



Monty Worthington
DIRECTOR OF PROJECT DEVELOPMENT, ALASKA

725 Christensen Drive, Suite A
Anchorage, AK 99501

DIRECT 907 339 7939

CELL 907 388 8639

OFFICE 207 772 7707

mworthington@oceanrenewablepower.com

September 30, 2010

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE, Room 1-A
Washington, DC 20426

VIA E-FILING

**Re: Nenana OCGen™ River TGU Power Project (P-13233)
Progress Report No. 4**

Dear Ms. Bose:

ORPC Alaska, LLC (ORPC) is pleased to submit the fourth progress report for the Nenana RivGen™ Power Project (P-13233-000) located in the Tanana River, within the Unorganized Borough of Yukon-Koyukuk, near Nenana Alaska.

FERC Pilot Project License Consultation

ORPC has continued to keep stakeholders and agency representatives informed of the status of the Nenana Project through private and public meetings. On June 11, 2010 ORPC held a meeting at the Alaska Department of Fish and Game (ADF&G) office in Fairbanks that included representatives of ADF&G, the United States Fish and Wildlife Service, the United States Army Corps of Engineers, the Alaska Department of Natural Resources, and the University of Alaska Fairbanks (UAF). This meeting focused on updating agency personnel on the status of the project and answering any questions or concerns they had. On the same day, ORPC also held a public stakeholder meeting at the Nenana Civic Center in Nenana, to provide a public forum on the project for local stakeholders. The meeting notes from the ADF&G meeting are included in Attachment A.

ORPC has also continued to participate in the Alaska Hydrokinetic Working Group meetings organized by the Alaska Energy Authority that have included agency representatives and other industry stakeholders in discussions.

Feasibility Studies

ORPC continues collaboration with the Alaska Hydrokinetic Energy Research Center (AHERC) at UAF to further ORPC's Nenana Project and to assist AHERC in establishing the Nenana Hydrokinetic Test Center (NHTS) a hydrokinetic device test center at Nenana. ORPC has



continued to collect environmental and site characterization data at the Nenana RivGen™ Power Project site along with AHERC who is developing data to inform the NHTS within ORPC's Preliminary Permit area. ORPC has contracted TerraSond to collect additional bathymetry and Acoustic Doppler Current Profiler (ADCP) current velocity data through the lower region of the site under funding from the Denali Commission's Emerging Energy Technology Grant (EETG) that was recently made available to ORPC for the project. TerraSond collected the data in early August and has issued a preliminary graphic of the data (Attachment B).

AHERC has also continued work at the site that included the following:

1. Continued to measure current velocity transects at the Nenana test site during the winter (2009/2010) and throughout the summer season. Winter current velocity data has been analyzed and preliminary results have been provided to ORPC. During the 2010 open water season, time synchronized measurements of current velocity, discharge, and sediment transport have been taken on a monthly basis. Analysis of sediment data is in progress. The goal is to establish the seasonal variation of the river hydraulics and sediment transport. Measurements are made on an approximate monthly basis.
2. River hydraulic measurements (bathymetry, current velocity, turbulence, side scan sonar) collected in 2009 have been analyzed and used to construct and validate a 2-D model of river hydraulics for the river reach at Nenana. Current velocity, discharge, specific power, maximum specific discharge and power, and turbulence levels were included in the hydraulic model. A journal article describing this study has been submitted and accepted by the Journal of Power and Energy. The published report will be filed with the next progress report
3. Sediment bedload and suspended sediment measurements were collected during the open water season of 2009 and 2010. Measurements demonstrated that the river bed of the main channel is dynamic (i.e., significant bed load transport) and that sediment sizes vary from sand-size to cobble-size at river current velocities of 2 to 3 meters/second.
4. Preliminary frazil ice formation study was conducted during fall, 2009 and forms the basis for continuing the more detailed study to be continued during fall, 2010.
5. A method for analysis of ADCP current velocity, discharge and Shallow Water Ice Profiler (SWIP) sonar measurements has been developed. Analysis of SWIP data demonstrated that it could detect the ice bottom and multiple sonar signal returns within the water column.
6. Underwater video was taken to examine the presence of frazil ice during the winter field season. This will be continued fall 2010.



