Before the Federal Energy Regulatory Commission

Application for Preliminary Permit

Paul Greyshock, for Cyclo-Ocean Inc., (applicant) applies to the Federal Energy Regulatory Commission for a preliminary permit for the proposed Ft Pierce Inlet Tidal Power Project, as described in the attached exhibits. This application is made in order that the applicant may secure and maintain priority of application for a license for the project under Part I of the Federal Power Act while obtaining the data and performing the acts required to determine the feasibility of the project and to support an application for a license.

The location of the proposed project:
State of Florida
St Lucie County
City of Fort Pierce
Fort Pierce Inlet

The name, business address, and telephone number of the applicant:
Paul Greyshock
Cyclo-Ocean Inc.
670 16th St, Vero Beach, FL 32960
772 501 4865
FERC ID #: F273160

The name, business address of person authorized to act as agent for the applicant:
David Cox Consulting LLC
2044 14TH Ave, Suite 24
Vero Beach, FL 32960
772 564 0540
FERC ID #: F289192

Applicant, Paul Greyshock a U.S. citizen residing in the State of Florida. Cyclo-Ocean Inc. registered in the State of Florida and, is not claiming preference under section 7(a) of the Federal Power Act.

The proposed term of the requested permit is for 36 months.

BACKGROUND

Applicant has developed a low cost sub-surface current generator which has been tested on a daily basis over the last four years in the tidal flow at Fort Pierce Inlet, a deep water navigable inlet. Research was conducted out of channel on the south side of the inlet with a six foot diameter prototype generator. Modifications have been conducted to engineer a generator that is compatible with environment and produce clean energy at a competitive price.

Applicant was granted a permit for testing by the Florida State Department of Environmental Protection (DEP) and, United States Army Corp of Engineers (USACE). A pilot project was conducted in October 2014 that supports this application.

LOCATION

Exhibit 1(a) is proposed project site location, anchoring arrangement, and transmission cable of proposed phases for the next 36 months.

1) There are no existing dams, spillways, penstocks, powerhouses, tailraces, or other structures, (existing or proposed), that would be part of the project.

2) There are no reservoirs (existing or proposed) that would be part of the project.

3) There is one primary transmission line at the front entrance (street side) of Manatee Island Bar & Grill. Phase (i) and (ii) applicant will supply and charge batteries to monitor load and output variations. Phase (iii) would be utilized after grant of license for grid connection.

PROJECT PHASES

The total estimated production and installed capacity is 240KW at an average annual rate:

Phase I 2015: average annual rate of TWO 40 KW tidal flow is 4000 hours = 160,000KWH

Phase II 2016: average annual rate of FOUR 40KW tidal flow is 4000 hours = 480,000KWH

Phase III 2017: average annual rate of SIX 40KW tidal flow is 4000 hours = 640,000KWH
TOTAL OUTPUT 240 KW from SIX 40KW generators = 640,000KWH

Estimated capacity and energy output is calculated at an average current speed of four knots at 4000 hours of tidal flow operation per year. Eventually, battery storage will increase output full time. Turbines are of new construction built of fiberglass, coupled to new generators constructed with steel laminations, copper windings and permanent magnets, manufactured from proven engineering, operating at zero hydraulic head.

4) Ft Pierce Inlet is a navigable waterway pursuant to, 16 U.S.C. § 797(f) and section 4(f) of the FPA.

Project Study Plan

Cyclo-Ocean deployed and studied it's turbine from Oct. 3rd to Oct. 24th, through a period of tidal ranges from 0 to 7.3 knots to observe: environmental compatibility, community comment and mechanical loads. The unit was anchored at each end by 25 ft. of half inch steel cable in line with the current and, monitored daily by physical scuba diving at slack tides.

Study resulted in no marine life incident or environmental impact to the site area, no negative community reaction and, no mechanical or anchoring failures. At the end of test period (21 days [504 hours] of real time testing), both anchors and cables were pulled and removed from seafloor and the generator floated and towed from site, demonstrating the eco safe operation and financial feasibility of technology. Anchoring as opposed to mono pole mooring, or heavy tripod nesting to seabed is much less costly, eliminating barge/crane heavy lift, with no impact to seabed. Turbine is fitted with a protective grill at each end to prevent entry of sea life or debris into the turbines. Results proved satisfactory in all aspects.

2(a) No new roads are required for development of the project at the inlet.

2(b) No new dam is entailed in the development of this project at the inlet.

2(c) Field testing conducted at project site revealed no alteration or disturbance from flood or ebb tidal flows that may alter or disturb lands or waters in the vicinity of the proposed project, including floodplains and wetlands.

2(d) No new dam construction is required that would require test pits, boring or other foundation exploration of the field.

Applicant requests a waiver pursuant to section 385.207.

Applicant has financed all costs of carrying out and preparing: permits, studies, tests, surveys and plans, and submit an annual audit to all costs.

