

Wildfire Safety Working Group Meeting

Wednesday, July 31, 2024

9:00am – 11:00am

MS Teams

Attendees

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Alan Hirayama, PUC	Ionatana Tuitasi, HSEO	Mathew McNeff, HE
Alexander Gomera, HE	Jacqui Hoover, HIEDB/HLPC	Matt Gonser, C&CH
Alfredo Echeverria, T-Mobile	James Abraham, HE	Matt Lee, FEP
Ali Arabnya, Quanta	Jamie Suzuki, HE	Matthew Wall, HIEMA
Alin Peterson, West Maui Land	Janet Yocum, FEMA	Michael Angelo, DCCA
Alison Scribailo, Quanta	Jason Benn, HE	Miles Nagato, HE
Amy Adrian, HE	Jeff Spohn, FEP	Naomi Kuwaye, PUC
Andrija Sadikovic, Quanta	John Bravender, NWS	Natalie Epenesa, HE
Barbara Geringer-Frazier, USDA	John Kadowaki, Cal Water	Nathan Todaro, HE
Bernard Sadoulet, Kohala Ranch Firewise	Jon Kawamura, Cal Water	Neil Yamamoto, KSBE
Bill Moore, Kohala Ranch Water	Jonathan Chin, HSEO	Nicole Galase, Hi Cattlemen Council
Brad Rockwell, KIUC	Kahikina Burgess, HE	Raelynn Nakabayashi, BWS
Brad Ventura, MFD	Kandice Kubojiri, HE	Randall Shiro, HE
Brenda Iokepa-Moses, CoH	Katy Christiansen, NREL	Ray Robertson, T-Mobile
Brian Miller, HDR	Kauilehuamelemele Kauhane, QHS	Rick Pinkerton, HE
Camryn Shigaya, HDR	Kawika Uyehara, DWS	Riley Ceria, HE
Cassandra Smith	Kazuo Todd, CoH	Riley Saito, CoH
Christine Wang, FEP	Keith Okamoto, DWS	Robb Tanaka, HE
Christopher Yunker, HSEO	Kekoa Kaluhiwa, KSBE	Robert Kaneshiro, HE
Colin Yost, PUC	Ken Aramaki, HE	Robert Stout, Cal Water
Colton Ching, HE	Keola Siafuafu, HE	Rod Aoki, RSA Law
Corey Shaffer, Verizon	Kevin Ihu, BWS	Roger Babcock, C&CH
Craig Souza, C&CH	Kika Bukoski, IBEW	Roy Uehara, AT&T
Darwin Okinaka, CoH	Kimberly Vaituulala, HE	Rudy Tamayo, HE
Dave Okamura, HE	Kimo Landgraf, CoM	Ryan Otsubo, MFD
David Kurohara, HE	Kono Davis, MEMA	S. Hao, HFD
Debby Shin, PUC	Kristen Okinaka, HE	Sarah Harris
Douglass Adams, CoH	Kurt Tsue, HE	Scott Winecoff, T-Mobile
Duke Oishi, HE	Kyra Howe, PUC	Sharri Thornton, HE
Elizabeth Songvilay, AT&T	Lee Mansfield, American Water	Shereen Wachi, DoD-Navy
Erin Kippen, HE	LeeAnn Silva, QHS	Sherilyn Hayashida, DCCA
Ernest Lau, BWS	Leo Asuncion, PUC	BG Stephen Logan, SoH DoD
Erwin Kawata, BWS	Lydia Mertyris, HE	Steve Tome, MCBH
Gina Yi, HE	Madeline Krueger	Steven Bergfeld, SoH-DOFAW
Gregg Lemler, Quanta	Marc Asano, HE	Taesun Kim, PUC
Henry Curtis, LOL	Mark Glick, HSEO	Thao Tran, HE

Henry Lee, HE	Mark Vaught, Mahi Pono	Thomas Yereance
Hiro Toiya, C&CH	Mason Withers, FEP	Vanita Chhabra, Quanta
		Wendee Hilderbrand, HE

Agenda

- Working Group objective to support the development of Hawaiian Electric's Wildfire Safety Strategy (WSS), to inform and engage stakeholders on various aspects of the Company's strategy, and to afford stakeholders and partners opportunities to provide their knowledge, feedback and input to the strategy.
- Review updated tiered risk maps
 - Purpose of Map
 - Used to prioritize wildfire activities and strategies
 - Examples:
 - Construction Standards
 - Vegetation Management
 - Operational Practices
 - Purpose of Meeting
 - Review preliminary risk maps, seek input from stakeholders on risk tiers
 - Obtain input on the risk areas and tiered designation
 - Feedback on data sources that we haven't considered in assessing risk

