To: Austin Barnes, Marion County Principal Planner
From: Adam Capage, Outreach and Communications Director, Renewable Northwest
Re: RNW Comments to Marion County Planners on Advisory Committee Educational Process

Thank you for the opportunity to provide feedback on the current draft ordinance language and setbacks, which has been shared prior to the Marion County Battery Energy Storage System ("BESS") Advisory Committee ("BAC") meeting on June 29th, 2026. These comments support RNW's recommendation that proposed setbacks **warrant further discussion and reconsideration**.

RNW steadfastly believes that the purpose of an advisory committee is to learn from each other, share insights and concerns, welcome expert knowledge, and ultimately draft reasonable policies that reflect the needs and values of the community. We appreciate that Staff has expanded the setback recommendation table to provide options to the Commission, but we remain deeply concerned by waterbody setbacks labeled as "most conservative". We understand the 800' and 400' setback recommendations reflect Staff's concerns about potential environmental impacts to water quality in and around BESS facilities. However, the data does not support these concerns. We are seeking a better understanding of Staff's concerns and **urge for them to be addressed with a specialist presentation and discussion with the full advisory committee.**

When the BAC discussed fire safety and setbacks, Marion County Staff were open to welcoming an outside leading fire safety expert organization, the Fire Risk Alliance ("FRA"). As a result, workgroup participants were reassured about fire risks. This included the representative of the Salem Fire Department, Justin Guinan, who now believes BESS can be safely deployed, particularly if there is more conversation about appropriate standards and training. Justin shared with RNW that as technology and safety information improves, collaboration between fire service and industry experts is an effective way to mitigate concerns and hazards. **This educational process for the workgroup gave invaluable insight into the current realities of BESS operations, and as a result, the workgroup shifted focus away from concerns about uncontrolled files, explosions, and toxic emissions from battery fires.** RNW commends the Committee's approach to

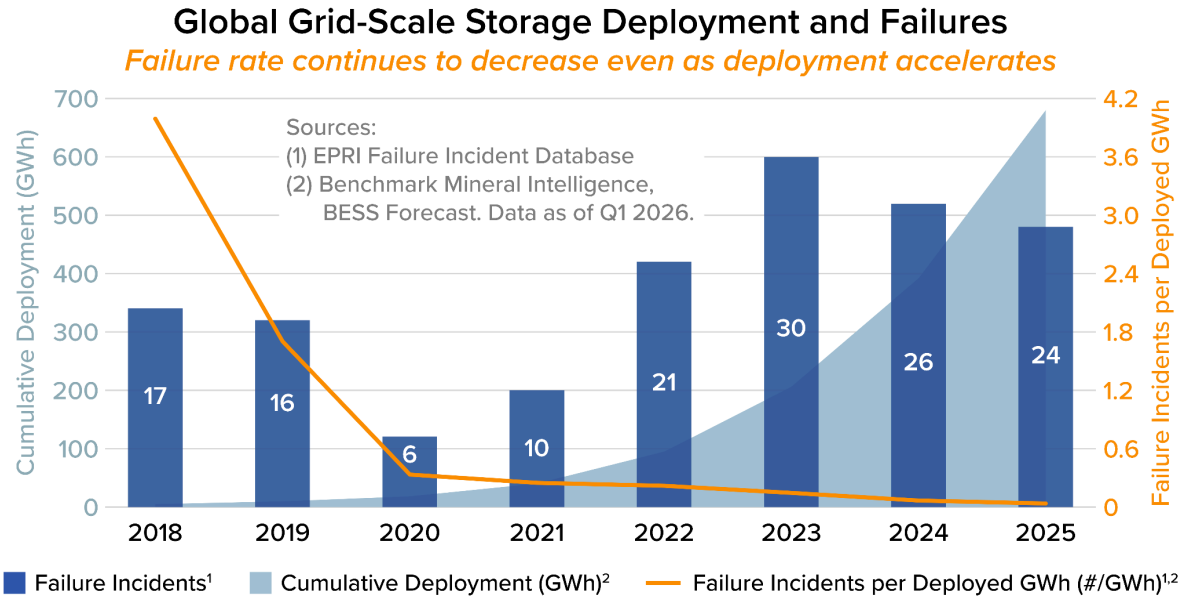
addressing the need to understand fire safety and response, and we appreciate the collaborative environment that the presentation provided.

