkfriends.org
Georgia Strait Alliance	Laurie	MacBride	Executive Director	#210 - 195 Commercial Street		Nanaimo,	BC	V9R 5G5	250/753-3459 gsa@georgiastrait.org
Hood Canal Coalition				PO Box 65279		Port Ludlow,	WA	98365	contactus@hoodcanalcoalition.org
Hood Canal Coordinating Council	Jay	Watson	Executive Director	17791 Fjord Drive NE	Box HH	Poulsbo,	WA	98380	jwatson@hccc.wa.gov
Hood Canal Environmental Council	Bill	Matchett, President	Board of Directors	PO Box 87		Seabeck,	WA	98380	206/692-3443 <u>hcec2000@hotmail.com</u>
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Company Name	First Name	Last Name	<u>Title</u>	Address Line 1	Address Line 2	<u>City</u>	<u>State</u>	ZIP Code	Work Phone	E-mail Address
Independent Business Association				7981 - 168th Avenue NE		Redmond,	WA	98052	425/453-8621	iba@isomedia.com
Islands Oil Spill Association				PO Box 2316		Friday Harbor,	WA	98250	360/378-5322	iosaoffice@rockisland.com
Izaak Walton League of Greater Seattle	Bruce	McGlenn	President	4000 - 95th Avenue NE		Bellevue,	WA	98004	425/455-1986	info@seattleikes.org
League of Women Voters	Barbara	Seitle	President	4710 University Way NE	Suite #214	Seattle,	WA	98105	206/622-8961	lwvwa@lwvwa.org
Marine Exchange of Puget Sound	John	Veentjer	Executive Director	100 West Harrison Street, Suite S-560		Seattle,	WA	98119	206/443-3830	www.marineexchangesea.com
Nisqually Delta Association		-		PO Box 7444		Olympia,	WA	98507	360/357-3792	NO E-MAIL ADDRESS
Nisqually River Council				12501 Yelm Hwy SE		Olympia,	WA	98513	360/407-1686	info@nisquallyriver.org
North Pacific Fishing Vessels Owners Association	Leslie	Hughes	Executive Director	1900 West Emerson, Suite 101		Seattle,	WA	98119	206/285-3883	info@npfvoa.org
Northwest Marine Trade Association	Alan	Bohling	Chair, Board of Directors	1900 N. Northlake Way	Suite #233	Seattle,	WA	98103-9087	206/634-0911	alan@seattleboat.com
Northwest Straits Commission	Lew	Moore	Director	10441 Bayview-Edison Road		Mount Vernon,	WA	98273	360/428-1084	info@nwstraits.org
Orca Network	Susan	Berta	Event Coordinator & VP /Treasurer	2403 S. North Bluff Road		Greenbank,	WA	98253	360/678-3451	info@orcanetwork.org
Pacific Coast Shellfish Growers Association	Robin	Downey	Executive Director	120 State Avenue NE	PMB #142	Olympia,	WA	98501	360/379-9041	RobinDowney@pcsga.org
Pacific Marine Conservation Council	Matt	Van Ess	Executive Director	PO Box 794		Port Townsend,	WA	98368	360/385-2746	caroline@pmcc.org
Pacific Merchant Shipping Association Seattle	Mike	Moore	Vice President	World Trade Center	2200 Alaska Way, Suite 160	Seattle,	WA	98121	206/441-9700	mmoore@pmsaship.com
Pacific States Marine Fisheries Commission	Randy	Fisher	Executive Director	205 SE Spokane Street, Suite 100		Portland,	OR	97202	503/595-3100	randy_fisher@psmfc.org
Passenger Vessels Association	Joel	Hudspeth	All American Marine, Inc.	200 Harris Avenue		Bellingham,	WA	98225	360/647-7602	jhudspeth@allamericanmarine.com
People for Puget Sound	Kathy	Fletcher	Executive Director	911 Western Avenue, Suite #580		Seattle,	WA	98104	206/382-7007	kfletcher@pugetsound.org
Protect the Peninsula's Future	Tyler	Ahlgren	President	PO Box 1677		Sequim,	WA	98382	360/683-6644	tallgreen@earthlink.net
Puget Sound Action Team	John	Cambalik	Regional Liaison			Sequim,	WA			jcambalik@psat.wa.gov
Puget Sound Action Team	Stuart	Glasoe	Regional Liaison, Shellfish Program Manager	PO Box 40900		Olympia,	WA	98504-0900	800/547-6863	sglasoe@psat.wa.gov
Puget Sound-Georgia Basin Task Force	Ron	Shultz	Director of Government Affairs	PO Box 40900		Olympia,	WA	98504-0900	360/725-5440	rshultz@psat.wa.gov
Puget Sound Gillnetters Association				1402 West Marine View Drive	Suite C	Everett,	WA	98201	206/252-6699	ptmaccon@olympus.net
** Puget Sound Harbor Safety Committee	Bruce	Reed	Chair	100 West Harrison Street, Suite S-560		Seattle,	WA	98119	206/281-4708	bruce@foss.com
Puget Sound Keeper Alliance	Tom	Diller	President, Board of Directors	5309 Shilshole Avenue NW	Suite #215	Seatle,	WA	98104-1035	206/464-7532	psa@pugetsoundkeeper.org
Puget Sound Partnership	Linda	Lushall	Regional Liaison	7924 - 212th Street SW #110		Edmonds,	WA	98206	425/640-3557	llyshall@psat.wa.gov
Puget Sound Pilots Association	Andy	Coe	Captain	101 Stewart Street	Suite 900	Seattle,	WA	98101	206/728-6400	president@pspilots.org
Puget Sound Regional Council	Rick	Olson	Directror of Government Relations	1011 Western Avenue	Suite #500	Seattle,	WA	98104-1035	206/464-7532	rolson@psrc.org
Recreational Boating Association of Washington				PO Box 23601		Federal Way,	WA	98093		NO E-MAIL ADDRESS
Save Our Wild Salmon	Darcie	Larson	Associate Director	200 First Avenue West	Suite 201	Seattle,	WA	98119	206/286-4455	darcie@wildsalmon.org
Save Our Wild Salmon	Jill	Wasberg	Associate Communications Director	200 First Avenue West	Suite 201	Seattle,	WA	98119	206/286-4455	jill@wildsalmon.org
Seattle Master Builders Association	Samuel	Anderson	Executive Officer	2155 - 112th Avenue NE	Suite #100	Bellevue,	WA	98004	425/451-7920	sanderson@mbaks.com
Sierra Club	Christopher	Chapman								cjchapman@comcast.net
Sierra Club Cascade Chapter	Trevor	Kaul	Director	180 Nickerson Street	Suite #202	Seattle,	WA	98109	206/378-0114	Trevor.Kaul@sierraclub.org
Snohomish County Sportsmen	Bob	Heirman	Vice-President	2120 Lake Avenue		Snohomish,	WA	98290-1032	360/568-4083	heirman@comcast.net
Sound Experience	Brian	Larsenstafki	Education Director	PO Box 1390		Port Townsend,	WA	98368	360/379-0438	brian@soundexp.org
Swinomish Yacht Club	Shannon	Hugel	Commodore	PO Box 60		LaConner,	WA	98257		st.hugel@verizon.net
The Nature Conservancy	David	Weekes	State Director	1917 - 1st Avenue		Seattle,	WA	98101	206/343-4344	wa_reception@tnc.org
Washington Scuba Alliance	Mike	Racine	President	6758 Cascade Avenue SE		Snoqualmie,	WA	98065		info@wascuba.org
Western States Petroleum Association, Northwest Office	Frank E.	Holmes	Manager, Northwest Region	975 Carpenter Road NE, Suite 106		Lacy,	WA	98516	360/352-4506	fholmes@wspa.org
Whidbey Environmental Action Network	Steve	Erickson		PO Box 53		Langley,	WA	98260		wean@whidbey.net

ADMIRALTY INLET PILOT TIDAL PROJECT

FERC PROJECT NO. 12690

APPLICATION for a NEW PILOT PROJECT LICENSE (MINOR WATER POWER PROJECT)



VOLUME I

APPLICATION EXHIBITS A, F, G

Public Utility District No. 1 of Snohomish County



February 29, 2012

U.S. Department of Energy
University of Washington
HDR | DTA
Sound & Sea Technology
OpenHydro Group Limited
Pacific Northwest National Laboratory

Prepared with additional assistance from:

SMRU Limited

Northwest National Marine Renewable Energy Center

National Renewable Energy Laboratory

BioSonics, Inc.

Sandia National Laboratory

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Electric Power Research Institute

Evans-Hamilton, Inc.

Fugro Survey Limited

Global Diving & Salvage

Beam Reach Marine Science and Sustainability School

The Whale Museum

The Orca Network

Golder Associates

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EXECUTIVE SUMMARY

for the Admiralty Inlet Pilot Tidal Project

1.0 INTRODUCTION

Public Utility District No. 1 of Snohomish County (the District) is a municipal corporation of the State of Washington, formed by a majority vote of the people in 1936 for the purpose of providing electric and/or water utility service throughout Snohomish County and neighboring Camano Island. The District is the second largest consumer-owned electric utility in Washington State and, despite the economic downturn, Snohomish County continues to exhibit population growth. In 2010 the District received 3,100 requests for new electric service connections, and the growth is expected to continue.

The District is required by the Washington State renewable portfolio standard to supply 15% of its load from new, renewable energy resources by 2020. The District believes there is significant potential to generate clean, renewable, environmentally benign, and cost effective energy from tidal flows at selected sites in the Puget Sound, and that successful tidal energy demonstration in the Sound may enable significant commercial development in the U.S. resulting in important benefits for both the northwest region and the country. The District also recognizes however, that in-water testing is required to address uncertainties in performance, cost, and environmental effects. The purpose of the Admiralty Inlet Pilot Tidal Project (FERC Project No. 12690) (the Project) is to address these uncertainties by gathering data via the temporary deployment, demonstration, and testing of tidal energy conversion technology in the Puget Sound.

Snohomish is filing this Final Application for a Hydrokinetic Pilot License (Minor Water Power Project) with the Federal Energy Regulatory Commission (FERC or Commission) for the construction and operation of the proposed Project. The proposed Project will consist of two 6-meter diameter OpenHydro turbines located in the northeastern portion of Admiralty Inlet, approximately 1 km west-southwest of Admiralty Head near latitude 48°09'03.24" N longitude 122°41'15.72" W latitude, in water depth of approximately 58 meters. The turbines will be mounted on completely submerged gravity foundations and will be interconnected to the electrical grid on private land on Whidbey Island.

