

**Humboldt Working Group**  
**Freshwater Tissue Plant**  
**Samoa, CA**

**October 5, 2009**

---

**Meeting Summary**

---

**Introductions**

*Roundtable introductions were led by Anna West, Kearns & West (K&W) Facilitator.*

**Updates**

*Led by Anna West, K&W Facilitator*

- Humboldt Working Group (HWG) member Helene Rouvier will no longer be participating in the HWG. K&W anticipates a replacement Wiyot Tribe representative will be appointed soon.
- Ocean Renewables Energy Conference, hosted by the Oregon Wave Energy Trust, was held on September 15<sup>th</sup> & 16<sup>th</sup>. Some members of the HWG attended and found it very informative.

**Presentation on Baseline Data**

*Presented by Doug Davy, CH2MHILL, and Sharon Kramer, H.T. Harvey*

Doug and Sharon gave a status report on the information collected to date for the baseline studies and preliminary preparations for the impact analysis and adaptive management and monitoring plan. They reiterated that this information will be used to prepare applications for the various permits required for this project. Doug and Sharon then shared the information collected to date and additional information needs for the draft FERC pilot project license application, including: geology and soils, water resources, marine fish and aquatic resources, marine wildlife, terrestrial resources, rare/threatened/endangered species, recreation and land use, cultural resources, aesthetic resources, and socioeconomic resources. Doug finished the presentation by explaining the goal of the impact assessment and the monitoring and adaptive management plans. The presentation can be viewed on the WaveConnect website at <http://www.pge.com/waveconnect/projects.shtml>.

The following clarifications about the presentation were made:

- The aesthetic resources will be evaluated initially using static simulations. With this information, if it appears necessary/useful to further evaluate viewshed effects, an animated simulation may be produced.
- Since the specific Wave Energy Converters (WECs) have not been chosen yet, the impact analysis approach is to prepare the studies assuming the greatest potential impact possible, i.e., they'll be assuming the largest potential impact based on the different WEC device designs.. Once the WECs are selected in December, the studies will be focused on the impacts of the specific technologies, if necessary. The agency applications (FERC, draft biological

- assessments for the resource agencies, etc.) will include an assessment of the impacts of the specific technologies selected.
- If the impact analysis finds there is a significant adverse impact, and that actions can be taken to mitigate the impact, then the project will be designed with those measures in place. PG&E will also prepare and file monitoring and adaptive management plans and will conduct a monitoring and adaptive management program before, during, and after construction in order to take into account any unforeseen impacts and adjust the project design or operating procedures, if needed, to mitigate or avoid them. The adaptive management and monitoring plans will specify triggers or conditions under which the project would be modified or even removed from the water. The FERC license will include a condition stipulating that the entire project must be removed under certain conditions, if and when a significant and adverse impact cannot be mitigated or avoided by project modification.
  - To be mailed a copy of the response letters from the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Game, in which these agencies have identified the special status species of concern in the project area, contact Aarty Joshi, CH2MHILL. Email: [ajoshi@ch2m.com](mailto:ajoshi@ch2m.com)
  - The organization Friends of the Dunes may have additional baseline information resources, particularly regarding terrestrial invertebrates.
  - The Yurok Tribe has completed a cultural resource literature search that can be used as additional baseline information.

### Brainstorming of Future HWG Topics

The following topics were identified as discussion topics for upcoming HWG meetings.

- **Wave Energy** - The OWET wave energy presentation from the Ocean Renewables Energy Conference should be addressed within this topic. Rick agreed to present this overview at the next meeting.
- **Wave Modeling** – the group agreed that this topic is important to the surfing community. A subgroup comprised of PG&E and the surfing community will review this information.
- **Operations & Maintenance** - This topic should be addressed at a later date, after WECs have been selected.
- **Hardware in the Sea** - Marine debris, benthic impacts, and navigation lighting standards should be address within this topic. This topic should be addressed after the WECs have been selected.
- **Lessons Learned** – This topic is to address lessons learned from others' experiences (England, Portugal, other locations in the US). It will also include plans/actions PG&E will take based on these lessons learned.
- **Technology**
- **Underwater Noise** - This should also be a topic for the Permitting Authority Subcommittee.
- **Security Systems**
- **Fishing Gear Entanglement** - This topic should be addressed at a later date, after WECs have been selected.
- **Migration Patterns of Whales and Juvenile Salmon**

## **Debrief of Permitting Authority Subcommittee Meetings**

Each agency involved in the Permitting Authority Subcommittee gave an overview of their Agency's role and responsibilities in the permitting process as discussed in the Permitting Authority Subcommittee. Each agency shared the following information.

### **National Marine Fisheries Service (NMFS)**

David White shared the three different processes NMFS requires for the project.