7. A report describing a literature review of what is known about fishes in the Tanana River was completed and has been submitted for journal publication review.

After review of the data collected by TerraSond for ORPC and AHERC from 2008 through the most recent effort in August 2010, and the data collected by AHERC to inform the development of the Test site, ORPC has recently narrowed down the area of interest for the first RivGen™ device deployment at the site to an area at the downstream edge of the FERC preliminary permit. It is important to note that it has taken two years of dedicated effort at the site by ORPC, AHERC, and the subcontractors to collect sufficient data on the river currents, bathymetry, bed load, and riverbed composition to be able to make a recommendation for the project's initial location. Based on this, ORPC will be contracting TerraSond to return to the site in early October and perform a river bed and sub bottom characterization of the area chosen for further investigation. This data will inform the bottom support frame design to be completed by ORPC and the riverine foundation studies that will be completed by AHERC.

Project Development

Grant documents from the EETG funding that ORPC received from the Denali Commission were recently executed allowing for those funds to be accessed for project work. AHERC will complete their literature review of riverine foundation systems and debris diversion systems under this funding. ORPC will be contracting TerraSond to return to Nenana in early October and collect additional data on the bottom and sub bottom characteristics of the site chosen for the initial RivGen™ device location, based on the data collected in August and ongoing community consultations. A project kickoff meeting with both AHERC and National Renewable Energy Laboratory representatives will be held in Eastport, Maine on October 7, 2010 in conjunction with a technical visit to ORPC's Beta TidGen™ Power System to begin collaboration on the Nenana RivGen™ Power Project.

ORPC recently revised the scope of work and timeline for the Nenana RivGen™ Power Project during the process of executing grant documents to allow for the release of the EETG funding for the project. As there were delays in the release of these funds and in ORPC's ability to begin engineering on the project it was necessary that ORPC adjust the schedule to account for these delays. As a result ORPC now plans to install the RivGen™ Power System by in June 2012. Based on FERC's anticipated expedited processing of six months for a pilot license, ORPC plans to file a final pilot license application in January 2012. In order to allow the maximum time to prepare a thorough and accurate license application ORPC now intends to submit the Draft Pilot Project License Application (DPLA) for the Nenana RivGen™ Power Project in the third and fourth Quarter 2011 prior to the expiration of the preliminary permit. ORPC will be submitting a request for extension on the filing of the DPLA in the near future to allow for this.

September 30, 2010

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Please contact me at (907) 388-8639 if you have any questions or need any additional information.

Very truly yours,

A handwritten signature in black ink, appearing to read "Monty Worthington". The signature is written in a cursive style with some loops and flourishes.

Monty Worthington
Director of Project Development, ORPC Alaska, LLC.

MW/MM
Attachments

cc: FERC Service List
M. McCann, HDR|DTA
File

Attachments

Attachment A
Alaska Department of Fish and Game Meeting Notes
June 11, 2010



Monty Worthington
DIRECTOR OF PROJECT DEVELOPMENT
ORPC ALASKA, LLC

811 West 8th Ave Suite 205
Anchorage, AK 99501

CELL 907 388 8639

mworthington@oceanrenewablepower.com

6/16/10

196.0003.0010

MEETING NOTES

MEETING DATE: 6/11/10

LOCATION: Fish & Game Bld - Fairbanks, Alaska

ATTENDEES: Luise Smith (USFWS), Audra Brase (ADFG), Jerry Johnson (UAF), Jack Schmid (UAF), Robert F. McLean(ADFG), Gary Prokasch, Bonnie Borba (ADFG), Andy Seitz (UAF), Greg Brimberst, Dave Pelunis-Messier, AJ Wait (ADNR), James Durst (ADFG), Christy Everett (USACE), Monty Worthington (ORPC), Herbert Scribner(ORPC), Tessa Kara (ORPC).
Total;16 attendees.

NOTES BY: Tessa Kara

SUBJECT: ORPC - Nenana RivGen Project

On 6/11/10 at 10:30am Monty Worthington and Herbert Scirbner presented an update on ORPC's Beta project in Maine and the RivGen project in Nenana, Alaska at the Fairbanks Fish and Game building. Jerry Johnson and Andy Seitz, from UAF, presented their work on the Tenana River modeling the fish research.

