***After Action Report for January 13-15, 2024 LWC Power Outage***
***Prepared by LWC Safety Committee (2024-01-21)***

- This After Action Report (AAR) primarily discusses what actions worked during the power outage affecting LWC from 1534 PST on 13-Jan-2024 until 1843 PST on 15-Jan-2024 and what actions could be improved with some included suggestions.

- This 51-hour outage was preceded by a 3½-hour outage (2143-0110) on 9-10-Jan-2024), a 2½-hour (1455-1728) outage on 11-Jan-2024, and followed by an even shorter 1½-hour (1600-1730) outage on 16-Jan-2024. In some respects, the first two outages could almost be considered "dry runs" for the 51-hour outage. Some relevant information obtained from these three short outages will be included in the AAR.

- Communication will be discussed first because communications play such an important role in situations such as this major power outage and a number of other emergencies ranging from relatively minor, and ultimately short, utility outages to major emergencies such as wildfires, earthquakes, and tsunamis.

- Given the timing of the 3½-hour outage (2143-0110) on 9-10-Jan-2024, the LWC Safety Committee's Internal Communication System (ICS) was not formally activated. The protocol for the ICS is included on the LWC Safety Committee webpage. The ICS is a less formal communications **network** between Safety Captains and residents. As stated in the Protocol it "…in no way supercedes nor replaces the existing LWC communication protocol based on Federal Emergency Management Agency's (FEMA) Incident Command Management System (ICMS) protocol between LWC Net Control…". Perhaps the Committee should have notified residents formally but only a few residents were on their radios at that hour.

- The ICS is based on FRS and GMRS (Family Radio Service and General Mobile Radio Service, respectively) communications. If we want more people on radios, we need simple, preprogrammed radios (e.g., Midland T10 X-Talker) and we need to keep the language **simple & clear**! While a ham operator may know that "QSY" means "Shall I

change to transmission on another frequency?" or more informally simply change to a frequency, most listeners will not know this. There are nearly 50 Q codes used by hams and literally hundreds used elsewhere. It would be better to simply say "switch to channel". "Switch" may not be as clear as "QSY" but more people understand the former term. Moreover, most people deal with **channels** not frequencies.

- The first FEMA Alert for a Winter Storm Watch during the second outage was forwarded at 2024-01-11-0804 to FEMA Alert recipients comprising LWC Safety Captains and individuals that asked to be included on the list. That was 7 hours before the outage occurred. LWC Net Control was not included because he had requested to be removed from further Safety Committee communications. Shortly after the power went off, the LWC Safety ICS was activated.

- After these "dry runs", communications improved significantly during the 51-hour outage on 13-15-January most likely because this outage was considered an "official emergency" by Depoe Bay EOC (Emergency Operations Center), ACS (Auxiliary Communications Service), and LWC Net Control. While there are two internal services, the distinction between the CTN+ and ICS blurred as the outage continued and communications functioned as a true network with the **flow of information going both directions**. Ron Pierre was clearly operating as Net Control when he was on Channel 7, but he was not always on Channel 7, since he was monitoring ACS communications and communicating with Depoe Bay EOC as well. When Ron was not on Channel 7, the communications continued as various Safety Captains and other individuals provided new information and asked for updates. While Net Control provided the official information, residents with radios were providing valuable information gleaned from a variety of sources be it the Internet until it went down (e.g., CLPUD's Facebook page and their Outage Map), information from cellular networks (spotty), information obtained from others, and actual onsite intelligence. A good example of the latter is that we were informed by Net Control that most gas stations could not pump gasoline because the Internet was down and yet one of the Safety Committee members went out and reported back that Circle K in Lincoln City was pumping gasoline although they were out of regular. This is valuable information that was passed on to the community via the ICS/CTN+. There were numerous examples of this type of information exchange. Whereas the formal system is more of

a communication chain, both the ICS and CTN+ represent networks with bidirectional information exchange.

- Some suggested improvements to radio communications:
    - Encourage **all residents** to purchase, at the very least, simple, preprogrammed FRS radios (or GMRS-certified radios, if they choose to apply for a GMRS license) radios using rechargeable and/or disposable batteries;
    - Encourage **Safety Captains** to purchase the more expensive GMRS-certified radios that can transmit at 5 watts on Channels 7-10 and obtain the required GMRS license. Note: if a vendor is selling GMRS radios and not stating a license is required, it is highly likely that the radio does not transmit at greater than 2 watts;
    - Keep jargon and chatter to a minimum and try to keep background noises (people talking, dogs barking, dishes clattering, etc.) to a minimum when transmitting;
    - Net Control announcing when the next information transmittal will occur was very helpful and the fact that it varied depending on conditions was a good idea, e.g., if very little is expected to happen, transmit in 3 hours (for example) rather than hourly. This will help conserve radio battery power;
    - That being said, some people will still miss the transmittals (away from the radio, batteries died, etc.), therefore, one or more Safety Captains that either have multiple radios or batteries should keep their radios on between scheduled transmittals to pass on the information they noted (on paper) during the official scheduled transmission);
    - Encourage listeners to provide **accurate** information to the network and they should be ready to cite the source (e.g., CLPUD Facebook, talking to a first responder, onsite intelligence, etc.);
    - And then there is the age-old question of how do we get people to turn on their radios, particularly if the event is **not** a utility outage or an earthquake (both noticeable events). If it is safe, do we drive around either with our bullhorn repeating a recorded message like “Please turn on your walkie talkie to Channel 7 for more information”

