KCE's Comments and Questions in Response to Idaho Power Company's Draft 2028 All-Source Request for Proposals

June 13, 2024 – Key Capture Energy ("KCE") would like to thank the Oregon Public Utility Commission ("Commission") and Idaho Power Company ("Idaho Power" or "IPC") for the opportunity to submit comments and questions regarding Idaho Power's 2028 All-Source Request for Proposals ("RFP"). KCE would like to submit the following questions and comments regarding the draft RFP and the RFP process:

1. **BESS Terminal Value Evaluation –** Standard life of a BESS is 20 years, but due to augmentation schemes can be expected to continue operating beyond 20 years at a diminished capacity. How will BESS bids be evaluated to account for residual value of BESS beyond its expected useful life?
2. **Section 301 Tariffs –** How will the impact of Section 301 tariffs be handled in bid evaluation considering the lack of clarity on the impact to planned BESS? In the interest of bids being evaluated equally we recommend requiring bid submissions to exclude tariff impacts until cost impacts can be clearly determined by suppliers.
3. **BESS Technical Specifications –** The following comments pertain to Exhibit G – BESS Technical Specifications:
    a. **Proven Design Requirement (Sections 1.5C and 17.2A) –** A commitment to proven design criteria is not feasible as projects with 2028 CODs are not likely to use any equipment currently on the market. The market is currently on an approximately 12–18-month iterative cycle and the final equipment for any facility will likely be composed of technology that is not yet available. Additionally, no vendors are able to provide a 10-year module form factor guarantee at this time.
    b. **Cycling (Section 1.6B) –** 396 cycles per year is only feasible for short terms. Consistent usage at this rate will cause the system to reach its end-of-life condition sooner than the required 20-year useful life requirement. The market standard is currently 365 cycles/year and up to two cycles per day for 20 years.
    c. **Fire-rated Wall (Section 6.4A) –** It is not market standard to include a firewall between PCS and batteries. This is not the standard practice employed by the industry, including some of the Approved Suppliers listed in the Technical Specifications.
    d. **Clean Agent Fire Suppression (Sections 6.8B and 9.4) –** Clean agents have not been a best practice for BESS in the last 5 years and are no longer available in the market.
    e. **Early Off-gas Detection (Section 6.8C) –** It is not market standard to include an early off-gas detection system. This is not the standard practice employed by the industry, including some of the Approved Suppliers listed in the Technical Specifications.
    f. **Water-Based Systems (Section 9.3) –** Water-based suppression is problematic with most BESS systems on the market and not the standard practice employed by the

industry, including some of the Approved Suppliers listed in the Technical Specifications.

g. **Automatically Activated Pre-action Suppression Valves (Sections 9.6E and 9.6I) –** Automatically activated pre-action suppression valves are not BESS best practice. This is not the standard practice employed by the industry, including some of the Approved Suppliers listed in the Technical Specifications.
h. **Fire Alarm Control Panel (Table in Section 9.6) –** An NFPA 72 compliant thermal camera is the only detection method acceptable to some of the Approved Suppliers listed in the Technical Specifications.
i. **Duct Detectors (Sections 9.7D and 9.7F1) –** Including smoke, heat, and HVAC duct detectors is not the standard practice employed by the industry, including some of the Approved Suppliers listed in the Technical Specifications.
j. **Heating, Ventilation, and Air Conditioning (Section 11) –** Much of this section assumes air cooling. Most vendors, including some of the Approved Suppliers listed in the Technical Specifications, do not provide equipment equipped with air cooling as the industry is moving towards liquid cooling.
k. **Emergency Stop Switches (Section 12.12) –** Including containerized E-stops is not the standard practice employed by the industry, including some of the Approved Suppliers listed in the Technical Specifications.
l. **Custom Rack Design (Section 17.2B) –** All equipment currently on the market cannot be customized without voiding its equipment listings.
m. **Duty Cycle (Section 17.2 Table 1) –** No vendor currently in the market can commit to 10 cycles per day on any C/4 system.
n. **Rack Design (Section 17.3) –** All equipment currently on the market cannot be customized without voiding its equipment listings.
o. **Battery Management System Design (Sections 17.4A2-8, 17.4B, and 17 Table 2) –** All equipment currently on the market cannot be customized without voiding its equipment listings.
p. **PCS Terminal Isolation (Section 18.1C) –** All equipment currently on the market cannot be customized without voiding its equipment listings.
q. **Inverter Useful Life (Sections 18.3C, 18.4C, and 19.1C) –** Some vendors provide different equipment life spans. We recommend removing this equipment-specific requirement to allow bidders flexibility to optimize system design for a facility-wide 20-year life span.

Sincerely,

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