EXHIBITS

Exhibit 1(a) satellite view of the proposed site and the three proposed phases starting with phase (i) in 2015, phase (ii) in 2016, and phase (iii) in 2017. The site position is: 27 28’ 12.05 N, and 80 17’ 46.86 W. 140ft. long from East to West, and 30ft. wide North and South, with each phase comprising of 1400 square feet, for a total of 4200 square feet for all three phases.

Exhibit 1(a)

Exhibit 1(b) Yellow boxed area marks location site on NOAA Chart 11475

Exhibit 1(b)

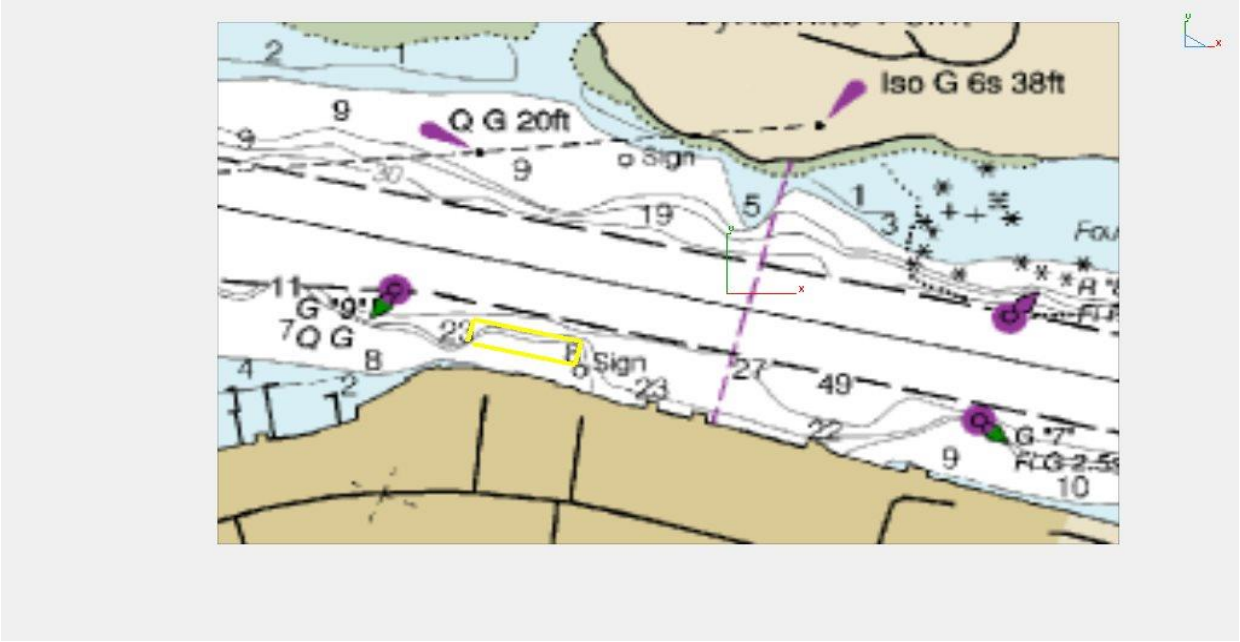

Exhibit 1(c) USACE geographical survey chart of dredging plan FY 2013; red box lower left is project site, and channel is dotted lines.

Exhibit 1(c)