The Commission regulates projects that generate power from water, and early in its efforts the District reviewed with the Commission the various options available to license this specific project. The District applied for a preliminary permit in June 2006 and was issued a preliminary permit in March 2007. The District started the formal Commission process in January 2008 by submitting a Pre-Application Document to the Commission and stakeholders describing the Project and the environmental resources present in Admiralty Inlet and the surrounding Puget Sound. Following that submittal, the Commission developed a process specific to the licensing of temporary or experimental hydrokinetic energy projects in order to study, monitor and evaluate the environmental, economic and cultural effects of hydrokinetic energy. This process was identified as the "Pilot Licensing Process" and the District selected this process to pursue obtaining a Federal license. Additionally, the Commission and the State of Washington have mutual interest regarding the development of hydrokinetic energy projects and signed a Memorandum of Understanding with respect to hydrokinetic projects in State of Washington. Some of the pertinent declarations include:

• Timely processing of applications for regulatory and other approvals required for

- hydrokinetic energy projects in Washington State waters to promote clean, renewable sources of energy.
- Creation of a process to make it possible for developers of all hydrokinetic energy projects to establish short-term or experimental projects within Washington State waters in order to study, monitor, and evaluate the environmental, economic and cultural effects of hydrokinetic energy.
- It is the intent of the Commission and the State of Washington that information developed during pilot projects will inform the decision making process for any longer term authorizations for hydrokinetic projects in Washington waters.
- The State of Washington supports the efforts by the Commission to establish procedures to allow for shorter term, experimental hydrokinetic energy projects with environmental safeguards through the pilot licensing process. Both agree that the pilot licensing process may be appropriate as a short term means of allowing hydrokinetic energy projects to proceed on a pilot basis while additional environmental and other data concerning the effects of such projects are gathered.

The Project proposed by the District aligns with these interests in the following manner:

- Promotes a clean, renewable source of energy.
- Is a temporary, short term project with environmental safeguards.
 - o Allows for study, monitoring and evaluation of the environmental, economic and cultural effects of hydrokinetic energy.
- Incorporates an adaptive management approach for Project operation.

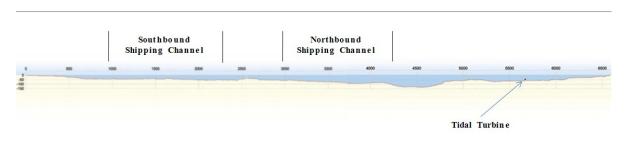
The Project is already globally recognized as one of the leading marine energy efforts in the United States, has substantial support in the region, and has built an exceptionally strong project team. The District, in partnership with the U.S. Department of Energy, the University of Washington, the Northwest National Marine Renewable Energy Center, Pacific Northwest National Laboratory, and the Electric Power Research Institute has conducted a thorough evaluation of potential tidal energy sites in the Puget Sound, and has selected Admiralty Inlet as the most appropriate location to establish a tidal energy research and development project.

The District engaged with over 30 tidal energy technology developers worldwide as part of its assessment and selection program. This effort included visits with the leading technology developers in the U.S., Europe, and Canada, as well as to the European Marine Energy Center (EMEC) in the Orkney Islands, Scotland. Following a detailed evaluation process, the District selected OpenHydro as its technology partner for the demonstration Project. OpenHydro is one of the few tidal energy technology firms in the world to have successfully deployed and tested commercial scale tidal energy turbines. The OpenHydro turbine consists of a horizontal axis rotor with a single moving part and power take-off through a direct drive, permanent magnet generator. It is principally comprised of the rotor and the stator; there is no requirement for a gearbox. The design incorporates several important features to avoid or minimize environmental risk:

- No requirement for oil/grease lubrication.
- The rotor blade tips are retained within the outer housing and therefore are not exposed.
- The rotor has a relatively low rotational speed.
- The ability exists for the rotor to be stopped quickly and remotely in emergency situations.

- Cavitation is prevented by design at specified deployment depth.
- The deployment method and foundation design eliminate the need for any drilling or piling operations, as well as facilitate potential relocation and complete removal of both the foundation and the turbine. In fact, both the turbines and their foundations are specifically designed to be completely removable for scheduled maintenance or other needs.

The Project would be of very limited scale relative to Admiralty Inlet, representing less than 0.05% of the Inlet's cross-section thereby significantly diminishing the likelihood of adverse environmental effects. Likewise, the water depth at the site and its location well outside of the shipping channel mitigates navigational concerns.



It is important to note that Admiralty Inlet is the primary entrance to Puget Sound and represents the main shipping channel through which all commercial, Naval, and other significant marine traffic passes while transiting to and from the Sound's several Naval stations and ports of Everett, Seattle, Tacoma, and Olympia. The environmental effects represented by this level of navigational traffic and activity in a busy commercial waterway would reasonably be expected to dwarf any potential effects of Snohomish's small, temporary research and development effort.

While they are limited in scope, existing data and assessments regarding currently operating and proposed tidal projects are notable in that they document no substantial or unanticipated environmental risk. The EMEC site (where OpenHydro turbines were initially deployed) represents a very ecologically diverse and productive marine ecosystem which is home to a number of fish and marine mammal species. Fish and shellfish species include: mackerel, herring, haddock, cod, monkfish, several flat fish species, lobster, crab, and scallops. Marine mammal species include: otters, seals, minke whale, harbor porpoise, white-sided dolphin, common dolphin, killer whale, and pilot whale. Leatherback turtles also regularly visit Scottish waters between August and November.

Operation of the OpenHydro turbine installation has been continuously videotaped while in operation since 2006 and no marine life incidents have been recorded. Review and analysis of the videotape data is ongoing, but to date indicates that fish and marine mammals avoid and do not interact with the device while it is rotating, but as might be expected, some fish species do aggregate downstream of the turbine at tidal current velocities too low for the turbine to rotate. Additionally, a comprehensive Environmental Assessment report to Canadian federal and provincial governments was completed for the deployment of a 10 meter OpenHydro turbine in the Bay of Fundy, Nova Scotia (this deployment occurred in November, 2009). The Bay of Fundy is also an ecologically diverse ecosystem including marine mammals and salmonids and other migratory species. The likely effects of the project on the environment were found to be limited in

scope and duration (AECOM 2009).

2.0 PILOT LICENSE CRITERIA

The Commission's *Criteria for Using the Pilot Licensing Procedures*, listed in Section III of the Commission's whitepaper, specify that a proposed project must be: (1) small; (2) short term; (3) not located in sensitive areas; (4) removable and able to be shut down on short notice; (5) removed, with the site restored, before the end of the license term (unless a new license is granted); and (6) initiated with a draft application that is adequate as filed to support environmental analysis.

On July 7, 2011, the Commission found that the District's Draft License Application addressed and met the criteria listed above. The Commission, however, reserved the final decision on whether the Project is an appropriate pilot project for when the Commission acts on the Final License Application. As a result, the District has included a justification statement demonstrating its compliance with the Commission's pilot license criteria. Specifically, the Project will consist of only two turbines with a combined capacity of less than one megawatt. The Project is located outside the shipping lane in Admiralty Inlet, a busy commercial waterway, and will have a short license term sufficient to enable in water testing. The turbines and their foundations are specifically designed to enable quick shutdown and removal, with minimal site restoration required, by virtue of there being no drilling or pilings associated with the installation. Through its pre-installation studies the District has substantially augmented the already extensive collection of data available for the Admiralty Inlet region to support a thorough and complete environmental analysis for the Project.

3.0 CONSULTATION

The District was issued a preliminary permit for the Admiralty Inlet site on March 9, 2007, though as early as July of 2006 Snohomish had informed key stakeholders (tribes, state agencies, federal agencies, NGO's, communities, etc.) of its intention to pursue tidal energy exploration in the Puget Sound. An initial project meeting was held with numerous stakeholders (tribes, state agencies, federal agencies, NGOs) on February 23, 2007, to formally introduce the project, answer questions, and discuss the consultation approach going forward. During the nearly five years since this initial meeting Snohomish has conducted over 100 formal and informal project communication meetings including dialogue with approximately 50 different stakeholder groups. These have included formal consultation meetings, community town hall meetings, conference presentations, NGO meetings, and more. The District has carefully considered all questions, feedback, and comments gathered during this process and rigorously endeavored to design both the physical project, study plans, and monitoring plans in the most responsive and collaborative way possible. The District has accepted comments on the various study and monitoring plans verbally at meetings, through phone calls and email messages, and through the formal exchange of written comments.

Additionally, the District has sought to directly involve key regional stakeholders and marine experts in its study efforts where practical. As one example, Beam Reach Marine Science and Sustainability School, the Whale Museum, and the Orca Network, all strong regional stewards for

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¹ A detailed discussion of each criteria can be found in the section of this application titled "Pilot Licensing Process Justification Statement."

killer whales in Puget Sound, worked with the District to design the Project's Marine Mammal Study Plan and are currently conducting the study in partnership with the Sea Mammal Research Unit. The Sea Mammal Research Unit is associated with the University of St. Andrews in Scotland and is currently engaged with efforts to study sea mammal interactions with tidal turbines at projects in the UK.

The District also sought the assistance of the Pacific Northwest National Laboratory and Sandia National Laboratory (collective, the National Labs) in determining the potential severity of an encounter between Southern Resident killer whales and a moving rotor. The District and the various stakeholders ultimately concluded that, given the size of the project, its location and depth, and the ability for marine mammals to avoid objects in their environment, the risk of an encounter was low. However, the unanswered question was the potential injury severity should the unlikely event of an encounter occur. This question is important given the status of the Southern Resident killer whale under the Endangered Species Act.

The National Labs carried out an analysis of the severity of blade encounter from the OpenHydro turbine with a Southern Resident killer whale. The analysis, described in a report dated February 28, 2012, and appended to the Final License Application as Appendix K, developed a scenario that represented the greatest possible risk to Southern Resident killer whales. After calculating the forces (stress and strain) that would be encountered, the National Labs concluded that in the highly unlikely situation where a Southern Resident killer whale encountered a turbine blade, the consequences are, at worst, minor bruising. Additionally, blade speed varies with current velocity, meaning that the consequences of blade strike will be even less significant during the majority of operation, when rotational speeds will be below those used in the National Labs' analysis.

Following discussions with Project stakeholders, NOAA Fisheries, and the National Labs, and after a thorough review of the analysis conducted by the National Labs, the District is no longer proposing to include a Southern Resident killer whale Monitoring, Operation, and Protection Plan (MOPP) as part of the pilot license. Instead, the District is incorporating the monitoring components of the MOPP, including applicable adaptive management triggers and actions, into the Marine Mammal Monitoring Plan. This plan is discussed further in Appendix A.