A question and answer session followed the presentation.

Question: Is the turbine made of aluminum?
Answer: No, a composition of composite and steels.

Question: What is the white tank on the barge? (Asked during pp presentation regarding deployment of the pilot unit deployed in Maine)
Answer: Mooring Tank

Question: What is the designed RPM?
Answer: 30-60 RPM, with 60 being the upper limit.

Question: What is your target resolution? (Regarding the DIDSON units)
Answer: Currently investigating the optimal resolution.

Question: DIDSON units are currently used in AK and do not have the same turn-around issue that you seem to be having in Maine. What would be different?



Answer: We are currently working with a consultant who has prior experience working with this technology.

Question: Will you be using gravity or anchor support for the RivGen?

Answer: Gravity.

Question: Do we know how far below the surface debris will be present?

Answer: Currently unknown, but a safe assumption is mass seen above will be present below.

Question: Is the FERC timeline realistic?

Answer: Yes.

Question: Would there be a greater benefit to a more general study versus an ORPC study?

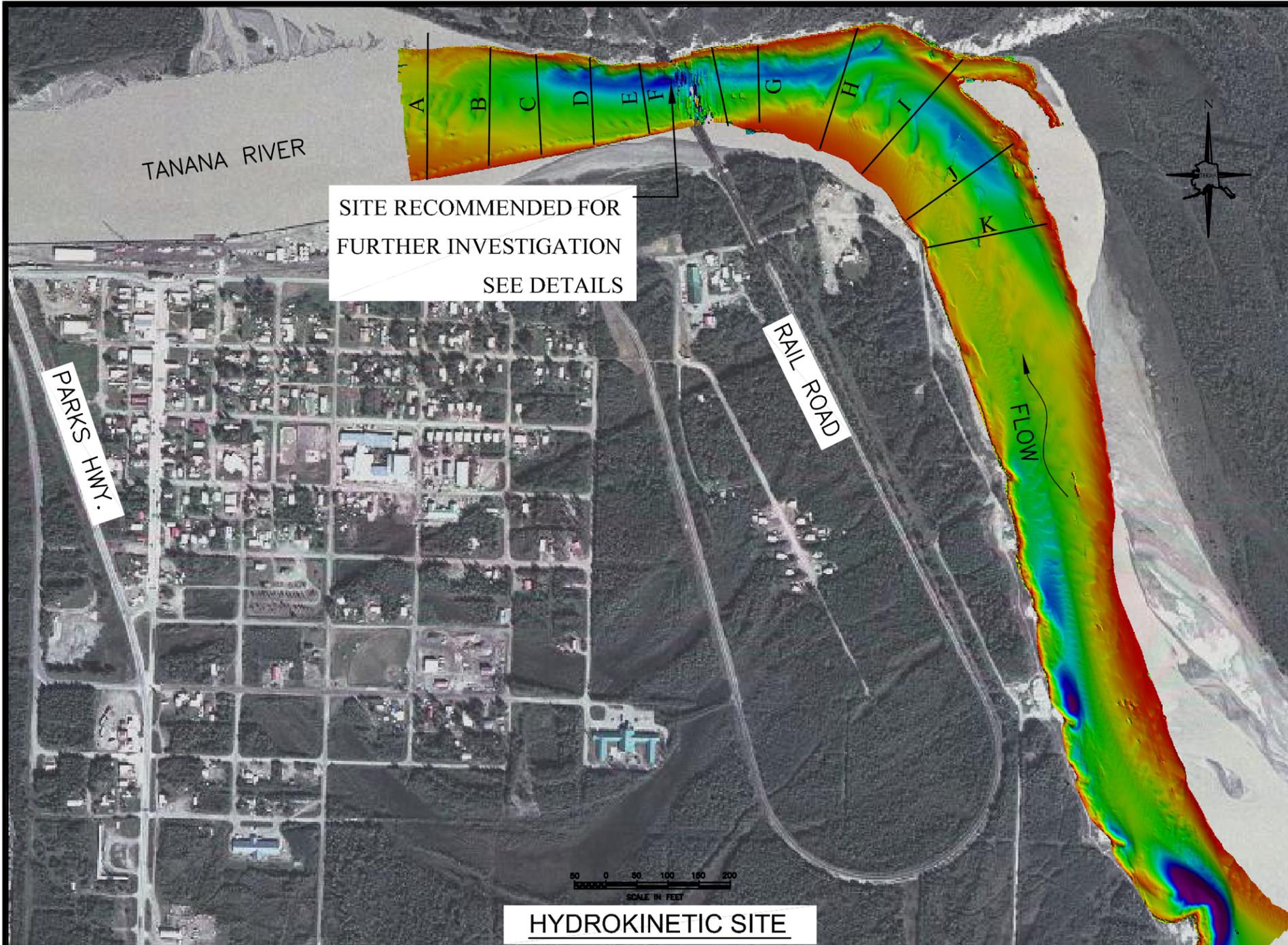
Answer: We will share all of our data and aim to have an open relationship with the hydrokinetic community.