RNW is concerned that a similar approach is not being adopted with the group's interest in groundwater contamination. The purpose of an outside resource providing information goes beyond changing minds; it is about understanding the goals of the proposed setbacks. RNW's team has studied guidelines from the Environmental Protection Agency (EPA) and the National Fire Protection Association (NFPA) about the potential for environmental impacts from BESS. We have also reviewed content the Advisory Committee learned at the educational presentation from the Fire Risk Alliance (FRA), and we remain unclear why Staff is recommending waterbody setbacks of this size. Here are the the following scientific and technical realities we see recurring in our research:

1. Under Normal Operating Conditions there is no ongoing use of water for operational purposes, including cooling. In addition, there are no ongoing air or water emissions associated with BESS facilities. **There is no evidence that modern utility-scale LFP battery systems built to NFPA and UL 9540/9540A standards present a risk to groundwater contamination during normal operation because the systems are sealed.**[1] This means that groundwater contamination risk is only present during a system failure event, which we elaborate on below.

2. The likelihood of a storage failure is diminishing rapidly. The chart below vividly displays the progression of safety proficiency that occurs as new technologies are deployed. **In just 7 years, utility-scale BESS has transformed from having a higher failure rate to a technology that is being deployed safely at a global scale.** <u>For context</u>: One half of a GWh of storage is equivalent to a 125MW system with 4 hours of energy storage. Worldwide, there are now more than 1,300 of these large-scale battery facilities in operation, yet as the chart displays, this global fleet experienced just 24 system failures in 2025.

[1] Fire Risk Alliance Presentation to Marion County BESS Advisory Committee



3. The National Fire Protection Association maintains a *Standard for the Installation of Stationary Energy Storage Systems*. This standard, referred to as NFPA 855, addresses environmental concerns with fire incident responses and recommended setbacks for battery systems. Under this standard, battery technology used in the Moss Landing facility and other highly publicized fire events is no longer allowed. NFPA 855 is a trusted and continuously updated industry standard that local fire departments are familiar with and regularly utilize.

4. In the unlikely event of a fire incident, a controlled burn approach is recommended under NFPA 855. This means that fire suppression tactics emphasize containment, not direct application of water on the fire, which limits the intensity of fires, as well as the possibility of contamination of water runoff. The local fire departments will be trained to follow this recommendation. See below from the Fire Risk Alliance:

> "Firefighting Water Runoff: The consensus best practice for response to a BESS fire is to allow the BESS to consume itself and provide cooling water to targets if needed. Unless there is direct suppression water applied to the BESS on fire, any cooling water applied will be similar to rain and no potential contaminants will be included in any runoff. While lithium-ion battery fires produce chemical byproducts, studies show that their solubility in water is low, limiting the potential for groundwater contamination if direct suppression efforts are performed. Additionally, standard stormwater management practices help prevent runoff from reaching

natural water sources in the event that the fire department determines that suppression efforts are required."[2]

5. In the unlikely event that (1) there is a fire, (2) standard fire response procedures are not followed (under NFPA 855), and (3) runoff water becomes contaminated, stormwater and containment is managed through emergency response processes with the EPA and local governments. Emergency response teams at the EPA have consistently found that BESS fire incidents have not led to groundwater contamination that is cause for public health concern.[3]

6. Since BESS systems do not pose risk of contamination in ongoing operations, there are no rules or standards from the State or Federal Government that require BESS facilities to have specific setbacks or construction rules for groundwater contamination. Instead, the U.S. Environmental Protection Agency ("EPA") has emergency management and fire response resources publicly available that directly reflect the research and best practices found in NFPA 855 and discussed by the FRA.[4] Additionally, Oregon's Department of Environmental Quality (DEQ) requires all industrial development to have a Stormwater Pollution Prevention Plan (SWPPP), which includes planning for best management practices and prevention plans.

RNW acknowledges that these points do not guarantee zero risk, which is an impossible standard for any energy generation, storage, or transmission technology to attain. Still, it remains unclear what technical justification prompted Staff to select "most conservative" and "conservative" setbacks that are 2-4 times the standard we see nationwide. RNW is seeking clarity and further education on these numbers and the science behind them. We are looking to learn and collaborate with others on the BAC to find a solution that works for Marion County. **We believe the educational process adopted with fire safety was useful and could be repeated to help Staff and the BAC have a discussion about water contamination that is guided by empirical data.**

Sincerely,
Adam Capage
Outreach and Communications Director
Renewable Northwest

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[2] Fire Risk Alliance and American Clean Power's Literature Review, Assessment of Potential Impacts of Fires at BESS Facilities
[3] EPA's Moss Landing Emergency Response News Release
[4] EPA's BESS Incident Response Recommendations