4.0 CONTENTS OF APPLICATION

As prescribed by the Commission's regulations, including 18 C.F.R. §§ 4.61 and 5.18, and the guidance contained in the Commission's whitepaper, "Licensing Hydrokinetic Pilot Projects," this application consists of:

- Initial Statement and General Content Requirements
- Pilot Licensing Justification Statement
- Process Plan
- Exhibit A, Project Description

APPLICATION FOR LICENSE FOR A PILOT HYDROKINETIC PROJECT Executive Summary – February 29, 2012

² See Assessment of Strike of Adult Killer Whales by an OpenHydro Tidal Turbine Blade, Pacific Northwest National Laboratory/Sandia National Laboratories (Feb. 28, 2012) (prepared for the U.S. Department of Energy).

³ See FERC, Licensing Hydrokinetic Pilot Projects (Apr. 14, 2008; revised Feb. 4, 2009; Feb. 19, 2010), available at http://www.ferc.gov/industries/hydropower/indus-act/hydrokinetics/energy-pilot.asp.

- Exhibit E, Environmental Report
- Exhibit F, Project Plans
- Exhibit G, Project Maps
- Appendices, containing proposed monitoring plans, the consultation record, and other information supporting the Final License Application
- Applicant-Prepared Draft Biological Assessment

Following the District's submission of a Draft License Application, on July 7, 2011, the Commission notified the District that there is good cause to use the pilot project license procedures for the Project, and thus the Commission granted the District's request to waive certain ILP regulations. The Commission agreed to waive the requirements of 18 C.F.R. §§ 5.2(a), 5.6, 5.7, 5.8, 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, and 5.18(c).

5.0 CONCLUSION

The marine energy industry today is in its infancy; the responsible deployment, testing and monitoring of commercial-scale ocean energy devices in real world sites is critical to exploring this potentially abundant, clean, renewable, domestic energy resource. Consistent with the interests of the State of Washington and the Commission, the data from this Project will inform the District's potential development of other sites in and around Puget Sound, but importantly will also provide relevant information for other marine energy developers in the nation. Because this is a nascent industry, the body of knowledge relative to marine energy technology, performance, environmental effects and monitoring approaches is growing substantially week by week. Snohomish fully expects that the Project will benefit from knowledge gained in the industry, perhaps most notably from the OpenHydro/Nova Scotia Power Project in the Bay of Fundy, during the period between the filing of this license application and the eventual deployment in the Puget Sound. The District will ensure for the effective leveraging of this new information, but maintains that currently available information is more than sufficient to move forward with the Project in a responsible manner. To consider new information as it is developed at the Project or elsewhere, the District will incorporate an adaptive management approach to continue to maintain a dialogue with stakeholders regarding the results of environmental monitoring during the life of the Project. These results would be used in combination with an understanding of the ecosystem and information from other relevant sources to make adjustments to study methods as appropriate and to manage or change aspects of the Project operation, as necessary, to avoid or minimize unexpected or undesirable impacts on resources. The adaptive management process allows for immediate action where necessary to address a critical adverse effect of the Project, should that occur.

The Project is proposed as a temporary pilot scale project (not commercial scale) with limited scale relative to Admiralty Inlet. Information collected through the deployment and monitoring of the Project will be used to support the decision making process for any longer term authorizations for hydrokinetic projects in Washington waters. There has been extensive discussion regarding the amount of baseline information required prior to deploying the Project and it is critical that baseline and project monitoring requirements are commensurate with the small scale and limited duration of the Project. The District's tidal energy efforts represent one of the primary tidal energy research efforts in the United States, continue to have the strong support of the U.S. Department of Energy's Advanced Water Power Projects program, and are consistent with national energy policy priorities. On December 10, 2009, in an address to the United Nations Conference on Climate

Change in Copenhagen, Secretary of the Interior Ken Salazar stated the following:

I am here today in Copenhagen on behalf of President Obama to deliver a simple message: the United States of America understands the danger that climate change poses to our world and we are committed to confronting it. Together with our partners in the international community, we will help build a strong, achievable, carbon reduction strategy. And we will deploy American technology, American vision, and American ingenuity for the benefit of our planet and all peoples. ... We must manage our lands and oceans for these three new functions - renewable energy production, carbon capture and storage, and climate adaptation – if we are to tackle the climate crisis. ... On renewable energy: the truth is - until now - America's vast deserts, plains, forests and oceans have been largely unexplored for their vast clean energy potential.

The Admiralty Inlet Pilot Tidal Project represents such an application of technology, vision, and ingenuity, here in the United States, to produce renewable energy from the country's oceans. Projects such as the Admiralty Inlet Pilot Tidal Project represent the early steps in exploring ways to harness tidal energy. With a peak capacity of approximately 700 kilowatts, the Admiralty Inlet Project would provide approximately 216,000 kWh annually of clean renewable ocean energy. The successful development of the Admiralty Inlet Project would demonstrate the potential of an emergent renewable energy industry segment with the goal of bringing clean, competitively-priced electricity to commercial and residential consumers in Washington State and other coastal U.S. states. From the future use of the Project's power, its displacement of non-renewable fossil-fueled generation and its contribution to a diversified generation mix, the Project will help meet a need for renewable, emission free, and environmentally responsible energy in the Puget Sound region. Given the pressing need to develop new renewable energy sources, in Washington State and in the U.S., to reduce greenhouse gas emissions, rely less on foreign fuel sources, and to meet growing energy demands, the District urges the Commission to issue a pilot license for the Project within the six month timeframe envisioned in the Commission's whitepaper.

change based on updated data, precise turbine location following deployment, actual performance, and other factors.

_

Expected generation figures are based on the most recent data available to the District and are the output of a model intended to predict turbine performance within Admiralty Inlet. However, electrical generation from tidal energy conversion devices is highly site-specific and may be influenced by even small changes in the final location of the turbines. Further, performance will be influenced by other factors as well, including actual efficiency of the devices, specific currents encountered, and the effect of turbulence. Therefore, generation figures are estimates only and may

UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

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Admiralty Inlet Pilot Tidal Project

Project No. 12690

APPLICATION FOR A HYDROKINETIC PILOT PROJECT LICENSE (MINOR WATER POWER PROJECT)

INITIAL STATEMENT AND GENERAL CONTENT REQUIREMENTS

The following information is provided pursuant to 18 C.F.R. § 4.61(b)

(b)(1) Intent to apply for a license

Public Utility District No. 1 of Snohomish County, Washington (the District) applies to the Federal Energy Regulatory Commission for a pilot hydrokinetic project license for the Admiralty Inlet Pilot Tidal Project, Project No. 12690 (the Project), as described hereinafter.

(b)(2) The location of the Project is:

State: Washington State County: Island County

Nearby town: City of Port Townsend located to the West

Body of Water: Admiralty Inlet, Puget Sound

Admiralty Inlet lies between the Olympic Peninsula on the mainland of the State of Washington (Jefferson County, Kitsap County) and Whidbey Island (Island County), and connects the northwestern end of Puget Sound to the Strait of Juan de Fuca (providing access to the Pacific Ocean and the Inland Passage to Alaska). The Project will be located in the eastern portion of Admiralty Inlet, entirely within Island County.

(b)(3) The exact name, address, and telephone number of the applicant are:

Public Utility District No. 1 of Snohomish County, Washington P.O. Box 1107 2320 California Street Everett, WA 98206-1107

Tel: (425) 783-8100

(b)(4) The exact name, address and telephone number of each person authorized to act as agent for the applicant in this application are:

Steven J. Klein, General Manager

Public Utility District No. 1 of Snohomish County, Washington P.O. Box 1107

Everett, WA 98206-1107 Tel: (425) 783-8606 sjklein@snopud.com

Kim D. Moore, Assistant General Manager of Generation

Public Utility District No. 1 of Snohomish County, Washington P.O. Box 1107 Everett, WA 98206-1107

Tel: (425) 783-8606 kdmoore@snopud.com

(b)(5) The District is a municipality as defined under the Federal Power Act (16 U.S.C. § 796(7)) and is claiming preference under section 7(a) of the Federal Power Act.

(b)(6)

(i) The statutory or regulatory requirements of the state(s) in which the project would be located that affect the project as proposed with respect to bed and banks and the appropriation, diversion, and use of water for power purposes, and with respect to the right to engage in the business of developing, transmitting, and distributing power and in any other business necessary to accomplish the purposes of the license under the Federal Power Act, are:

Through consultation with state and local agencies and governments, the following state regulatory requirements have been identified:

Washington State Environmental Policy Act, Chapter 43.21C RCW

Hydraulic Project Approval, Chapter 77.55 RCW

Shoreline Management Act, Chapter 90.58 RCW

Use Authorization for State-Owned Aquatic Lands, Chapter 79.105 RCW

Water Quality Certification under Section 401 of the Clean Water Act, 33 U.S.C. § 1341; Chapter 90.48 RCW

Consistency Determination under the Coastal Zone Management Act, 16 U.S.C. § 1456

The District is a Public Utility District formed under Washington law. In Washington State, Public Utility Districts (PUDs) are nonprofit, community-owned and governed municipal corporations that provide some or all of electricity, water, wholesale telecommunications, and sewer service. The law governing the formation and operation of PUDs is Title 54 of the Revised Code of Washington (RCW), available at http://apps.leg.wa.gov/rcw/default.aspx?Cite=54. RCW 54.04.020, authorizing the formation of PUDs, and RCW 54.16.040, authorizing the

construction of facilities for generating electric current, are attached to this application as Appendix J.

(ii) The steps which the applicant has taken or plans to take to comply with each of the laws cited above are:

The District has consulted with the various agencies responsible for implementing the state requirements listed in (b)(6)(i) above throughout the licensing process. These agencies have reviewed the various monitoring and other plans included with this application and have the opportunity to provide comments and discuss concerns.

The District has completed and submitted a Joint Aquatic Resource Permit Application (JARPA). The JARPA is a single application that can be used to apply for more than one permit at a time, created by multiple regulatory agencies to streamline the environmental permitting process. The District filed its JARPA with the appropriate agencies on February 7, 2012. This application covers the Hydraulic Project Approval and the Water Quality Certification under Section 401 of the Clean Water Act, as well as permits required by the U.S. Army Corps of Engineers and potentially for permits required under Sections 10 and 404 of the Clean Water Act.

The District will initiate its review under the Washington State Environmental Policy Act shortly after the Commission issues its environmental analysis under the National Environmental Policy Act. This timing will allow the District to utilize that environmental analysis as part of its review, avoiding unnecessary duplication.

The District will submit an application to Island County for a permit under the Shoreline Management Act shortly after the Final License Application is filed with the Commission. The District will also submit an application to the Washington State Department of Natural Resources for a Use Authorization for State-Owned Aquatic Lands soon after filing the Final License Application.

The District is working with the Washington Department of Ecology to comply with the requirements of the Coastal Zone Management Act and is filing its request for consistency certification concurrently with this Final License Application.