- 1) Endangered Species Act (ESA, Section 7) consultation. This process is initiated when the Biological Assessment (BA) is reviewed and submitted by FERC to NMFS. NMFS then reviews the BA for completeness, and if complete, NMFS develops its Biological Opinion (BO) on the project within 135 days.
- 2) Marine Mammal Protection Act (MMPA) process. The MMPA gives the applicant an insurance policy through either an Incidental Harassment Authorization (IHA) or a Letter of Authorization (LOA) for listed species to authorize take. An IHA authorizes harassment, but not take, of marine mammals for one year. NMFS requires six months to complete an IHA, and it should be completed three months before construction begins. A LOA authorizes harassment and take of marine mammals for up to 5 years. NMFS requires one year to complete a LOA before construction begins.
- 3) Essential Fish Habitat (EFH) process. NMFS takes 30-60 days to issue an EFH Assessment of the project. The EFH assessment is incorporated into the BA, and occurs with the ESA consultation.

### **U.S. Fish and Wildlife Service (USFWS)**

Bill McIver explained that under the ESA, USFWS and NMFS are the responsible agencies and have a similar consultation role. Once USFWS determines the BA is complete, USFWS has 135 days to develop their BO on the project. If USFWS determines some level of take of listed species occurs, an Incidental Take Authorization is required. If that assessment is complete in early August 2010, then the BO will be completed in early 2011.

### **California State Lands Commission (CSLC)**

Steve Mindt explained that CSLC will be working with FERC to explore preparing a single environmental (NEPA/CEQA) document. Once a complete project description is submitted by PG&E, CSLC could produce the environmental document (in coordination with FERC) in 180 days. CSLC's goal is to produce a CEQA document that has all the information that other agencies would need to satisfy CEQA requirements. This effort could take longer depending on the adequacy of information provided, controversy and other issues that may arise.

### **U.S. Army Corps of Engineers (USACE)**

David Ammerman explained that the USACE requires a permit application for the project pursuant to two Federal statutes: Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act. USACE will begin its part of the NEPA process when they receive a complete permit application and project description. Once PG&E has submitted a complete permit application and project description, USACE will have 15 days to prepare and circulate a Public Notice for a 30-day

comment period. PG&E will then have 30 days to respond to public comments. After all of the FERC NEPA coordination is done and the USACE receives an ESA Biological Opinion from NMFS and USFWS (if necessary), copies of the California Coastal Commission permits, and certification from the California Regional Water Quality Control Board or State Water Resource Control Board (if necessary), then the USACE can issue a permit.

#### North Coast Regional Water Quality Control Board (NCRWQCB)/State Water Resources Control Board (SWRCB)

Mark Neely explained that the CRWQCB does its review once CSLC issues a determination on the CEQA document. This will be to complete their application needs for their 401 water quality certificate. CRWQCB will look into whether or not the State Water Quality Control Board would apply to WaveConnect.

#### U.S. Coast Guard (USCG)

Liezel Nicholas explained that the USCG processes Safety and Anchor applications and permits through the waterways office. USCG will be meeting with PG&E to discuss what the project will require of USCG. The requirements could include a Safety and Anchoring permit, chart demarcation, and broadcast notice to mariners.

USCG will meet with PG&E at Sector San Francisco and/or District 11 Alameda, to discuss what the project will require of USCG.

#### California Department of Fish & Game (CDFG)

Vicki Frey explained that under the California Endangered Species Act (CESA), the CDFG is responsible for “take” of California state-listed species, which differs from federal ESA in that the state-level definition of “take” does not include “harm” or “harass”. If the project will result in take of a state-only listed species, a CESA Incidental Take Permit (ITP) is required. The ITP application has to be submitted by PG&E after the CEQA document is finalized. If the project will “take” a species that is both state- and federally-listed, then CDFG can issue a consistency determination with the USFWS and NMFS’s Biological Opinions.

#### California Coastal Commission (CCC)

Not present.

A meeting with NMFS, CDFG, USFWS, and PG&E will be held on November 9<sup>th</sup> at the NMFS offices in Arcata to discuss the baseline information needs of these agencies.

### **Cable Lay – Additional Information Presentation**

*Presented by Rick Williams, SAIC*

Rick presented more detailed information regarding the cable route for the pilot project. He explained that since the last meeting, SAIC contacted several cable laying companies who said that common practice is to lay the five evenly spaced power cables within an estimated 400 ft wide corridor on the ocean floor. This protects each individual cable as the neighboring cables are installed and provides access if needed for repairs. Five cables are being planned and each cable is about 4 inches in diameter. The cables

would be bundled only when inside the outfall or overflow conduit. The cables would be pulled individually through such conduit, if used.

