



Item 10: Cal Poly Humboldt Sponsored Programs Foundation

June 22, 2026, Business Meeting

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Energy Research and Development Division
Industry and Carbon Management Branch



Overview

Long-Duration Storage System

- Vanadium redox flow battery system with Hoopa Valley Tribe
- Co-located solar photovoltaics and lithium-ion storage
- Experienced project team
- Match share towards Department of Energy's Tribal Energy Resiliency and Sovereignty project



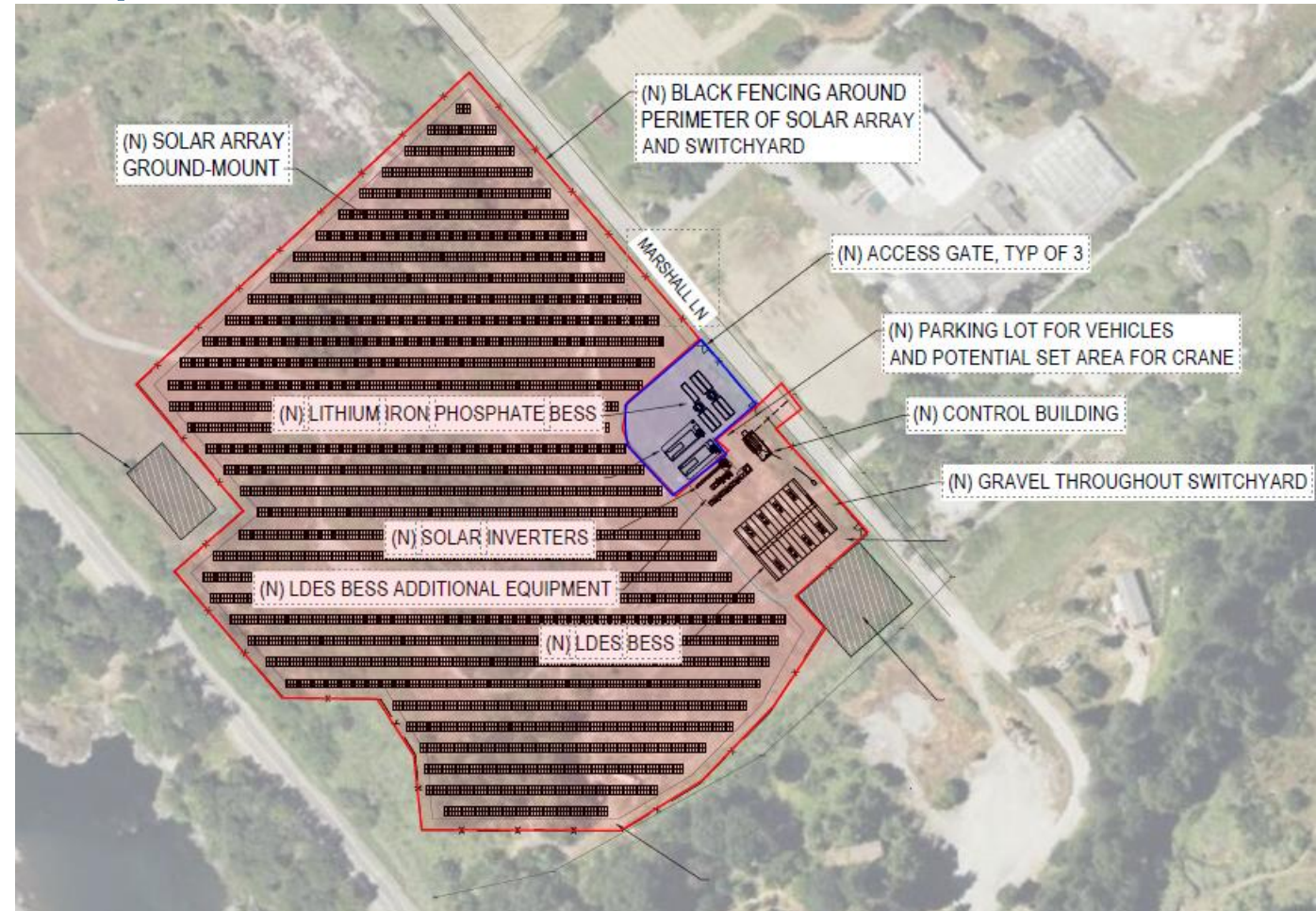
Cal Poly Humboldt
Schatz Energy
Research Center