(i)	Proposed installed generating capacity:	<1	MW.

(-)	- · · · · · · · · · · · · · · · · · · ·
(ii)	Check appropriate box:
	☐ Unconstructed Dam
	\square Existing Dam \square Existing Dam, Major Modified Project (see § 4.30(b)(14))
	\overline{M} None

The Project is a hydropower project that proposes to utilize the kinetic energy of tidal streams to power two turbines. The Project is located under water in a section of Admiralty Inlet in the

(b)(7) Brief Project Description:

northwestern portion of Puget Sound, an inland marine waterway of the northern Pacific Ocean. The Project will consist of two OpenHydro turbines, which are closed-shroud, open-centered devices with no exposed blade tips, and are installed without anchors or pilings.

The Project will have an installed capacity of less than 1 megawatt (MW), with models showing expected peak generation of approximately 680 kilowatts (kW). Power will be transferred to the grid via seabed cable. This cable will use directional-boring technology near land to minimize or eliminate any shoreline disturbance. The Project will include appurtenant facilities for interconnection, operation, monitoring, and safety.

While the Project will produce a modest amount of electric energy, the primary purpose of the Project is to conduct research and gather data to inform questions regarding the technical, economic, and environmental viability of tidal energy generation generally, and to inform the District's potential further development of tidal energy generation in Admiralty Inlet and other sites in and around Puget Sound.

(b)(8) Lands of the United States affected (affected lands shown on Exhibit G):

No lands of the United States will be affected.

	(Name)	(Acres)
(i) National Forest	n/a	0
(ii) Indian Reservation	n/a	0
(iii) Public Lands Under		
Jurisdiction of	n/a	0
(iv) Other	n/a	0
(v) Total U.S. Lands		0
(vi) Check appropriate box:		
☑ Surveyed Land	☐ Unsurveyed Land	

(b)(9) Construction of the Project is planned to start within 18 months, and is planned to be

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performance, and other factors.

completed within 36 months, from the date of issuance of license.

Expected generation figures are based on the most recent data available to the District and are the output of a model intended to predict turbine performance within Admiralty Inlet. However, electrical generation from tidal energy conversion devices is highly site-specific and may be influenced by even small changes in the final location of the turbines. Further, performance will be influenced by other factors as well, including actual efficiency of the devices, specific currents encountered, and the effect of turbulence. Therefore, the figures herein are estimates only and may change based on updated data, precise turbine location following deployment, actual

The following information is provided pursuant to 18 C.F.R. § 5.18(a)

(a)(1) Identify every person, citizen, association of citizens, domestic corporation, municipality, or state that has or intends to obtain and will maintain any proprietary right necessary to construct, operate, or maintain the project:

The District submits this Final License Application as the sole applicant for a new pilot hydrokinetic license for the project. The District is the only entity that has or intends to acquire all proprietary rights to construct, operate, and maintain the Project over the term of the new license.

- (a)(2) *Identify (providing names and mailing addresses):*
 - (i) Every county in which any part of the project, and any Federal facilities that would be used by the project, would be located:

The Project does not use any Federal facilities. The Project lies entirely within the political boundary of Island County. Island County's contact information is:

Island County

1 NE 7th Street P.O. Box 5000 Coupeville, WA 98239

- (ii) Every city, town, or similar local political subdivision:
 - A. In which any part of the project, and any Federal facilities that would be used by the project, would be located:

No part of the Project, nor any portion of the Project boundary, will be located within the boundary of any city, town, or similar political subdivision.

B. That has a population of 5,000 or more people and is located within 15 miles of the project dam:

There are three cities with populations of 5,000 or more people located within a 15-mile radius of the proposed Project. The mailing addresses of those cities are:

City of Port Townsend

250 Madison Street Port Townsend, WA 98368

City of Oak Harbor

865 SE Barrington Drive Oak Harbor, WA 98277

City of Stanwood

10220 270th Street NW Stanwood, WA 98292

- (iii) Every irrigation district, drainage district, or similar special purpose political subdivision:
 - A. In which any part of the project, and any Federal facilities that would be used by the project, would be located:

No Project facilities will be located in or are proposed for location in an irrigation district, drainage district, or similar special purpose political subdivision, nor will any Federal facilities be used by the Project.

B. That owns, operates, maintains, or uses any project facilities that would be used by the project:

The District will be solely responsible for owning, operating, maintaining, and using Project facilities. No special purpose political subdivision would be involved with the Project.

(iv) Every other political subdivision in the general area of the project that there is reason to believe would likely be interested in, or affected by, the application:

The District is unaware of any political subdivisions in the area of the Project likely to be interested in the licensing of the Project and not mentioned above.

(v) All Indian tribes that may be affected by the project:

Indian tribes potentially affected by or interested in the Project and participating in the licensing process are:

Jamestown S'Klallam Tribe

1033 Old Blyn Highway Sequim, WA 98382

Lower Elwha Klallam Tribe

2851 Lower Elwha Road Port Angeles, WA 98363

Lummi Nation

2616 Kwina Road Bellingham, WA 98226

Port Gamble S'Klallam Indian Tribe

31912 Little Boston Road NE Kingston, WA 98346

Sauk-Suiattle Indian Tribe

5318 Chief Brown Land Darrington, WA 98241

Suquamish Tribe

18490 Suquamish Way Suquamish, WA 98392

Swinomish Indian Tribal Community

11404 Moorage Way LaConner, WA 98257

Tulalip Tribes of Washington

6406 Marine Drive Tulalip, WA 98271

Upper Skagit Indian Tribe

25977 Community Plaza Way Sedro Wooley, WA 98284

(a)(3) As required by 18 C.F.R. § 5.18(a)(3)(i), and concurrent with the filing of this Final License Application, the District is serving a copy of the Final License Application and those exhibits and attachments containing non-Critical Electrical Infrastructure Information upon the appropriate Federal, state, and interstate resource agencies, Indian tribes, local governments, and members of the public identified as interested or active participants, in the licensing proceedings for the Project, including the entities listed in (a)(2) of this Initial Statement. In addition, the District is notifying every property owner of record with interest in the property within the bounds of the Project of the filing of this Final License Application.

(a)(4) As required by 18 C.F.R. \S 5.17(e), the District notes that it is not seeking benefits under section 210 of the Public Utility Regulatory Policies Act of 1978.

(a)(5) Verification of Facts

This application is executed in the:

State of Washington,

County of Snohomish,

By:

Steven. J. Klein, General Manager

(Name):

Public Utility District No. 1 of Snohomish County, Washington

(Address):

P.O. Box 1107, 2320 California Street, Everett, WA 98206-1107

being duly sworn, deposes and says that the contents of this application are true and correct to the best of his knowledge and belief. The undersigned Applicant has signed the application this day of February, 2012.

PUBLIC UTICITY DISTRICT NO. 1 OF SNOHOMISH COUNTY

By:

Steven J. Klein

General Manager

Rublic Utility District No. 1 of Snohomish County

Subscribed and sworn to before me, a Notary Public, this 25 day of February, 2012.

PUBLIC 5-17-2012

Signature of Notary Public

Printed Name

Residing at: <u>NERETT</u> WA

My commission expires: 577 2012

PILOT PROJECT LICENSING JUSTIFICATION STATEMENT

for the Admiralty Inlet Pilot Tidal Project

On July 7, 2011, the Federal Energy Regulatory Commission (the Commission) found that the Draft License Application for the Admiralty Inlet Pilot Tidal Project (the Project) filed by Public Utility District No. 1 of Snohomish County (the District) on December 28, 2009, addresses and meets the criteria for licensing pilot projects outlined in the Commission's whitepaper, "Licensing Hydrokinetic Pilot Projects." The Commission, however, reserved the final decision on whether the Project is an appropriate pilot project for when the Commission acts on the Final License Application.

The following demonstrates that the Project meets the *Criteria for Using the Pilot Licensing Procedures*, listed in Section III of the Commission's whitepaper. These criteria specify that a proposed project must be: (1) small; (2) short term; (3) not located in sensitive areas; (4) removable and able to be shut down on short notice; (5) removed, with the site restored, before the end of the license term (unless a new license is granted); and (6) initiated with a draft application that is adequate as filed to support environmental analysis.

1. The Project Will be Small

As discussed in the whitepaper, Commission staff will evaluate projects on a case-by-case basis, but expects that pilot projects will be less than 5 MW and often will be substantially smaller. In addition to generating capacity, staff also will consider carefully the number of generating units and the project footprint in determining whether the proposal qualifies as a pilot project. The proposed Project is consistent with this criterion, as it will consist of only two turbines and have a proposed installed capacity of 681 kW, well below the 5 MW threshold proposed by the Commission in its whitepaper.

2. The License Term Will be Short

As discussed in the whitepaper, while the Commission expects that pilot project will have terms of five years, it will evaluate proposals for longer license terms on a case-by-case basis. The District believes that a license term of ten (10) years is appropriate for the Project. Tidal energy technology, including the OpenHydro turbine, is an emerging technology that requires substantial field demonstration, particularly in terms of maintenance and operations cycles, to fully inform future plans and deliver on the data requirements of the project. The District and OpenHydro currently believe that fully evaluating plant operations and gathering the associated and required data will require multiple years of turbine operation. Because the license term must also allow time for procurement, construction, and potential removal of the turbines, a 10-year license term is appropriate. In addition, Commission regulations require that an application for a new license be filed at least two years prior to license expiration. Because pre-application proceedings can take three or more years to complete, a five-year license term would require Snohomish to begin relicensing proceedings almost before the Project begins operation.

APPLICATION FOR LICENSE FOR A PILOT HYDROKINETIC PROJECT Pilot Project Licensing Justification Statement – February 29, 2012

² See FERC, Licensing Hydrokinetic Pilot Projects (Apr. 14, 2008; revised Feb. 4, 2009; Feb. 19, 2010), available at http://www.ferc.gov/industries/hydropower/indus-act/hydrokinetics/energy-pilot.asp.

3. The Project Will Not be Located in a Sensitive Area

The whitepaper guidance indicates that the applicant must describe potential areas of sensitivity in the proposed project area and indicate the reasons for the sensitivity and include stakeholder comments. Commission staff will determine whether a potential use conflict makes the proposal inappropriate for an expedited review process. Although Admiralty Inlet is home to several species listed under the Endangered Species Act, the characteristics of the Inlet demonstrate that it is a large, diverse, commercial waterway appropriate for a pilot tidal energy project.