Question: We should contact the Coast Guard regarding navigational responsibility on the Tanana River.

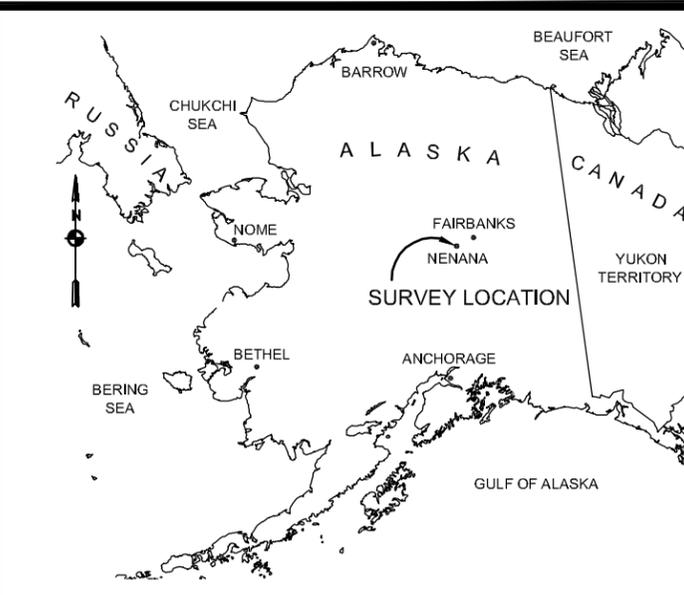
Answer: We have done so and will continue to keep communication open.

Monty Worthington closed by thanking all who attending and sent out a request to the community to compile questions that they would like answers to.

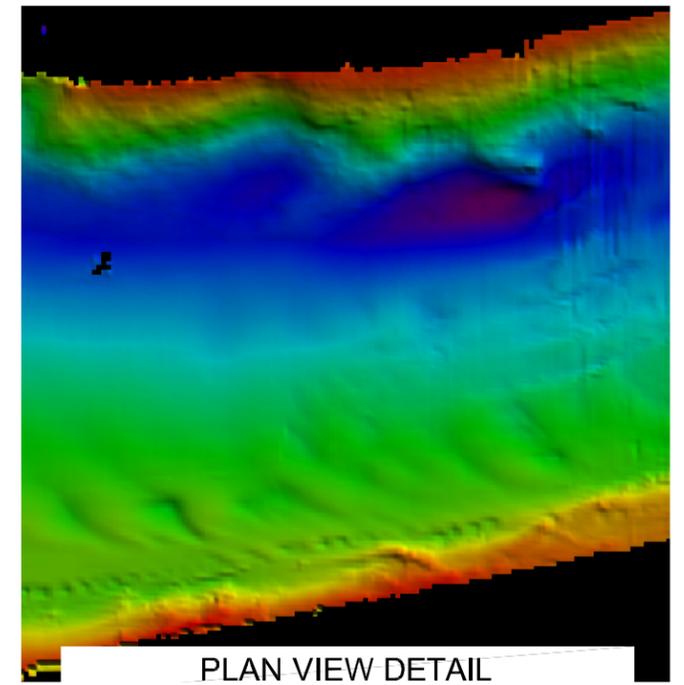
Attachment B
TerraSond Preliminary Data Graphic