Overview (Continued)

Replicable Use-Case

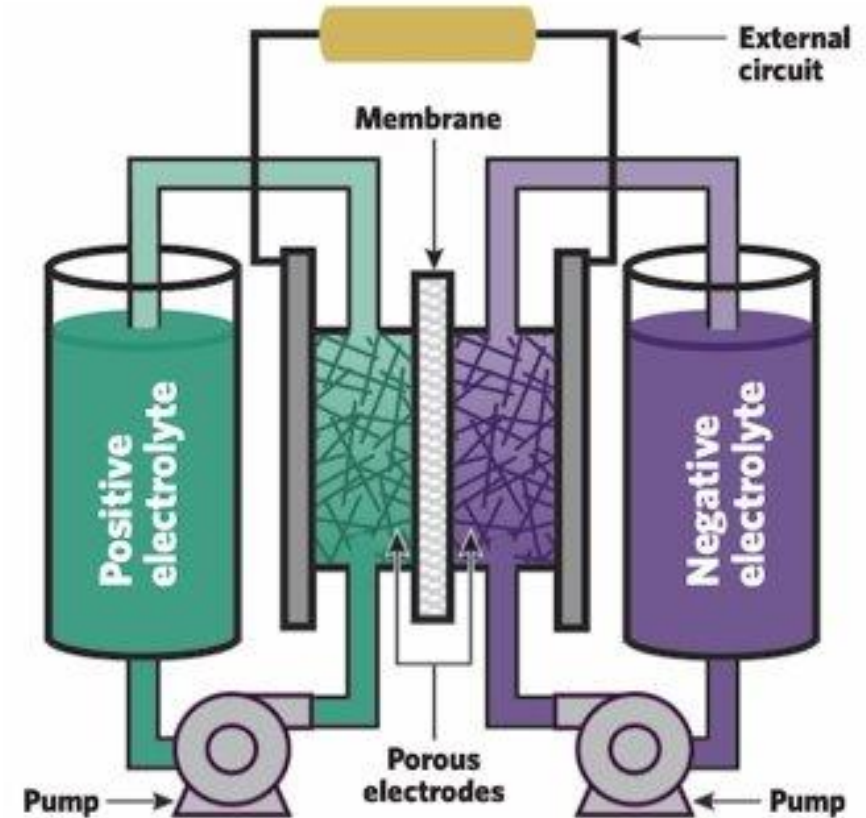
- Demonstrates LDES as front-of-the-meter asset
- Tribal energy resiliency:
 - Backup power to distribution circuit during outages
 - Offtake agreement to generate revenue for Tribe when grid is “up”





Benefits to Californians

- Accelerate commercialization of long duration energy storage (LDES) technology
- Enhance resiliency and reliability for Tribe and region
- Reduce regional greenhouse gas emissions