Admiralty Inlet has substantial shoreline development, a ferry route operating directly to the south of the project site which typically makes twenty crossings daily between Whidbey Island and the city of Port Townsend, and most notably includes the major regional shipping lane utilized by essentially all commercial and military traffic in and out of Puget Sound. Figure 1 below reflects the shipping traffic adjacent to the project site for a typical week. Admiralty Inlet is by any definition a working waterway. The District has consulted with the Coast Guard and all major navigational users of the Admiralty Inlet waterway via the Puget Sound Harbor Safety Committee. No navigational or recreational impediments to the siting and operation of the Admiralty Inlet Pilot Tidal Project as proposed have been identified.

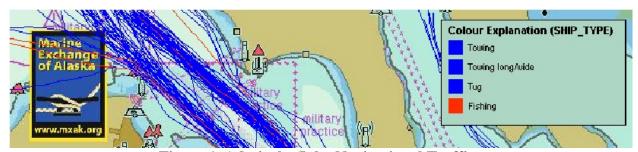


Figure 1. Admiralty Inlet Navigational Traffic.

The placement of the Project near a busy shipping channel, which is used by essentially all maritime traffic transiting to and from the ports of Seattle, Tacoma, Olympia, and Everett, as well as Naval facilities including Naval Station Everett, Puget Sound Naval Shipyard, and the Bangor Submarine Base, represents an appropriate use of a commercial waterway.

Based upon available information, the District anticipates that the proposed Project will not present a risk to marine resources within Admiralty Inlet. In part, this is due to the design of the OpenHydro turbine itself: a closed-shroud, open-centered device with no exposed blade tips, running at low speed without cavitation, with no need for oil or grease lubricants, and installed without anchors or pilings. Additionally, the Project is of very limited scale relative to Admiralty Inlet, representing less than 0.05% of the Inlet's cross-section (Figure 2).

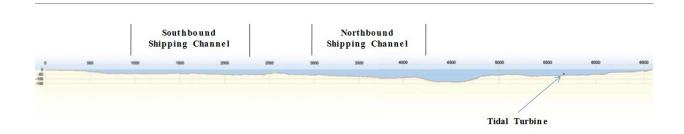


Figure 2. Cross-section of Admiralty Inlet showing approximate scale of a tidal turbine.

While limited in scope, existing data and assessments regarding currently operating and proposed tidal projects do not document substantial or unanticipated environmental risk. A primary concern of tidal energy technologies is that marine life will interact with the rotating turbine blades. Marine mammals and fish are highly sensitive to their surroundings and it is expected that they will avoid turbines. Initial evaluation of the potential for interaction with the turbine, primarily at test facilities in Europe, appear to support this hypothesis and a program of work for full evaluation is ongoing. Similarly, the recent OpenHydro installation in the Bay of Fundy was evaluated in a comprehensive Environmental Assessment report to Canadian federal and provincial governments; the likely effects of the project were found to be limited in scope and duration (AECOM 2009). While these and similar assessments do not by themselves document the safety of the Admiralty Inlet Pilot Tidal Project, Snohomish believes they provide important context that must be included relative to considering potential environmental risk.

The proposed Project area includes the following areas:

1. Endangered Species Act (ESA) Designated Critical Habitat.

The proposed Project area includes designated critical habitat for eight ESA-listed species managed by National Marine Fisheries Service and two ESA-list species managed by the US Fish and Wildlife Service. Based upon the design and scope of the proposed Project, the District anticipates that the proposed Project will not adversely affect ESA Designated Critical Habitat. The proposed monitoring plans appended to this Final License Application will allow the District to verify that the Project is not adversely affecting Critical Habitat.

2. Essential Fish Habitat.

As is the case for the entirety of Puget Sound, the National Marine Fisheries Service has designated Admiralty Inlet as Essential Fish Habitat (EFH) for a number of species and includes several Habitat Areas of Particular Concern. Based upon the design and scope of the proposed Project, the District anticipates that the proposed Project will not adversely affect EFH. The proposed monitoring plans appended to this Final License Application will allow the District to verify that the Project is not adversely affecting EFH.

4. The Project Will be Removable and Able to be Shut Down on Short Notice

The whitepaper states that, in the event of unacceptable risks to the public or the environment during the license period, projects using the Pilot Licensing Process must be removable or able to shut down on short notice.

In the District's June 24, 2011, response to the Commission's request for additional information, the District included a proposed Near-Turbine Monitoring Plan to detect and quantify fish and marine mammal use, if any, of the local vicinity of the project turbines. (Such an effort is not feasible prior to turbine installation because the transponders require power and high-capacity data transfer and storage.) Although the District continues to work with interested agencies and other stakeholders to finalize the Near-Turbine Monitoring Plan, the goals and standards contained in the June 24 draft remain.

In combination with the Near-Turbine Monitoring Plan, the District is working with interested agencies and stakeholders to finalize a Marine Mammal Monitoring Plan. The objective of the Marine Mammal Monitoring Plan is, broadly, to improve the understanding of how marine mammals interact with operating tidal turbines. The primary consideration is attraction or avoidance.

In addition, the District has developed Project Safeguard Plans which detail procedures the District will undertake to safeguard the public and environmental resources, including procedures for emergency shutdown and removal of the Project, if required. These plans provide for monitoring to detect the potential for substantial environmental or public harm, and allow for appropriate mitigation efforts (e.g., fish deterring acoustic devices). In the unexpected event that Project removal or shutdown is required, the District would be able to take such measures on short notice. No anchor placements, pilings, or surface-piercing structures would be involved with the turbine installations or cable. In fact, both the turbines and their foundations are specifically designed to be completely removable for scheduled maintenance or other needs. Both the design of the OpenHydro turbine foundation itself, as well as the deployment methodology, are completely consistent with the Pilot License Process requirement that the Project is removable or able to shut down in the event of risk to the public or environmental harm.

5. The Project Will be Removed and the Site Restored Before the End of the License, Unless a New License is Obtained

The whitepaper states that licenses for pilot projects will require that the project be removed and the site restored as directed by the Commission. If a pilot project licensee opts to apply for a standard license at the end of the pilot project license term, authorization of the build- out project will be evaluated in a full Commission proceeding with National Environmental Policy Act review and participation by all interested stakeholders. If build-out is licensed, there may be no need to remove the pilot devices.

As discussed above, in the case of the Project, no anchor placements, pilings, or surface-piercing structures would be involved with the turbine installations or cable. In fact, both the turbines and their foundations are specifically designed to be completely removable for scheduled

maintenance or other needs. Power would be transferred to the grid via a seabed cable to Whidbey Island. The cable deployment will utilize horizontal directional drilling so as to avoid disturbing nearshore habitats. Both the design of the OpenHydro turbine foundation itself, as well as the deployment methodology, are completely consistent with the Pilot License Process requirement to completely remove the installation and restore the site within the term of the pilot license.

6. The Draft License Application, as Supplemented, Was Sufficient to Support Environmental Analysis

The District filed the Draft License Application on December 28, 2009. On August 6, 2010, the Commission requested additional information from the District to aid in its assessment of whether the Project meets the criteria for the pilot licensing process. The District submitted its response to the Commission on June 24, 2011. On July 7, 2011, the Commission found that the Draft License Application, as supplemented by the additional information requested, addresses and meets the criteria for licensing pilot projects outlined in the Commission's whitepaper. Thus the District's Draft License Application complies with this criterion. Moreover, this Final License Application provides additional information about the existing environment to fully support the Commission's environmental analysis.

PROCESS PLAN AND SCHEDULE

for the Admiralty Inlet Pilot Tidal Project

This process plan and schedule outlines the steps and timing associated with the Commission's pilot project license procedures for the District's Admiralty Inlet Pilot Tidal Project (the Project). The schedule is generally broken into two phases: (1) the pre-filing phase, which encompasses those actions between the submittal of a Notification of Intent and a Draft License Application and a Commission determination on the appropriateness of the pilot licensing process; and (2) the post-filing phase, which encompasses those actions between the submittal of a Final License Application and the Commission's issuance of a pilot license.

On July 7, 2011, the Commission notified the District that there is good cause to use the pilot project license procedures for the Project, and thus the Commission granted the District's request to waive certain ILP regulations. Concurrent with its July 7, 2011, letter, the Commission issued a notice concluding the pre-filing phase. Therefore, the schedule below only outlines the steps associated with the post-filing phase.

Table 1. Post-Filing Process Schedule as Described in the Commission Whitepaper.

Responsible Entity	Milestone	Date		
Snohomish	File Final License Application and Draft Biological Assessment	2/29/2012		Box 5
Snohomish	Request 401 Water Quality Certification and CZMA Consistency Determination	2/29/2012		Box 5
FERC	Issue Public Notice Accepting Application and Ready for Environmental Analysis (REA)	3/15/2012	15 days from filing	Box 6A
FERC	Issue Biological Assessment			Box 6A
All stakeholders	Comments, Interventions, Recommendations, and Conditions Due	4/14/2012	30 days from Commission public notice	Box 7
FERC	Issue Single Environmental Assessment (Single EA) if a Finding of No Significant Impact (FONSI)	6/13/2012	60 days from due date for comments	Box 8
All stakeholders	Comments on Single EA; 10(j) Resolution	7/13/2012	30 days from Single EA	Box 9
FERC	Ready for Commission Decision			Box 10

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¹ The District requested waiver of sections 5.2(a), 5.6, 5.7, 5.8, 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16, and 5.18(c).

EXHIBIT A - PROJECT DESCRIPTION

for the Admiralty Inlet Pilot Tidal Project

1.0 SUMMARY DESCRIPTION OF PROJECT

Public Utility District No. 1 of Snohomish County, Washington (the District), is applying to the Federal Energy Regulatory Commission (the Commission) for a short-term pilot license for a tidal energy demonstration and research project, the Admiralty Inlet Pilot Tidal Project (Project No. 12690) (the Project), in Admiralty Inlet in Washington State. The District is a municipal corporation of the State of Washington, formed by a majority vote of the people in 1936 for the purpose of providing electric and/or water utility service throughout Snohomish County and neighboring Camano Island. The District is the second largest consumer-owned electric utility in Washington State and, despite the economic downturn, Snohomish County continues to exhibit population growth. In 2010 the District received 3,100 requests for new electric service connections, and the growth is expected to continue.

The Project will involve the deployment and operation of two six meter diameter Open-Centre Turbines developed and manufactured by OpenHydro Group Ltd. The maximum power output from the turbines is approximately 680 kilowatts (kW) of electrical energy at peak tidal currents. However, the maximum power is expected to be capped at 300 kW (150 kW per turbine) to limit stress on the subsea cable, cable connections, and power conversion equipment.

While the Project will produce a modest amount of energy, the primary purpose of the Project is to explore the feasibility of tidal energy as a generation resource. The District will use the information gathered from the Project to inform the potential further development of the Admiralty Inlet site and the potential development of other sites in and around Puget Sound.