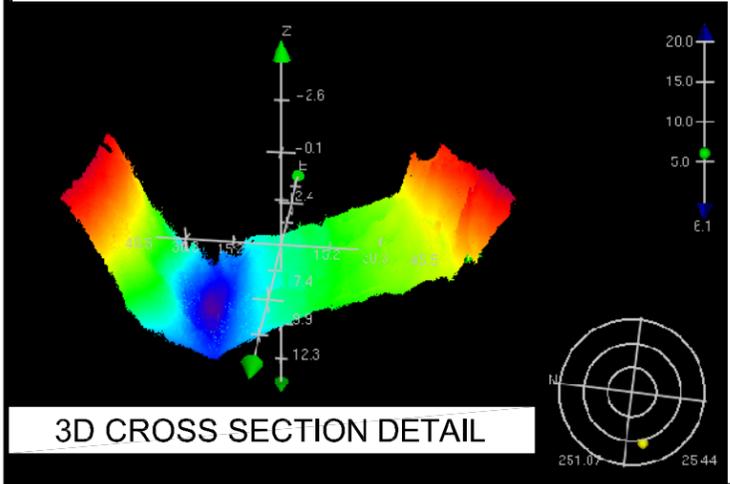
HYDROKINETIC SITE



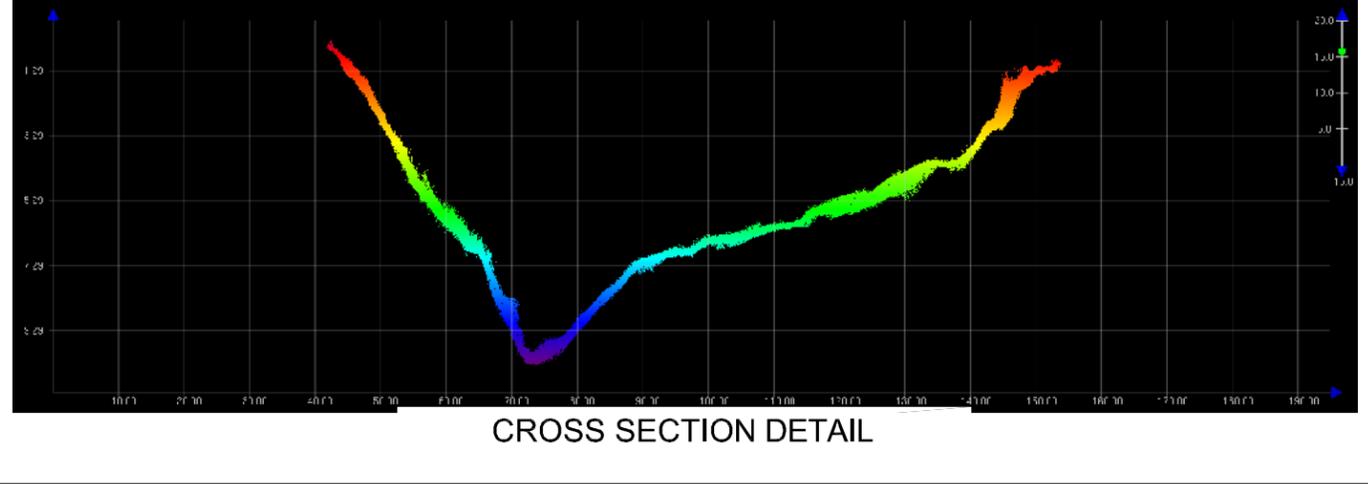
VICINITY MAP
NOT TO SCALE



PLAN VIEW DETAIL



3D CROSS SECTION DETAIL



CROSS SECTION DETAIL

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PRESENTED TO:

NENANA HYDROKINETIC POWER PROJECT

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ACEP
Aerial Center for Energy and Power