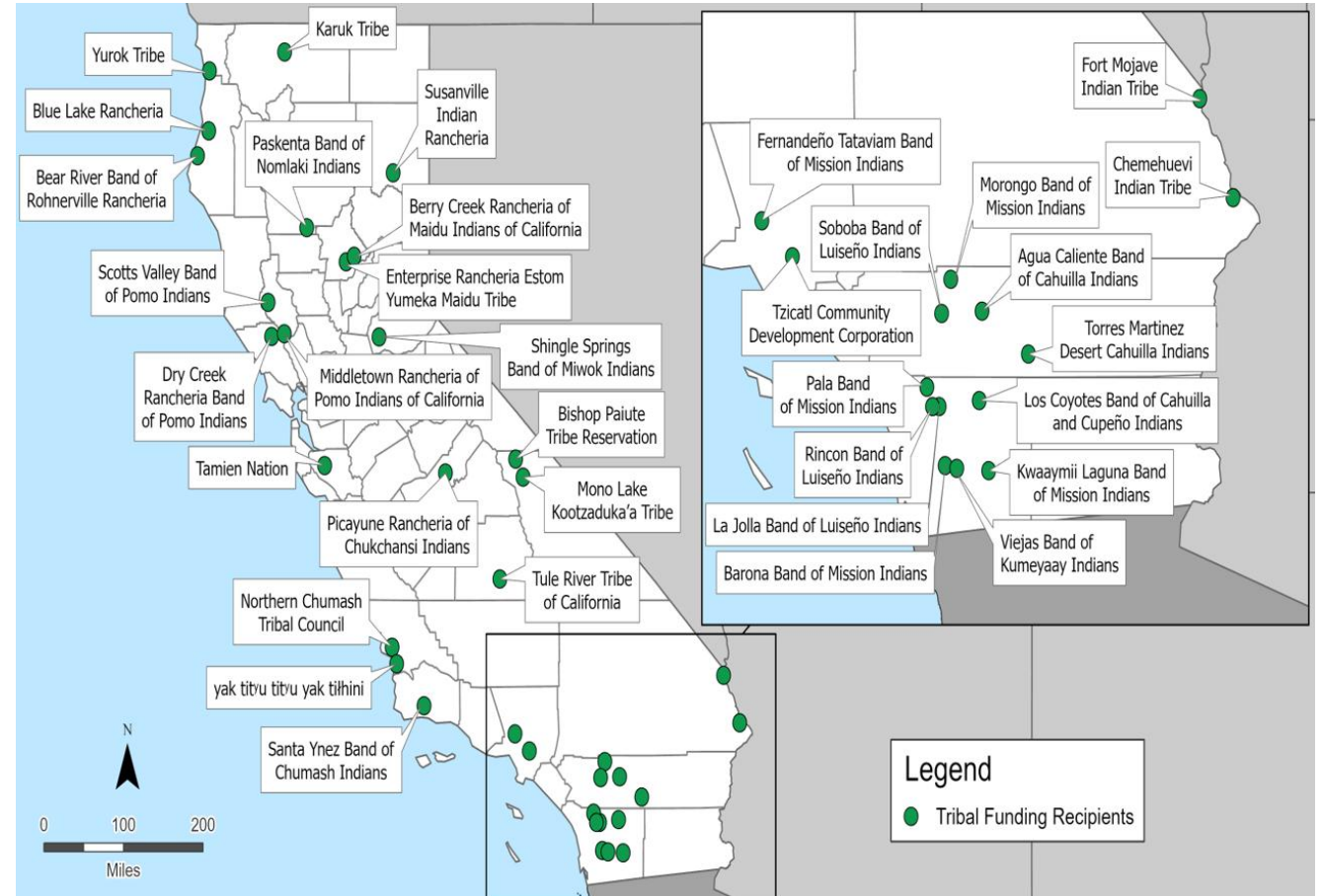


Flow battery diagram. Source: [Loudermilk, et al](#)



Statewide Potential

- Project builds on CEC's commitment to tribal energy sovereignty
- If all tribes in CA adopted this model, potential **0.5 GW** of LDES supporting CA's grid
- Could help meet the 4 GW of LDES needed for 100% clean energy by 2045
- Replicable in other sectors that need critical backup power



CEC Tribal Funding Partnerships. Source: California Energy Commission



Staff Recommendation

- Adopt staff's recommendation that this project is exempt from CEQA
- Approve agreement LDS-25-001 with Cal Poly Humboldt Sponsored Programs Foundation.