The turbines will be mounted on completely submerged gravity foundations and will be interconnected to the electrical grid on Whidbey Island. Other Project facilities include a subsea transmission cable, a cable termination vault, and a power conditioning and control building.

The Project description that follows is organized pursuant to the requirements set forth in the Commission's regulations, at 18 C.F.R. § 4.61(c). A more detailed and complete description of the proposed project, including construction and installation methods for the turbine and appurtenant facilities, appears in section 2 of Exhibit E.

2.0 PROJECT DESCRIPTION

2.1 The number of generating units, including auxiliary units, the capacity of each unit, and provision, if any, for future units.

¹ Expected generation figures are based on the most recent data available to the District and are the output of a model intended to predict turbine performance within Admiralty Inlet. However, electrical generation from tidal energy conversion devices is highly site-specific and may be influenced by even small changes in the final location of the turbines. Further, performance will be influenced by other factors as well, including actual efficiency of the devices, specific currents encountered, and the effect of turbulence. Therefore, the figures herein are estimates only and may change based on updated data, precise turbine location following deployment, actual performance, and other factors.

The Project will generate electrical power from two tidal energy turbines. The predicted peak power generated will be approximately 370 kW for turbine 1 and 310 kW for turbine 2, for a total predicted peak capacity of 680 kW. The District does not expect to install additional units pursuant to the requested pilot license. Rather, should the District wish to pursue the installation of additional turbines, the District expects to apply for a long-term, commercial license from the Commission.

2.2 The type of hydraulic turbine(s).

The Project will utilize 6-meter diameter Open-Centre turbines supplied by OpenHydro Group Ltd. The Open-Centre turbines feature a horizontal axis rotor with power off take through a direct drive, permanent magnet generator. The turbine is principally comprised of three components:

- An external venture, or duct;
- Stator; and
- Turbine rotor, with rotor blades retained entirely within the outer venture and a large open center.

The design has no need for a gearbox or other complicated components requiring regular intervention. An image of the turbine is below:

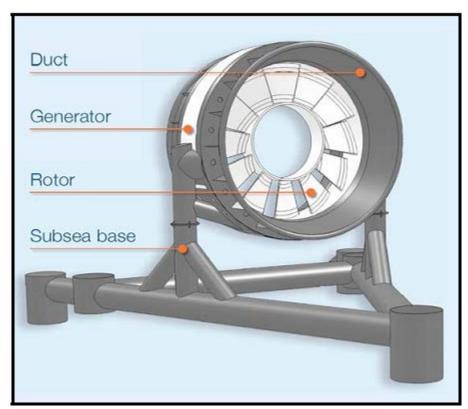


Figure 1. OpenHydro Open-Centre Turbine.

2.3 A description of how the plant is to be operated, manual or automatic, and whether the plant is to be used for peaking.

The OpenHydro turbine is a designed to generate electric power based on the velocity of the tidal currents. Under normal operating conditions, no braking will be applied to slow the turbine as the water velocity is predictable and the turbine design allows for all conditions that could occur. However, in unusual circumstances, an electrical brake can be applied to stop the turbine rotation almost instantly. There is no impoundment of water and no means to artificially increase the flow of water past the turbine. As a result, the Project is not suitable for use as a peaking resource.

2.4 The estimated average annual generation in kilowatt-hours or mechanical energy equivalent.

Turbine 1 is expected have an average instantaneous power output for the year of 14.5 kW and an average output of 13.0 kW for turbine 2, for an average annual generation of 114,000 kilowatt-hours (kWh) and 102,000 kWh for turbines 1 and 2, respectively. This equates to an average annual generation of approximately 27.5 kW, or 216,000 kWh, for the Project. Peak power is predicted to be 680 kW for the Project.

2.5 The estimated average head on the plant.

Not applicable to this Project.

2.6 The reservoir surface area in acres and, if known, the net and gross storage capacity.

Not applicable to this Project.

2.7 The estimated minimum and maximum hydraulic capacity of the plant (flow through the plant) in cubic feet per second and estimated average flow of the stream or water body at the plant or point of diversion.

The Project does not utilize impounded water to generate electricity, and thus there will not be a "diversion" as traditionally envisioned for river-based hydroelectric projects. A description of the characteristics of Admiralty Inlet, however, follows.

The Northwest National Marine Renewable Energy Center deployed Acoustic Doppler Current Profiler (ADCP) devices in Admiralty Inlet over a period of 75 days between May and August 2009. The ADCP devices collect data that can be used to assess the tidal stream current resource and allow developers to assess the energy generation potential of individual locations within a site.

The maximum velocity recorded during this deployment was 3.418 m/s on an ebb tide. It should be noted that the ebb tide is more energetic and in total 55% of the kinetic energy recorded was during the North- Westerly flowing ebb tides. Average tidal velocity is approximately 1.5 m/s.

2.8 Sizes, capacities, and construction materials, as appropriate, of pipelines, ditches, flumes, canals, intake facilities, powerhouses, dams, transmission lines, and other appurtenances.

The Project will incorporate the following facilities or appurtenances:

- Subsea transmission cable;
- Shore landing cable;
- Cable termination vault;
- Back haul cable to the Power Conditioning and Control building;
- Power Conditioning and Control building;
- Back haul cable to the Puget Sound Energy (PSE) grid; and
- Devices required for interconnection with the PSE grid.

Each of these appurtenances is described below:

2.8.1 Subsea trunk cable

The Project will transmit electrical power generated from the OpenHydro turbines to the onshore electrical grid via two parallel subsea trunk cables. The cables connect to a control room, and from the control room the cables connect to the Puget Sound Energy (PSE) grid. The shore landing, control room, and connection to the PSE grid is all located on private land east of Admiralty Head. The general configuration of the cables and shore landing is shown in Figure 2. The two trunk cables will be routed through a single HDD bore which runs from onshore to a minimum depth of 18 meters. From the HDD exit underwater, the cables will continue on the seabed to the turbines.

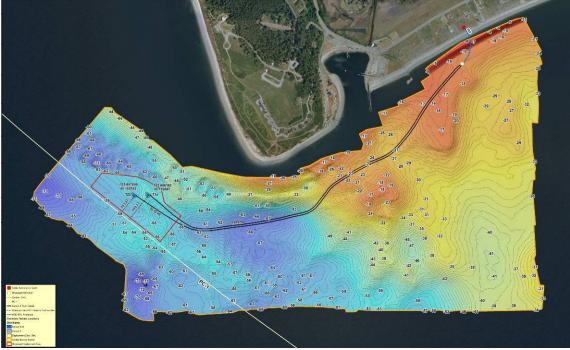


Figure 2. Project Transmission Route.

(Note: Soundings and distances in meters.)

The trunk cables transmit power at 6 kV (or less), 3 phase Alternating Current (AC) on three dedicated cores in the trunk cables. Turbine control and monitoring signals and environmental data are on dedicated single mode fiber optic elements within the trunk cables. Low voltage

power for turbine control and the environmental monitoring system are provided by 2 kV or less dedicated low power elements in the trunk cables. A typical cable arrangement is shown in Figure 3.

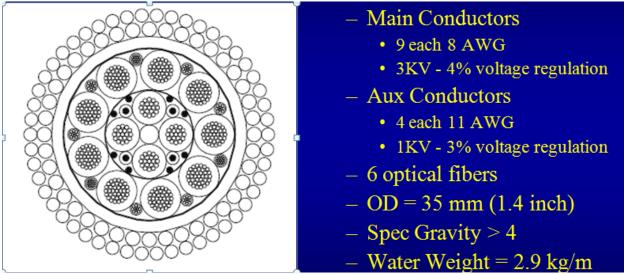


Figure 3. Typical Trunk Cable.

The trunk cables are installed from the turbines to the HDD exit point immediately following the turbine installation. The trunk cables are installed parallel to each other along the seabed surface for approximately 2 km. The cables are installed separately, approximately two weeks apart due to the turbine installation sequence. Approximately 180 meters from the turbines each cable will have a cable connector that will allow for turbine disconnection and removal.

The cables are designed with a high Specific Gravity to assure they do not move on the sea floor due to the high currents along the route. For reference, the cable used with the OpenHydro turbine deployed at EMEC had a submerged weight of 18.4 kilograms per meter, and is likely to be of the same dimensions as the cables proposed for Admiralty Inlet. If there are areas where the cables are suspended across depressions in the seabed or where there are gravel or sand waves, the cables may have to be pinned to the bottom. This is done with weighted sacks or other cable stabilization techniques used in the industry (N. Murphy, Open Hydro and L. Armbruster, Sound & Sea Technology, FERC Technical Conference, Admiralty Inlet Conference, April 12, 2010).

2.8.2 Anchor Mooring System

A two anchor mooring system is planned to be installed for installation and operations support. The anchors are installed to the east of the turbine locations so that they are positioned far away from the existing PC-1 telecommunications cable. The anchors are embedment type with gravity suppressor weights in line to reduce the vertical loading on the anchor. Each anchor is estimated to be about 50 tons. The anchor to suppressor weight link is chain and the remaining mooring line is chain for a distance and then either wire rope or synthetic line. The mooring line is stored on the bottom and retrieved during installation or inspection evolution in the operations time frame. The use of the mooring is to provide safety against any emergency situation during

installation and inspection to avoid vessels needing to drop anchors in a power loss or equipment failure scenario. The District intends to remove the anchors prior to expiration of the license, following consultation with appropriate agencies and interested stakeholders.

2.8.3 Shore landing cable

The cable landing site was selected for: (1) proximity to the subsea turbine site, (2) a suitable location for a shore facility building, and (3) proximity to the existing transmission infrastructure, the PSE grid. The trunk cables will come on shore through a bore hole installed by Horizontal Driectional Drilling (HDD), to the shore cable vault.

2.8.4 Cable termination vault

At the cable vault, the trunk cables terminate and are connected to the terrestrial buried cables (connection breakout point). This termination vault provides an accessible connect and disconnect working area for installation and in the event that the trunk cables need to be removed or disconnected for any reason. An example of the standard utility vault expected to be used measures approximately 1.2 by 1.8 by 0.9 meters and sits flush with the surrounding surface grade.

2.8.5 Back haul cable to the control room

From the cable vault the individual cable cores will be broken out and pulled through separate conduits. The terrestrial cables will run from the termination vault through a buried conduit to the control room. One conduit will contain the AC power transmission lines from Turbine One and a second conduit will contain the AC power transmission cores from Turbine Two. The fiber optic cable, low voltage power elements and the data and telemetry wire bundles will be in additional conduits. Both turbine power cables will be terminated at the first converter buss bar and the sensor cables will terminate at their respective controllers.