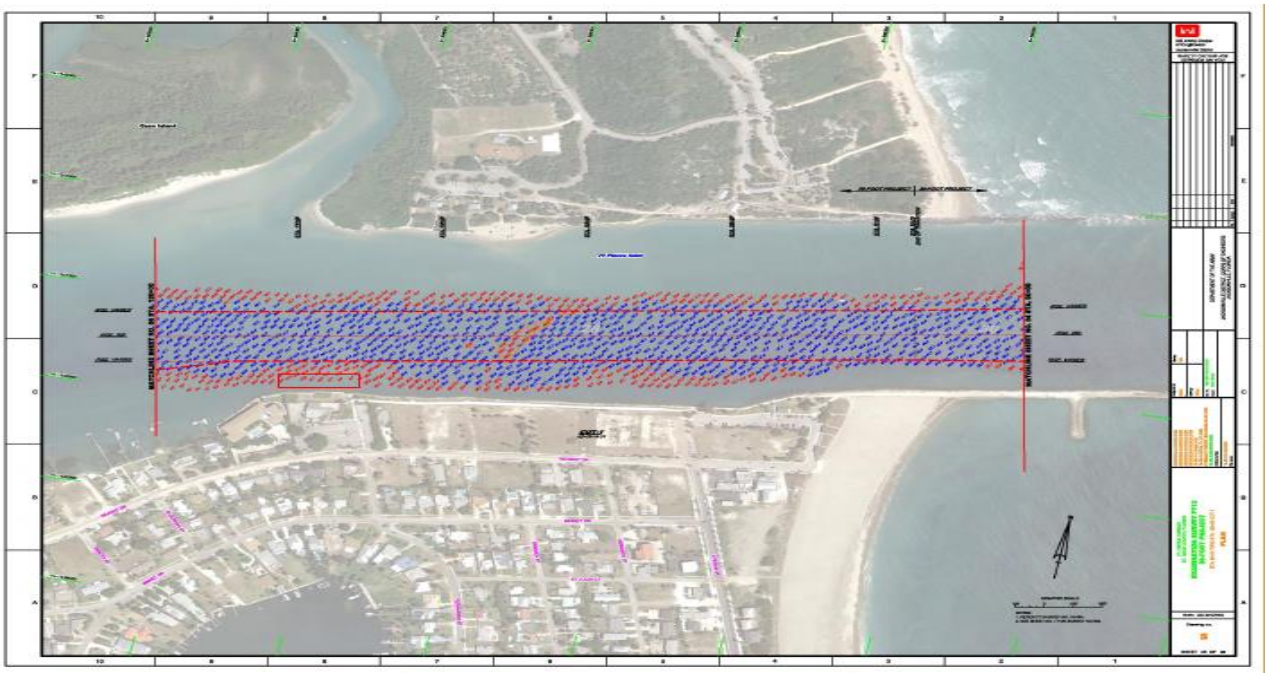

Exhibit 1(d), Fort Pierce Port Plan 2013, with site index

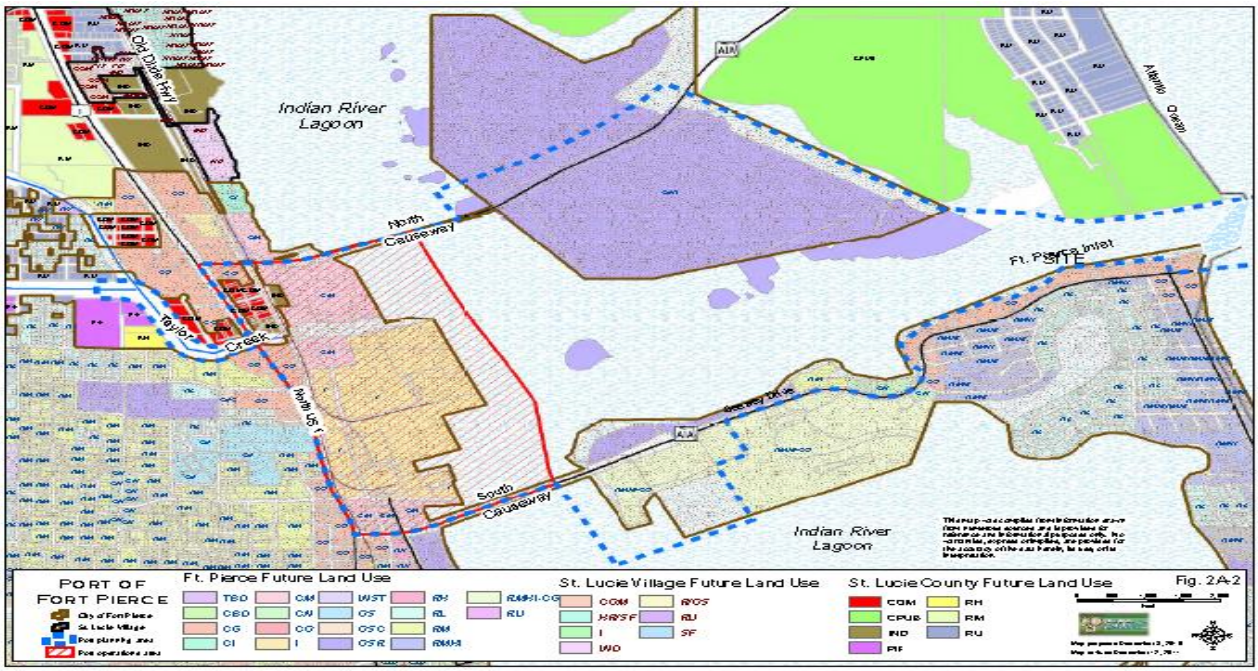

Exhibit 1(e) project site, buoy marks the underwater turbine

There are no physical interrelationships with: dam, reservoir, water conveyance facilities, power plant, transmission lines, historic land sites, and other appurtenances of the project features. In accordance to the Wilderness Act; there are no areas within the vicinity of project boundary designated for study for inclusion in the National Wild and Scenic Rivers System, (i) designated as a wilderness area, (ii) recommended for designation as a wilderness area,

(iii) designated as wilderness area, pursuant to the, Federal Power Act, as amended, 16 U.S.C. 792-828c (1976); Department of Energy Organization Act, 42 U.S.C. 7101-7352 (Supp. IV 1980); E.O. 12009, 3 CFR part 142 (1978); 5 U.S.C. 553 (Supp. IV 1980).

CONCLUSION

Applicant has been respectfully developing and testing technology for the last five years from small prototype to the current six foot diameter prototype at Fort Pierce Inlet at the exhibited site, where applicant has demonstrated a safe and viable sub-surface current generator for commercial use into the electrical power grid in the future.

Respectfully submitted,

Paul Greyshock, *applicant pro se*

DATED: December 4, 2014