Freight Logistics Electrification Demonstration Project

Lays the groundwork for electrified transportation in Utah to improve air quality and stimulate economic growth

Inland Port is an ideal candidate to demonstrate capabilities for heavy duty vehicles and prepare “shovel-ready” projects for upcoming federal infrastructure funds

3-year project with Pre-Pilot Development, Infrastructure Build, and Pilot Demonstration provides validated full scale port electrification plan

Pilot infrastructure will be used long term in port electrification

Union Pacific Intermodal Facility moves 1M cargo containers per year

Demonstrate electric “hoteling” for semis to reduce overnight diesel pollution

Demonstrate site-level smart charge management to improve utilization and reduce cost

Demonstrate plug-in, static and dynamic wireless charging of heavy duty trucks and fork lifts

Leverage significant private and federal cost share

Committed commercial partners (vehicle & infrastructure)

USU-ASPIRE Pre-Pilot

Vehicle, infrastructure, and communications systems integration and evaluation in controlled environment with commercial partners

ASPIRE

Utah – Epicenter for Electrified Transportation

Phase 1

Pilot Demonstration

Comprehensive UIPA pilot in Salt Lake City, heavy duty freight logistics electrification, pre-commercial proven shovel ready solutions

Phase 2

Local Deployment

Commercialization, early manufacturing, electrify port operations, expand to local distribution

Phase 3+

Regional Deployment

Large scale manufacturing, electrify corridors, out of state expansion

Target Federal Match on Pilot Demonstration

Target Large Scale Federal Infrastructure Funding for Deployment

UTAH INLAND PORT AUTHORITY

ROCKY MOUNTAIN POWER

ASPIRE

UDOT

ASPIRE

Leverage ASPIRE Technologies from NSF and DOE R&D Funding

Leading the Nation

UTAH INLAND PORT AUTHORITY

Utah will transform and lead electrification of the logistics and supply chain network. The F-LED Project will reduce emissions and assist the Utah Inland Port Authority in reaching its mission of sustainable, equitable, and smart logistics investments.

Positioning Utah as a center of innovation and excellence creates a series of successes across the state; connecting siloed sectors of industry; igniting business opportunities; enabling innovation and creation of value-added services; leading the transition to a more sustainable logistics mobility, and; inspiring a trained digital workforce. The F-LED Project will leverage multiple technology integration programs, including 5G connectivity for vehicle, operator, and infrastructure communications.

Utah Inland Port, coupled with its advanced connected and electrified transportation technology integration, and partnered the ASPIRE Center and Rocky Mounty Power, will be a model for the future of transportation.

The ASPIRE Center launched at Utah State in 2020 with $50.6M in federal funding from NSF. ASPIRE's mission is to improve health and quality of life through sustainable and equitable electrification in transportation, with specific emphasis on infrastructure to support electrifying freight and fleets.

The Utah Inland Port provides an ideal partnership and location to transition developed technologies into public systems and to position Utah as the leader for commercialization and manufacturing.

Kenworth Truck Company
Research & Development
485 Houser Way North
Renton, Washington 98057
(425) 254-6046

A DIVISION OF PACCAR

February 3, 2021

Re: Utah Legislature F-LED Request for Appropriation

Dear Appropriation Committee:

On behalf of Kenworth Truck Company, this letter of commitment and support documents our intent to participate in *the Freight Logistics Electrification Demonstration Project (F-LED)*.

Kenworth is a leading manufacturer of medium- and heavy-duty trucks, with a reputation for building high quality trucks tailored for their specific task. Kenworth commits its expertise accrued over its 98-year history toward this program. For this project, Kenworth will loan an electric Class 8 heavy-duty truck to ASPIRE for the electrification pre-pilot work. Kenworth is currently working with ASPIRE on a 1 MW wireless charger project, and I personally serve on the ASPIRE Executive Advisory Board. I have found ASPIRE to be high-quality organization that executes on its deliverables, and I enjoy working with the team.

This project advances the overall goals of enabling cost-effective, high-power, static and dynamic wireless charging. The commercial viability of these technologies can help eliminate one of the barriers that heavy truck OEMs such as Kenworth face in producing zero-emission vehicles in order to reduce emissions and improve society. We strongly believe that, when adopted on a larger scale, this technology can help reduce greenhouse gas and criteria pollutant emissions.

We are committed to supporting this project by contributing our truck and our time in guiding the project to a solution that is commercially viable and desirable by our end-use customers. We are particularly enthusiastic about the State of Utah's leadership in this promising and rapidly developing technology area, and we anticipate that leadership will benefit the state both economically and environmentally.

The project partners' combined significant expertise will allow for successful project completion. Should you have any questions about our involvement, please do not hesitate to contact me at (425) 254-6046 or at brian.lindgren@paccar.com.

Sincerely,

Brian J. Lindgren
Director, Research & Development
Kenworth Truck Company