2.8.6 Control room

The control room will be architecturally designed to be appropriate for the existing buildings at and near the site. The control room will house the power conditioning and monitoring equipment; the major equipment will include transformers, power inverters and conditioners, cabling, and Heating Ventilating and Air Conditioning systems. The control room layout is shown in Figures 4 and 5. The cables will penetrate the building below ground and enter a diamond plate covered cableway in the floor.



Figure 4. Representation of Control Room Site.

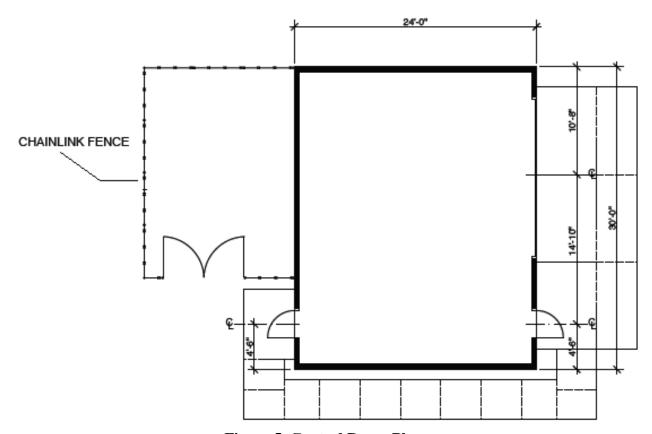


Figure 5. Control Room Plan.

2.8.7 Back haul cable to the PSE grid

From the below ground cable penetration at the control room, the AC power cables will be run underground 70 meters to the 12-kV PSE grid at a utility pole located at approximately 48.159881° N and -122.672955° W.

2.9 The estimated cost of the project.

The District expects total Project expenses, including estimated capital and permitting costs, to be approximately \$23,000,000 by the time the turbine is installed and operating. It is important to note that this expected cost is a rough estimate only, and that more accurate cost estimates will only be available *after* the District has issued a Request for Proposals regarding the various aspects of the Project and received written responses. The imprecise estimate of costs at this stage of Project development is typical of early, pilot-scale projects such as the one proposed here.

Various components of the estimated total cost are described in greater detail below.

2.10 The estimated capital costs and estimated annual operation and maintenance expense of each proposed environmental measure.

The full capital cost of the Project, including construction and delivery of two turbines and foundations, purchase and installation of the subsea cable, construction of any terrestrial facilities, purchase of related equipment and materials, and deployment of the turbines, is expected to be approximately \$16,000,000. Final cost may vary greatly depending on cost of raw materials, availability of labor, and other factors. In addition, all contracts and agreements are subject to negotiation and contracts above certain thresholds must be approved by the District's Board of Commissioners. These negotiations and approvals have not yet occurred, and thus this estimated cost is a rough estimate only.

The District conducted a suite of environmental studies prior to installation of the Project. The estimated cost for these pre-installation environmental studies was approximately \$1,400,000. In addition, the Northwest National Marine Renewable Energy Center has undertaken several study efforts that are relevant to the Project. The District estimates that these studies total an additional \$350,000, for a total pre-installation study cost of approximately \$1,750,000.

As part of this Project, the District proposes to undertake certain measures designed to gather environmental and operational data regarding the operation of the turbines. This information will be utilized to evaluate the Project and may result in modifications to the Project's operations including, in unusual circumstances, ceasing operation. The District is also committing to remove Project facilities and restore the site should a standard license not be issued. Due to the pilot nature of the Project, most of the proposed monitoring plans are the first application of the technology in this fashion. Thus, providing precise estimates for individual monitoring plans is extremely difficult. However, the District estimates that the total cost to acquire, install, operate, and maintain the equipment required for the proposed monitoring plans, and conduct the activities described in the proposed monitoring plans, over a period of five years will total approximately \$6.5 million.

3.0 PURPOSES OF THE PROJECT

While the Project is expected to generate a modest amount of energy, the Project's primary purpose is to demonstrate the potential of the emergent tidal energy industry to bring clean, environmentally benign, and competitively-priced electricity to commercial and residential consumers in Washington State and other coastal states. The District is hopeful that the Project will demonstrate that tidal energy can be counted on to help displace non-renewable fossil-fueled generation and meet a need for power in the District's service territory, both during and beyond the pilot license term.

4.0 ESTIMATED COST TO DEVELOP THE LICENSE APPLICATION

The District initiated activities related to the Project in June 2006. In the ensuing five and a half years, the District has undertaken extensive consultation and outreach, developed a comprehensive and voluminous Pre-Application Document, performed numerous site evaluation studies, performed numerous environmental studies, developed a Draft License Application, and developed and refined numerous monitoring plans to safeguard the public and environmental resources. The District estimates the costs of these and other efforts required to develop the Final License Application total approximately \$2,500,000. The total does not include the costs for ongoing consultation and outreach occurring after the Final License Application is filed, such as finalizing three of the monitoring plans and confirming the technical specifications of the equipment required to implement the various monitoring plans. The total also does not include internal expenses incurred by the District, including staff time, overhead, travel, and other Project-related costs.

5.0 ON-PEAK AND OFF-PEAK VALUES OF PROJECT POWER

Not applicable to this Project.

6.0 ESTIMATED AVERAGE ANNUAL INCREASE OR DECREASE IN PROJECT GENERATION

Not applicable to this Project.

7.0 REMAINING UNDEPRECIATED NET INVESTMENT, OR BOOK VALUE, OF THE PROJECT

Not applicable to this Project.

8.0 ANNUAL OPERATION AND MAINTENANCE EXPENSES, INCLUDING INSURANCE, AND ADMINISTRATIVE AND GENERAL COSTS

The District does not currently have an accurate estimate of the annual operation and maintenance expenses associated with the Project. Determining these costs is in fact a primary objective of conducting the pilot project, as it can only be through real world experience that these costs can be estimated with any degree of accuracy.

9.0 STATEMENT OF MEASURES TAKEN OR PLANNED TO ENSURE SAFE MANAGEMENT, OPERATION, AND MAINTENANCE OF THE PROJECT

The measures to be taken by the District to ensure safe management, operation, and maintenance of the Project are described in detail in the Project Safeguard Plans, appended to the Final License Application as Appendix E. The Project Safeguard Plans address (1) Project and public safety, (2) navigational safety, (3) emergency shutdown of one or both turbines, if necessary, and (4) removal of the Project and restoration of the site, if required. These plans were developed in consultation with regulatory agencies, tribal governments, and Project stakeholders.

10.0 SINGLE-LINE ELECTRICAL DIAGRAM

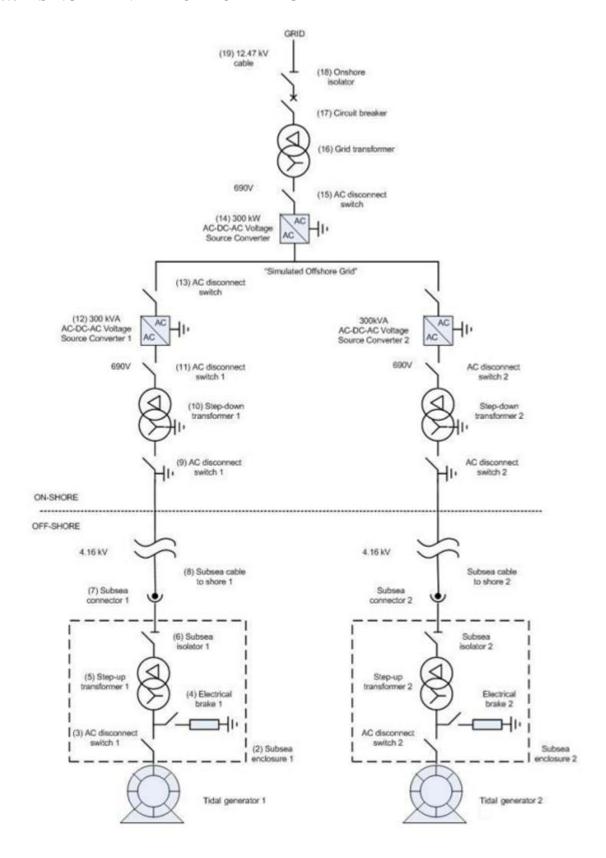
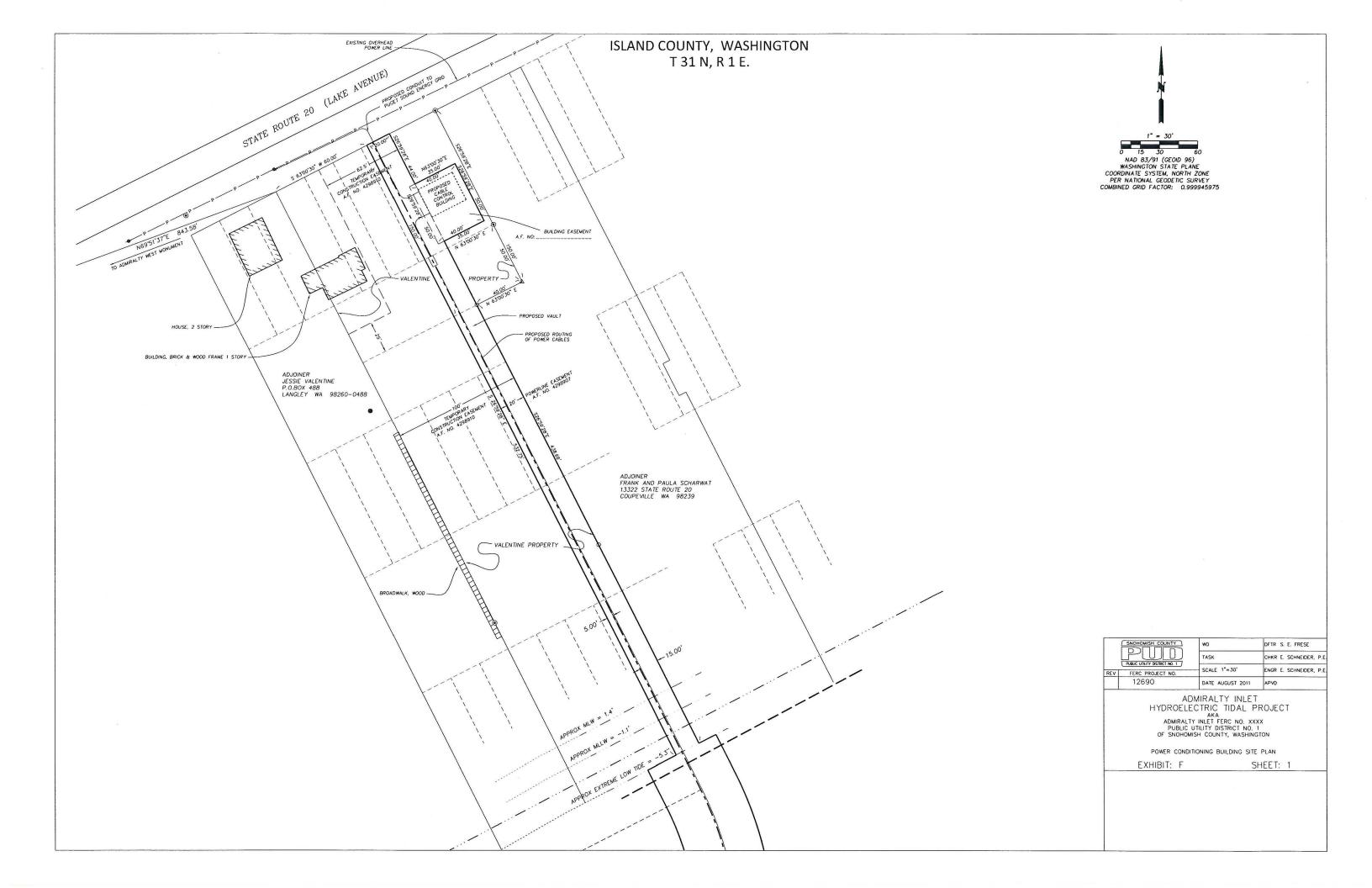
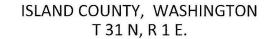
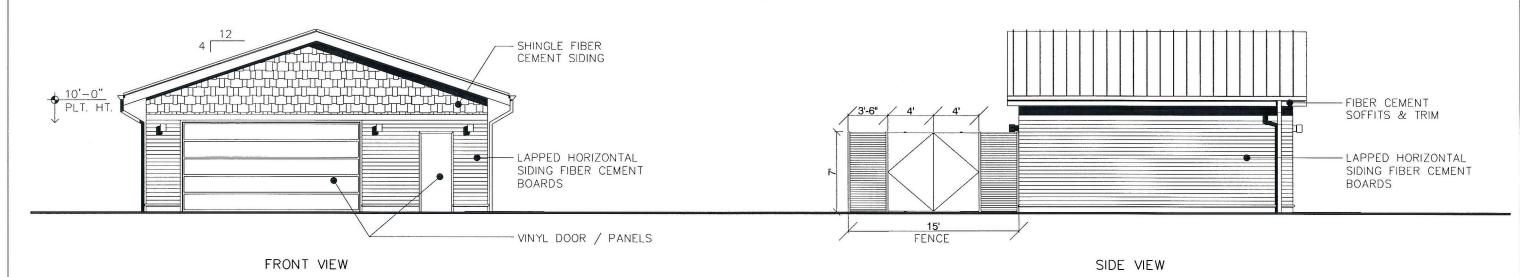