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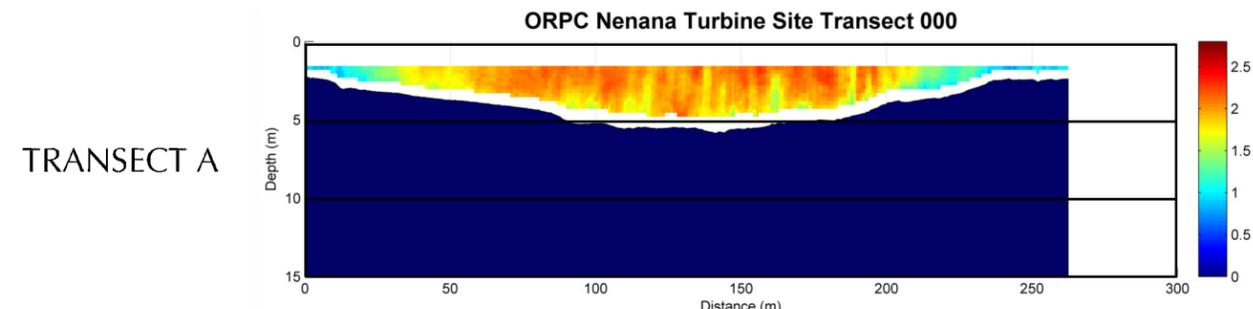
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www.terrasond.com
14 Zona Ministerio De Agricultura, Servicio, SN Malabo, Bioko-Norte Equatorial Guinea
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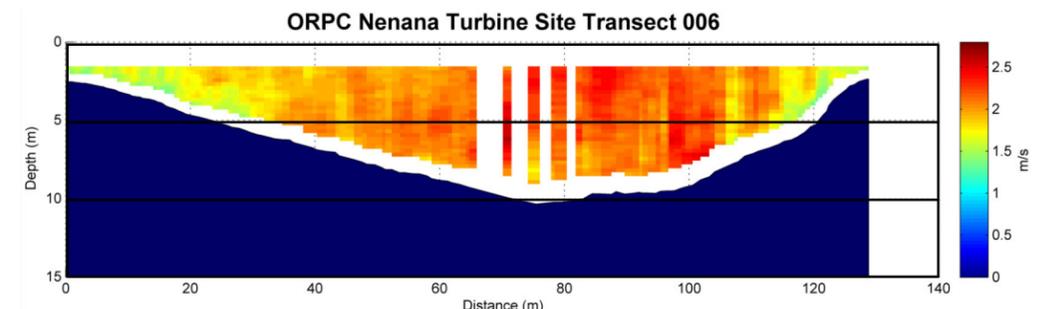
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523 Fitzgerald Street Corpus Christi, Texas 78401
361.684.1780