Discussion – Wildfire Safety Strategy

- I. Stakeholder: Will the WSS be submitted in a docket? Or just a filing?
 - a. HE: Still in discussion. At the moment, there is no statute or mandate to submit this to the PUC. The intent is to make WSS public and we will be publishing it on our website and make it accessible to all.
- II. Stakeholder: Is WSS the same thing as the wildfire mitigation plan we've been discussing? Is there an outline of what will be in the WSS?
 - a. HE: Yes, it's the same material. There's an outline and we'll share in later meetings.
- III. Stakeholder: Will WSS include funding details, including what's already funded and what would need funding?
 - a. HE: Yes, the goal is to provide an estimate of how much the plan will cost and potential methods of funding.
- IV. Stakeholder: If the process aligns with California's, then it would need to be a docket. It will also depend on how the plan is going to be used going forward, more than likely it'll be more flexible to capture everyone's insights. The earlier you can provide insights on the plan, the better.
 - a. HE: Agree, we're trying to get as much input as possible before filing like in previous efforts. Helps a little bit on the procedural side that we already solicited and incorporated feedback.

- V. Stakeholder: Will the number and locations of watershed collaboration (e.g., Hawaii Island resources through Federal government, military fire mitigation) be included in the report to the PUC?
 - a. HE: At minimum, the working group would be collaborative but mainly focused on implementation plans to reduce wildfire risk based around Hawaiian Electric infrastructure and resources to respond. We want to scope this to ignitions and risk reduction of utility caused ignitions. We don't want to step on other people's plans; this won't be a comprehensive plan for all actions.
- VI. Stakeholder: Natural hazard management plans are due to the PUC at the end of August. How will community input inform these plans and the WSS?
 - a. HE: We're planning to include some wildfire details in our natural hazard management plan, but those items are ongoing. The Company is conducting community outreach even while plans are being developed.

Discussion – Symposium Feedback and Weather Stations

- I. Stakeholder: What data can be shared?
 - a. HE: In service weather station data and locations are available online (MESO West). Camera locations and what they're currently viewing are available online (ALERT West). Grid hardening is focused in high-risk areas indicated on risk maps.
- II. Stakeholder: How many circuits exist on Hawaii Island and/or in PSPS outage areas?
 - a. HE: About 150 distribution circuits and close to 40 sub-transmission/transmission circuits on Hawaii Island. For Hawaii Island, 24 distribution circuits and 11 transmission circuits are in the scope of the PSPS program.
- III. Stakeholder: What is the goal for total number of replacements or is this an ongoing effort?
 - a. HE: Currently targeting and replacing conductors in the near-term, focused on copper conductors of small diameter. The WSS will have a more comprehensive total.
- IV. Stakeholder: Are the cameras connected to the dispatch center?
 - a. HE: Yes, ALERT West calls 911 and HFD was dispatched. We plan to continue that going forward.
 - b. HE: We have met with all of the fire departments, emergency management agencies, etc. and obtained their authorized users who will receive automated notifications about ignitions from ALERTWest. For HFD, we received from HFD the list of requested users and they have been provided with emails on finalizing their user credentials, training on how to use the cameras, and setting up alerts. In addition, HFD provided us with the dispatch phone number and ALERTWest is manually calling in ignitions to that number while HFD is getting trained on the system. This is happening across all the counties.
- V. Stakeholder: Will cameras go dark if PSPS is activated?
 - a. HE: Weather stations have batteries and are designed to run independently. We planned and are deploying the video camera stations in a way that should prevent this.
- VI. Stakeholder: How long will camera/weather station battery last? Is there a back up if the internet infrastructure goes down? If cell service goes down?

- a. HE: The weather stations can last close to 2 weeks on just battery alone. We are working with our weather station vendor and telecom companies to ensure that the cell towers that the weather stations ping have sufficient back-up power in case of PSPS. In the future, Hawaiian Electric plans to have back-up capabilities via its Private LTE network.
- VII. Stakeholder: What is the map software used? Is it ArcGIS? Regarding battery backup time, how many hours is the battery designed for? Is the 2 weeks assuming that there is adequate sun to charge via PV every day?
 - a. HE: Yes, using ArcGIS. The 2 weeks assumes there is no sun for 2 weeks.
- VIII. Stakeholder: Will WSS include long-term maintenance considerations for cameras and weather stations?
 - a. HE: Yes, this will be part of the WSS.