EXHIBIT F – GENERAL DESIGN DRAWINGS OF THE PRINCIPAL PROJECT WORKS

for the Admiralty Inlet Pilot Tidal Project









	SNOHOMISH COUNTY	wo	DFTR S. E. FRESE
		TASK	CHKR E. SCHNEIDER, P.E
REV	FERC PROJECT NO. 1	SCALE 3"=1"	ENGR E. SCHNEIDER, P.E
	12690	DATE AUGUST 2011	APVD

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HYDROELECTRIC TIDAL PROJECT
AKA
ADMIRALTY INLET FERC NO. XXXX
PUBLIC UTILITY DISTRICT NO. 1
OF SNOHOMISH COUNTY, WASHINGTON

POWER CONDITIONING BUILDING ELEVATIONS

EXHIBIT: F

SHEET: 2

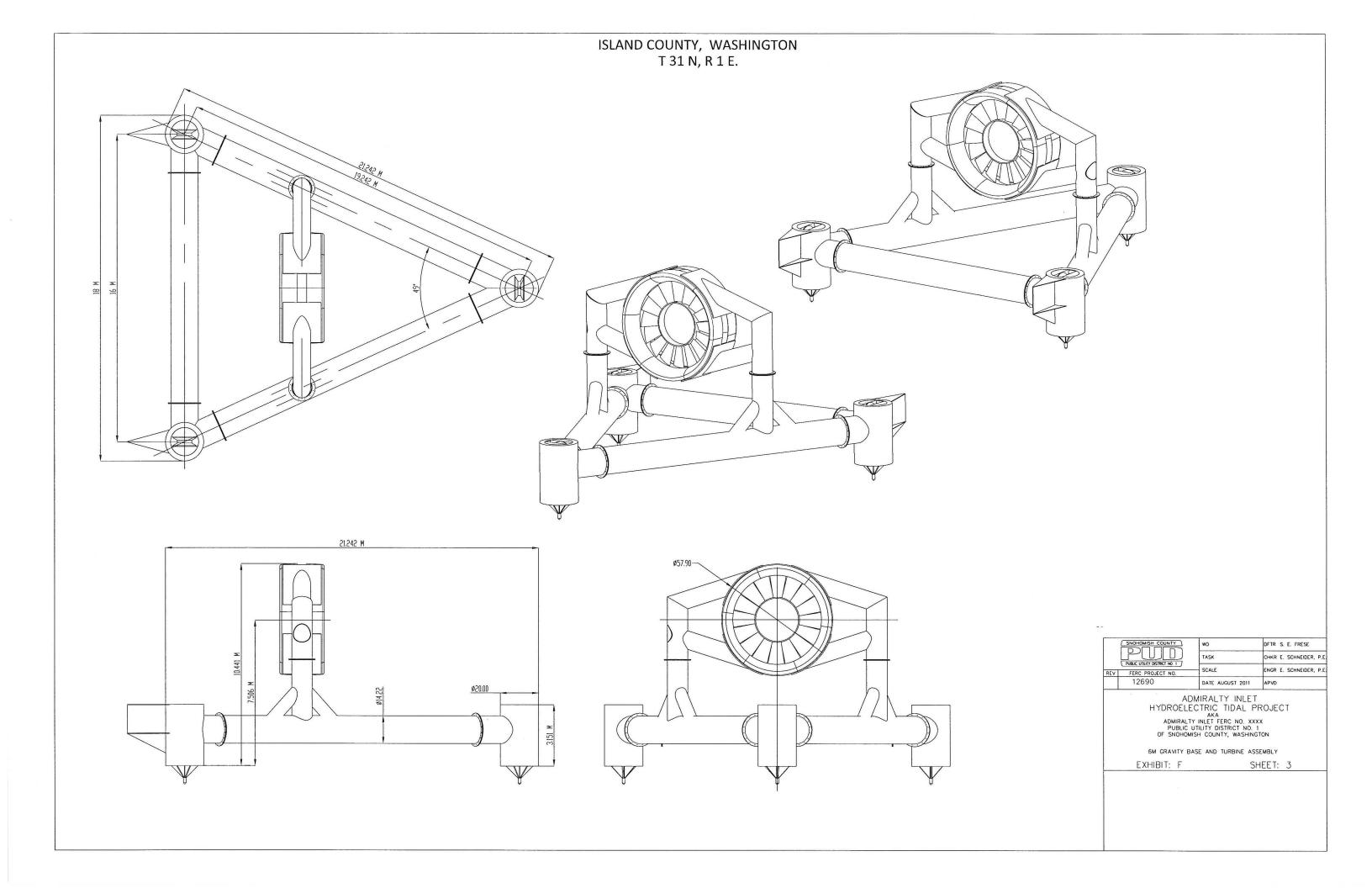


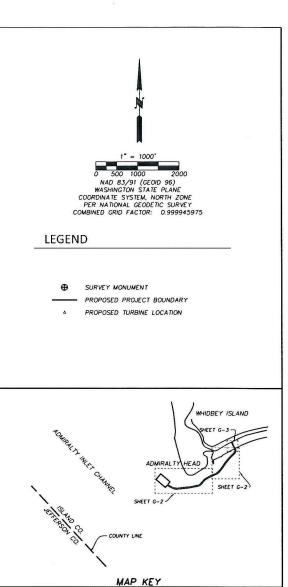
EXHIBIT G – PROJECT MAP

for the Admiralty Inlet Pilot Tidal Project

ISLAND COUNTY, WASHINGTON T 31 N, R 1 E. O LYNDEN ADMIRALTY INLET PROJECT GENERAL LOCATION WHATCOM SKAGIT ISLAND COUNTY MT VERNON CLALLAM · LAKE STEVENS ADMIRALTY INLET PROJECT GENERAL LOCATION -SNOHOMISH **JEFFERSON** o RENTON KING ABERDEEN MONTESANO N. T. S. A380II CROCKETT LAKE 12 KEYSTONE HARBOR & FERRY TERM. **⊕** FORT APPROX SHORELINE PROJECT BOUNDARY: PROPOSED ONSHORE FACILITIES FORT CASEY PROJECT EXTENTS PROJECT BOUNDARY: PROPOSED TURBINE DEPLOYMENT SITE ▲ EAST REFERENCE POINT NO. 4100 PROJECT BOUNDARY: PROPOSED POWER CABLE UNDER SEA ALIGNMENT **ADMIRALTY** PROJECT REFERENCE POINTS ation Northing Elevation Point Designation NGS FORT 428727.19 1189361.29 NGS ADMIRALTY HEAD 426853.96 1190329.04 NGS ADMIRALTY WEST 428547.45 1192435.34 WSDOT KEYSTONE 427959.23 1191363.55 West Reference Pt 4000 426000.00 1194000.00 Northeost Reference Pt 22 428901.48 1193352.13 8 7.03 12.41 12.81

The project boundary an these sheets was developed by Harmsen and Associates using public and private data sources that are identified in the metadata provided. All data sources tract their foundation to 1:24,000 mapping. The portions of the project boundary described by metes and bounds have been reviewed by this surveyor for location, orientation, and accuracy within the 1:24,000 map base.

NGS denotes National Geodetic Survey Monument WSDOT denotes Washington State Department of Transporation Monument



- 1	SNOHOMISH COUNTY	TASK	DFTR T. L. ROBERTS CHKR J. MCDANIEL, P.L.S. ENGR E. SCHNEIDER, P.E.
	PUBLIC UTILITY DISTRICT NO. 1 7		
REV	FERC PROJECT NO.		
	12690	DATE SEPTEMBER 2011	APVD

ADMIRALTY INLET
HYDROELECTRIC TIDAL PROJECT
AMA
ADMIRALTY INLET FERC NO. 12690
PUBLIC UTILITY DISTRICT NO. 1
OF SNOHOMISH COUNTY, WASHINGTON

OVERALL SITE & CONTROL - PLAN

EXHIBIT: G SHEET: 1

HARMSEN & ASSOCIATES INC 16778 146th St SE, Ste 104, MONROE, WA 98272 (360)794-7811 (206)343-5903