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206.420.8304

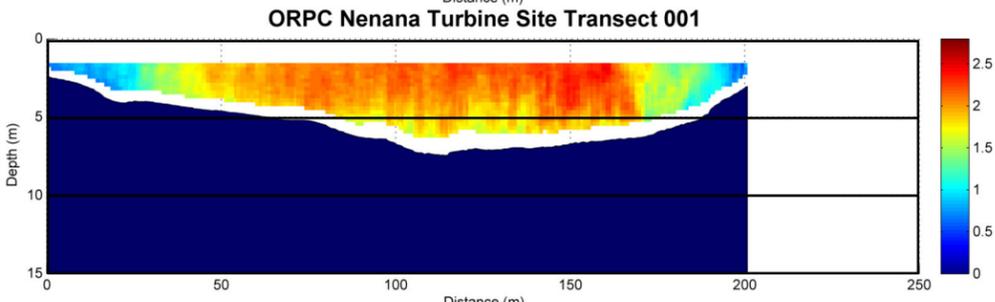
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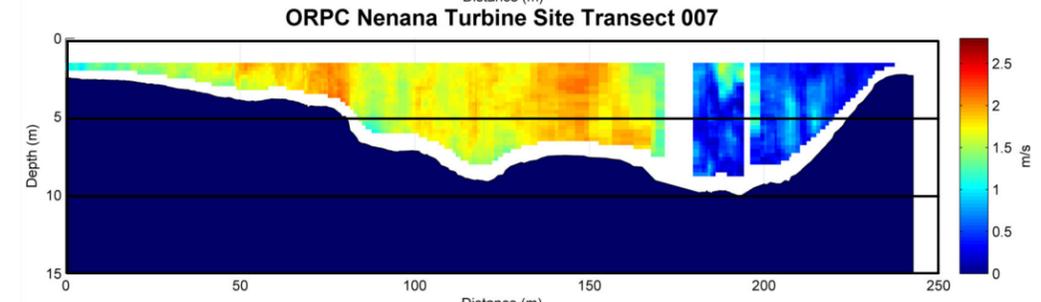
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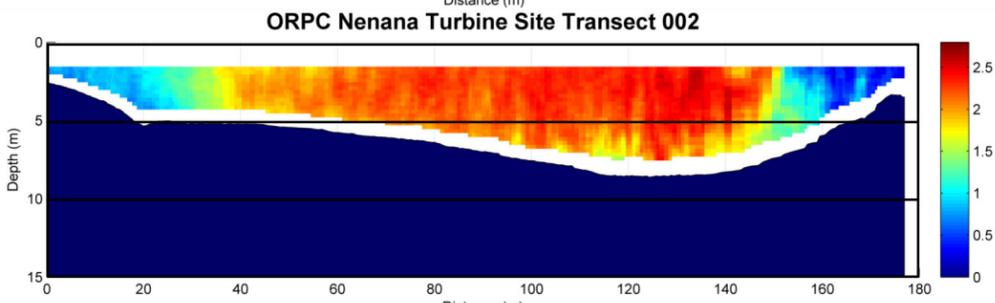
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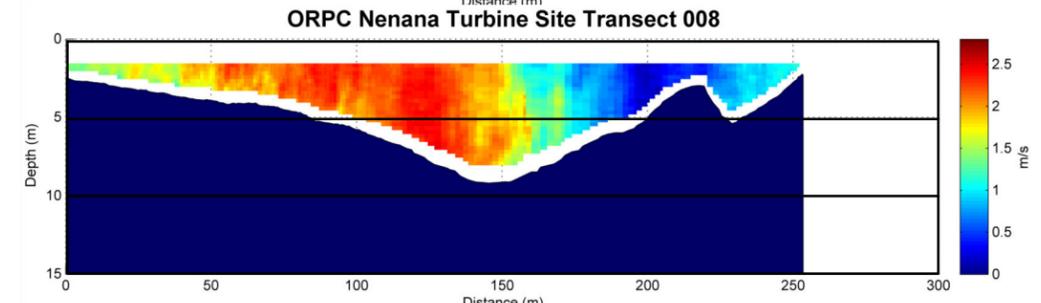
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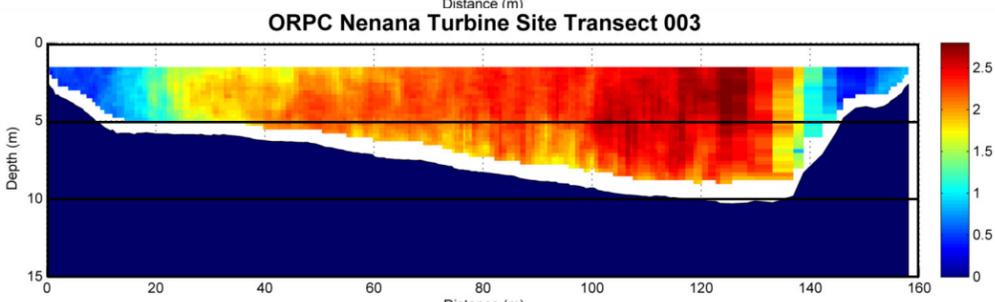
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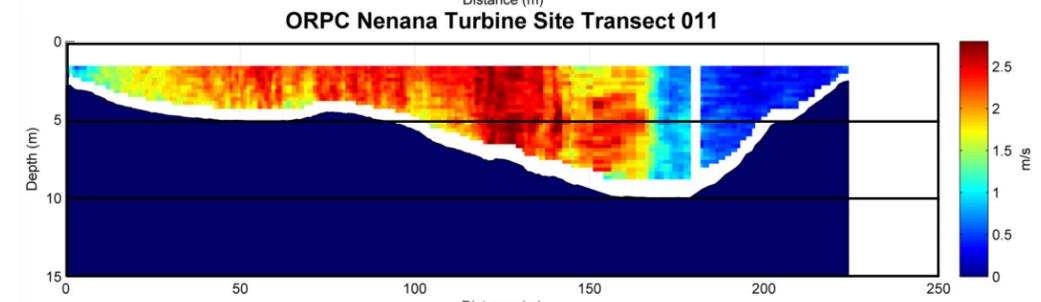
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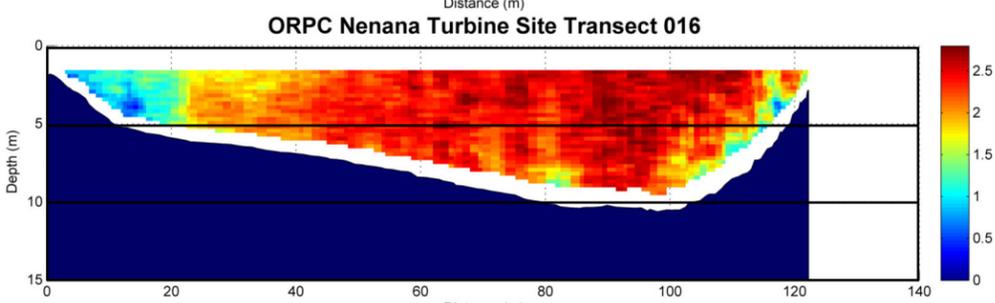
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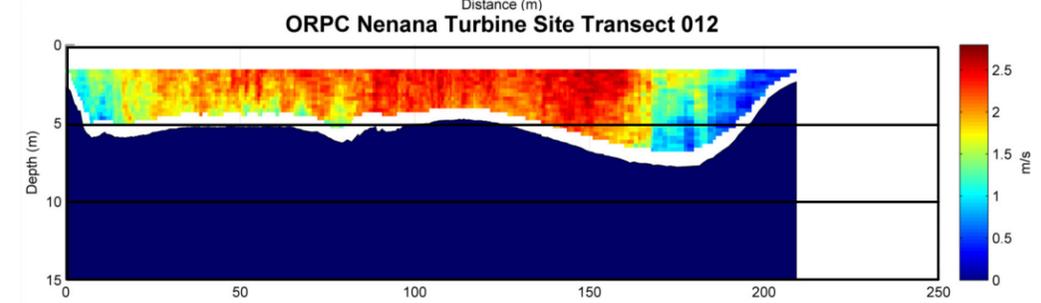