With this information, the fishing community expressed concern about crab pot recovery. The fishing community explained that crab gear generally gets buried at depths shallower than 18 fathoms, and that their concern is that the cables will interact with pots making recovery of buried pots difficult. They thought it would be best to go directly into deep water to minimize the chance of interaction with the cables going from the project to shore, and that a cable route that stayed in deeper water as much as possible was preferable, as there is less gear in the deeper waters. This routing would add cost to the cable installation, as it is an indirect route from the WEC arrays to the shore landing. The fishing community also expressed that it would be necessary to have the cable route annotated on nautical charts as well as a phone line for emergency situations.

The group was interested in the mooring system and anchors and was interested in a better understanding of what that would entail. Rick explained that the RFI responses will have more detail. He noted that all WEC vendors that have been interviewed to date use some variant of a multi-point catenary mooring system. It is important to have the WECs secured in a manner compatible with minimizing the risk of damage to the WEC, the WaveConnect facility, or the sea bottom.

Rick shared that all four shore landing alternatives near the stacks are viable and due diligence is proceeding to learn more detail about routing the cables, 1) through the pulp mill effluent outfall, 2) through the water district tower overflow, 3) through the Bay Street parking lot, or 4) bury the cables alongside the water tower overflow. The backup alternative is to come ashore near the manila Community Services District Water Treatment Facility. Bill Toman, PG&E, explained that, if necessary, the cables could be brought onshore at more than one of the four onshore landing alternatives.

Rick explained that the WaveConnect team is researching with industry and agencies whether or not surface lay of the cables in the deep water portion is a viable option.

The group agreed that this is a topic for continued discussion at future HWG meetings, and should possibly be addressed by a subcommittee.

### Action Items

Action Item	Who	When
1. Send out a message when the PPT is posted on the WaveConnect website.	1. K&W	1. When PPT is posted on the WaveConnect website.
2. Resend HWG meeting dates to the full group.	2. K&W	2. ASAP
3. Resend MarineMap link to the full group.	3. K&W	3. ASAP
4. Don't schedule topics that are critical to fishing community in December, if possible.	4. K&W	4. When preparing December Agenda
5. Present the WEC types and	5. Rick Williams,	5. November 2, 2009

associated mooring methods, from manufacturers that have responded to the RFI to date, at the November HWG meeting.	SAIC	
6. Provide information on progress toward an international lighting standard.	6. Rick Williams, SAIC	6. November 2, 2009
7. Email the link to the review of the Minnesota Project, by Mark Thomas (oregonwave.org)	7. K&W	7. ASAP
8. Share graphs from presentation and indicate sources; post on the website and notify the HWG.	8. Doug Davy, CH2M; K&W	8. ASAP
9. Present an overview of wave energy similar to the presentation at the OWET Conference.	9. Rick Williams, SAIC	9. November 2, 2009

**Attendees**

Primary:

- Vicki Frey, California Department of Fish & Game
- Michael Van Hattem, California Department of Fish & Game
- John Dye, California State Lands Commission
- Steve Mindt, California State Lands Commission
- Paul Hagen, City of Arcata
- Jeff Leonard, City of Eureka
- Julie Fulkerson, City of Trinidad
- Kevin Pinto, Commercial Fisherman
- Ken Burns, Commercial Trawler Fisherman
- Ken Hogan, Federal Energy Regulatory Commission
- Larry DeRidder, Humboldt Area Saltwater Anglers
- Aaron Newman, Humboldt Bay Fishermen's Marketing Association
- Maggy Herbelin, Humboldt Bay Stewards
- Mark Lovelace, Humboldt County
- Greg Crawford, Humboldt State University
- Diane Ashton, National Marine Fisheries Service
- Dave White, National Marine Fisheries Service
- Mark Neely, North Coast Regional Water Quality Control Board
- David Boyd, Redwood Coast Energy Authority
- Rob Cozens, Resighini Rancheria
- Jim Zoellick, Schatz Energy Research Center
- Scott Willits, Surfrider Foundation, Humboldt Chapter
- David Ammerman, U.S. Army Corps of Engineers
- Robert Starr, U.S. Coast Guard
- Liezel Nicholas, U.S. Coast Guard

- Bill McIver, U.S. Fish and Wildlife Service
- Aarty Joshi, CH2M Hill
- Doug Davy, CH2M Hill
- Sharon Kramer, H.T. Harvey
- Ian Caliendo, PG&E
- Bill Toman, PG&E (by phone)
- Rick Williams, SAIC

Alternates:

- Alexandra Stillman, Arcata City Councilmember
- Dave Meserve – Former Arcata City Councilmember
- Jim Lund, Freshwater Tissue
- Milton Boyd, Humboldt State University
- Alison Talbott, PG&E
- Colin Sheppard, Schatz Energy Research Center

Future WaveConnect Consultants:

- Pat Kaspari, Winzler & Kelly of Eureka

Facilitators:

- Briana Moseley, Kearns & West
- Anna West, Kearns & West