Discussion – Preliminary Risk Maps

- I. Stakeholder: Can we map tree mortality or vegetation moisture content?
 - a. HE: Recommendation will be included in the WSS. Moisture of dead vegetation can already be calculated. We’re also looking at trees outside of our right of way. Weather stations are currently measuring relative humidity, but in the future, we’re planning to include a feature that measures moisture content of soil near the weather station.
- II. Stakeholder: Hawaiian Electric can only remove trees in their right of ways, but will they be formally coordinating with landowners to remove/address vegetation?
 - a. HE: Yes, that’s the Hazard Tree Removal Program.
- III. Stakeholder: In California, moisture levels were very important. Will Hawaiian Electric be mapping this data out?
 - a. HE: The Company is evaluating a program to do this. Want to collaborate with others.
- IV. Stakeholder: Will you be incorporating UH MESONET Stations as they get installed? Can you provide a list of vegetation types in each group?
 - a. HE: Yes, that’s the plan. Yes, we can provide that.
- V. Stakeholder: We will need those ArcGIS maps so we can overlay to our equipment. How do we get these?
 - a. HE: We can connect offline on mapping.
- VI. Stakeholder: Will the maps show where the communication systems are?
 - a. HE: The maps focus on when and where mitigations will be deployed, very specific to electrical infrastructure. We weren’t looking at a broader risk map to incorporate all infrastructure. The Company is having ongoing conversations with telecoms to work on overlay to capture their infrastructure.
- VII. Stakeholder: Two places on Oahu that don’t necessarily match up with current understanding
 - a. HE: We can relook at those locations (Halawa and Ko’olau).
- VIII. Stakeholder: The mapping should also include the household locations where residents are challenged. Challenge in health, physical/mental disability, life sustaining technology based on electricity. Without wired and wireless communication being operational, these households may be at risk.
 - a. HE: Agree, we’re figuring out to incorporate that in the risk modeling (next meeting).

- IX. Stakeholder: How often will the maps be updated after they're finalized?
 - a. HE: In the first 2 years or so, they'll be regularly updated, taking into account new data from the weather stations. Afterwards, they'll usually be in maintenance mode and can be updated every few years. System hardening doesn't happen at risk mapping stage, it usually happens at the risk modeling stage.
- X. Stakeholder: Going back to breakdown of communication systems, which is a major safety risk, what are the plans for cell towers?
 - a. HE: HFD has been meeting with telecoms. From what we understand, none of the towers are within the PSPS area and have generation. Telecoms don't want to provide too much detail to Hawaiian Electric, they've requested info be limited to county and state.
- XI. Stakeholder: Is there a lead to coordinate mapping to have a shared library of data sets that can be used to understand and plan for an extended (multiple days) PSPS outage?
 - a. HE: Hawaiian Electric is leading mapping conversations with various partners. We are not sure if there will be a lead for additional mapping efforts.
- XII. Stakeholder: There's a lot of red on maps. When a PSPS is implemented, how granular can Hawaiian Electric get when turning off power? Has Hawaiian Electric simulated PSPS based on historical fire events?
 - a. HE: Weather stations will help to measure wind by circuit, so the hope is not to deenergize the entire red area at one time. The decision will be made on a circuit-by-circuit basis. We will make a call based on that measured wind and humidity data. With the data available, PSPS simulations have been conducted.
- XIII. Stakeholder: Is this circuit by circuit evaluation decision making process dependent on the National Weather Service issuing a red flag warning?
 - a. HE: Not necessarily, red flag warnings are a factor but there are other factors. Decision to do a shut down after an activation is dependent on weather station data and what crews are seeing in real time.
- XIV. Stakeholder: Can you please clarify if the preliminary maps show fire ignition potential, fire spread potential, or areas where there is risk for utility-associated wildfires?
 - a. HE: Risk maps are more on the consequence side and help determine where mitigations should be implemented. Risk modeling will look more into ignition probability.
- XV. Stakeholder: Will the public have access to maps of the circuit status?
 - a. HE: There's an outage map available online and if they're turned off for PSPS reasons then it would be reflected on the outage map. This is available on our website and mobile app.

Next Steps

- Hawaiian Electric to finalize risk maps relatively soon.
- Additional feedback on risk maps is due by August 9, 2024.