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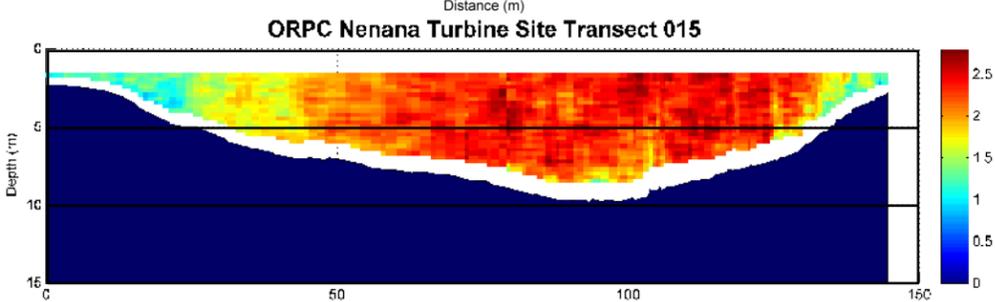
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PRELIMINARY TURBINE SITE ASSESSMENT

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NENANA HYDROKINETIC POWER PROJECT

TeraSond EG
 14 Zona Ministerio De Agricultura, Servicio, SN
 Malabo, Bioko-Norte
 Equatorial Guinea
 002-40.091114
 801 NW 42nd St., Ste 2115
 Seattle, Washington 98107
 206.420.8304

www.terasond.com
 email:terra@terasond.com
 Corporate Office
 1617 S. Industrial Way, Ste 3
 Palmer, Alaska 99645
 907.745.7215

6699 Portwest Dr., Ste 190
 Houston, Texas 77024
 713.690.4900

523 Fitzgerald Street
 Corpus Christi, Texas 78401
 361.684.1780