The Action Plan: Projects and Programs

Cam LeHouillier, Manager of Energy R&D
The Action Plan

• Annual update on results of previous year efforts
• Specifies areas of focus for the utility
• Previews program design and delivery for next year
• Aligned with the guiding principles in the Strategic Plan
• Not explicitly adopted by the Public Utility Board to provide operational flexibility
Action 1: Educate customers on the benefits of TE

- Invest in website updates and training for customer facing staff to provide excellent information to customers in a way that is easy to understand
- Conduct market research and customer analysis to understand what customers want and the barriers that exist to them
- Work with dealerships to host electric vehicle events and information sessions for customers and offer a second electric car discount program
- Investigate opportunities to expand transportation electrification to low-income communities
Action 2: Support DCFC infrastructure investments

- Tacoma Power will work with local property owners to seek out grant funding opportunities and support applications
- Provide concierge level utility service and permitting
- Publicize our pilot DCFC rate and assist third party DCFC investments
- Develop a pilot program to offer “make ready” investments at its utility expense
Action 3: Expand campus charging, fleet transition

- Seek opportunities to prototype and expand the Tacoma Power fleet to include models that are hybrid/battery/fuel cell/zero carbon electro-fuel
- Tacoma Power will uphold the West Coast Green Fleet Pledge to spend at least 3% of new fleet acquisition spending on zero-emission vehicles
- Seek grant funding to expand campus employee and customer charging
- Review current retail charging fees at campus charging stations and explore the cost recovery options of different fee designs
- Expand charging infrastructure Tacoma Power hydro projects and Tacoma Power parks
Action 4: Launch an electric vehicle charger pilot

- Deliver a program that encourages home EV charging
- Utilizing customer, use, and charging behavior data collected in the 2019 EV Charging Study, investigate the benefits of load management systems and rate designs alternatives to incentivize customers to set their charging to off-peak periods
- Seek opportunities to assist customers who are interested in sourcing and installing charging equipment for public, or fleet applications
Action 5: Address the split incentive problem

• Split incentive problem: property owner and EV driver are not the same person – different economic interests

• Investigate peer-to-peer sharing technology to bridge gap by providing property owners with financial incentive to operate and maintain charging infrastructure

• Design a program to extend this service to homeowners, multi-family building owners, retail businesses, and employers
Action 6: Expand TE at the Port of Tacoma

- Work with the Northwest Seaport Alliance, Port of Tacoma, terminal operators, shipping lines, and businesses to understand their electrification goals
- Seek opportunities for grant funding to reduce the cost and barriers to all partners engaged in further electrification
- Seek to design and implement rate tariffs that support electrification of ships at berth
- Develop a cargo/material handling equipment pilot program to assist customers with electric charging infrastructure
Action 7: Assist school districts electrify buses

- Assist school districts in acquiring financing for electric school buses through grant funding applications and locating other financial incentives.
- Advise infrastructure design to support duty cycle.
- Organize a workgroup of school districts to share research, information, and operational data so more school districts can make informed decisions about fleet electrification.
- Seek opportunities to learn about vehicle to grid charging applications and how they can support school microgrids.
Action 8: Assist with transit electrification

• Work collaboratively on site selection and charging infrastructure design

• Propose innovative ideas to reduce obstacles including grant funding, battery storage infrastructure or load management software

• Collaboratively research and explore the use of fuel cell transit buses fueled with renewable hydrogen produced with Tacoma Power’s clean, renewable, carbon free electricity.
Action 9: Explore the production and use of carbon neutral fuels

- Research the benefits, costs, and risks of the production, storage, distribution, and use of non-carbon fuels to end-users, the utility ratepayer, and the environment.
- Work cooperatively with transportation end-users, local community leaders, non-carbon fuel producers, and others to identify obstacles and find solutions to achieve the benefits, reduce the costs, and mitigate the risks of non-carbon fuel production, storage and use.
- Host a prototype fuel cell project to test capabilities, and to calculate and estimate both benefits and costs for a larger scale application of this technology.

Source: DNV GL “Maritime Forecast to 2050.”
Action 10: Work to electrify heavy duty transportation

• Investigate electric transportation options for trucking, marine, cargo handling equipment and rail
• Develop programs to incentivize commercial and industrial customers to transition to electric transportation options
• Develop customer outreach and education programs to highlight the benefits of transitioning to electrified transportation options.
Thank You!