Mr. Jones called the Public Utility Board study session to order at 3:02 p.m. at the Public Utilities Administration Building.

Present: Woodrow E. Jones, Jr., Bryan Flint, Christine Cooley, Mark Patterson, Karen Larkin

**Board Workshop Follow-Up**

Director Flowers began by reviewing current practices for building access during Board meetings. Elevators are placed into free access and key doors unlocked, allowing public participation without checking in with security. Next, the Board was provided with a summary of current practices for distribution of Board meeting materials. Key outcomes of the two-day Board workshop on January 30 and 31 were reviewed. The Board agreed on initial governance principles as guidelines for their work over the next year. The Board identified initial strategic directives and areas of focus for TPU that will further support TPU’s mission, the City’s Vision 2025, and continue to enhance coordination with the City, franchise cities, and other stakeholders. The initial strategic directive categories identified are: rates; reliability; customer experience/expectations; financial sustainability; environmental leadership; employee relations; resource planning; ethics; equity and inclusion; economic development; resiliency; stakeholder engagement; government relations; innovation; telecommunication; undergrounding; electrification of transportation; wholesale markets. The Board also began to set performance expectations for the Director of Utilities. Discussion ensued with the Board requesting staff to research options for audio recordings, synchronized with presentation slides, of Board study sessions. The Board will also provide feedback on which strategic directives to fully develop first.

**Tacoma Power: Port Electrification – Shore power rate design and Volkswagen settlement opportunity**

Jeremy Stewart, Power Analyst, provided a project overview. Shore power, also known as cold ironing or alternative marine power, would use Tacoma Power electricity to supply ship electric needs while in port instead of burning fuel. Shore power has many benefits including reduced carbon emissions for the Port of Tacoma and lower operating costs.
costs for shipping lines. The Volkswagen settlement funds, from diesel emissions
crash, represent a generational opportunity for shore power. Up to 45 percent is
earmarked for marine vessels, but a significant portion will go to the state ferry system.
To create the strongest proposal possible for these funds, Tacoma Power will seek
Board approval of a resolution that directs utility staff to partner with the Port to pursue
grant funding opportunities. The resolution would support an indicative rate design that
eliminates the demand charge by increasing the energy charge and allows the energy
charge to be reallocated to shipping lines. Mr. Stewart then reviewed the proposed
shore power indicative rate design, what we currently know about the Volkswagen
settlement funding, and the strategy to pursue Volkswagen settlement funding with both
basic and full port electrification proposals. Discussion ensued with the Board asking
the Director to coordinate with both the Port of Tacoma and Chamber of Commerce on
this project. At the Board’s request, staff will also research background on the climate
and air quality (particulate analysis) impacts.

Tacoma Power: Wholesale market trends/energy imbalance markets
Clay Norris, Power Manager, provided an update on trends seen in energy markets.
Mr. Norris shared graphical representations of load resource balance and biennium net
wholesale revenues. Renewable generation, generation mix, and load growth, were
then summarized. Centralized wholesale markets were then detailed. Centralized,
organized markets are managed by regional oversight entities called regional
transmission organizations (RTOs) and independent system operators (ISOs) that
facilitate competition among wholesale suppliers, perform planning and operations of
the grid to ensure reliability, and oversee competitive energy markets to guard against
market power and manipulation. California’s ISO’s (CAISO)’s role was then discussed.
Gareth Tomlinson, Real Time Energy Trader, summarized changes seen in the real
time markets over the last few years. A Real Time Energy Trader balances resources
and load, manages reservoirs in real time, and optimizes the resource portfolio. Mr.
Tomlinson then discussed bilateral wholesale markets and how trading deadlines have
changed for energy imbalance market participants. Power Management staff is
updating and enhancing an analysis of impacts from joining CAISO energy imbalance
market and will return to a Board study session in April to continue the discussion.

AMI Program Update on Data Privacy
Tyler Swartz, Power Supervisor, began by reviewing common cyber phishing traits.
Cybersecurity requirements were then reviewed. External requirements are modeled
from the Federal Risk and Authorization Management program. Internal requirements
are modeled after the National Institute of Standards and Technology by the U.S.
Department of Commerce. Over 900 security controls concerning confidentiality,
integrity, and availability of the systems were vetted during procurement phases.
System-wide and meter security were then reviewed. Some protections include multi-
layer encryption to the end point; tamper prevention and detection; and non-repudiation.
Discussion ensued with the Board reiterating their desire to have robust communication
about the security and safety of the AMI project.
Adjournment
The study session was adjourned at 5:57 p.m. until the next regularly scheduled study session on Wednesday, February 27, 2019 at 3:00 p.m.

Approved:     Approved:

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Woodrow E. Jones, Jr., Chair  Bryan Flint, Secretary