or tell people if a car drives through their neighborhood honking the horn in 3 short bursts, turn on their radio? This is in lieu of the fact that it seems sirens are being phased out.

- We need more and better charging strips and better heaters for the LWC Rec Center. Along with this, LWC might want to consider purchasing a larger generator that normally runs on natural gas thereby obviating the need to refuel and large enough provide sufficient power. One of our Committee members provided the following information about their generator:
    - Firman T07571 purchased from Costco about 2 years ago for $1000;
    - It is a Tri-Fuel – natural gas (6,750-watt output), gasoline (7,500-watt output), and propane (5,500-watt output);
    - The generator pretty much runs everything they have in house; however, on propane, they don't run bath heaters;
    - We would need an electrician to install an interlock kit on breaker panel and a plumber to install a quick disconnect on NG line at the LWC Rec Center (we need to obtain cost estimates for this); and
    - We will need a hose for the NG and a cable for the power.

- One of our Safety Captains, on a walk-around suggested via radio that everyone remember to place their OK/HELP signs in a window visible from the street to facilitate a Rapid Needs Assessment. Ron Pierre, as Net Control, announced this using his higher-power radio. In the future, whoever initiates a communication system during an event should make that announcement as soon as possible.

- During the 51-hour outage, there was considerable concern (and rightfully so) that people conserve their radio batteries (and other devices as well). To this end, people should consider investing in power blocks and/or a stock of disposable batteries. Another alternative is to purchase dual-power radios such as Midland T51, T61, or LXT633 preprogrammed radios or the Motorola T270TP Radio.

- One of our Safety Captains posted multiple updates in the form of printed paper notices on the Safety Committee kiosks. This process was more difficult and time consuming than expected because the notices required locating paper, markers and tape or thumbtacks, retrieving a

key to the kiosk from the SOC lockbox, hand writing duplicate messages for the two kiosks, accessing the smaller Innisfree kiosk which has sliding doors that are difficult to open, and fighting with cold, rain, and wind to post the paper updates. Then repeat the process again when new information comes available. Perhaps expecting everyone to purchase and use a radio is unrealistic but taxing our Safety Captains and possibly placing them in harm's way is not a good idea either. We might be able to convince people to use radios if the radios are simple and not intimidating, we use plain English in our announcements, and we make sure they understand they do **not** need to talk on these radios – merely listen!

- It was apparent in hearing the communications that some people had gas fireplaces but remained without heat because they needed electricity to operate these fireplaces. We need to inform people that there are gas fireplaces that do work without electricity such as the Valor Model 534AN to name one example. We anticipate that the proposed *Safety Plan* will contain suggestions like this and many more. This document will serve as a reference document (i.e., you do not have to read it cover-to-cover but it will contain safety information and tips on safety preparations).

- It is troubling that State of Oregon is apparently encouraging people to reduce their carbon footprint by purchasing all electrical appliances. That means, no heat (unless you have some alternative) and no cooking. During power outages (which are relatively common), comfortable room temperatures, warm food, and a hot shower can increase a person's endurance and improve their state of mind.

- People should be reminded to always keep their vehicle's gasoline tank (if it has one) half full of gasoline and, if they need to transfer gasoline, they should consider some type of battery-powered fuel transfer system such as a FlowJoe – Fuel Transfer Pump for about $140. This particular system is capable of bypassing some vehicle fuel tank security features – something that is difficult or impossible to do with a simple siphon hose.

- Access to various facility keys was and will be a problem during emergencies. We cannot assume that management staff will be onsite or that they can be called upon during emergencies. Nor can we assume that at least one Board director, Safety Captain, or other resident will be

onsite and able to provide these keys. Multiple copies of keys or combination codes need to be available during an emergency to allow access to the: 1) Rec Center, 2) SOC, 3) North gate, 4) Maintenance Shed, and 5) Safety Committee kiosks. More specifically, when the power is out, the Rec Center front doors cannot be opened from the outside even with a key. A hard key to the back door is the only way in. The SOC has a single key in a lock box that is very old and fussy and is only for the SOC. It is possible to lock that key inside the SOC by locking the door knob from the inside and closing the door. The combination lock on the North gate has to be replaced frequently due to the weather and the combination is also changed whenever a new board member is seated or retired. But the new combination has not always been communicated to those who are supposed to know the code (e.g., Safety Captains).