



APPROVED 5-22-19

MINUTES
 City of Tacoma
 Public Utility Board Study Session
 May 8, 2019
 3:00 p.m.

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., Christine Cooley, Mark Patterson, Bryan Flint (arrived 3:20), Karen Larkin

Board Workshop Follow-Up: Development of Equity and inclusion Strategic Directive

The Board continued its work on the development of the Strategic Directive (SD) on Equity and Inclusion and staff will work to have a final draft in time for the next study session. The Board mapped out a preliminary process for the development of future SDs: Review existing background material; meet with staff and subject matter experts; Draft the SD; Review the SD with a subject matter expert (optional); Send draft to Board office; Board office to transmit to the Board in an editable version; Board review; Staff edits; Legal review; Board final review; Consideration of motion.

Miscellaneous

Michael Catsi, the new Economic Development Manager for TPU, was introduced to the Board. Mr. Catsi summarized his background and the Board made welcoming comments.

Tacoma Power: Energy Imbalance Market (EIM)

Clay Norris, Power Manager, introduced the topic explaining that trading in the market is done because it is cost prohibitive to have enough resources to meet load obligations in any and all circumstances and it is more reliable for utilities to help each other. Bilateral markets occur when a willing buyer meets a willing seller. Most of Tacoma Power's transactions happen this way. Centralized markets are run through a market operator and require extensive metering, communication, and powerful computers to function. The California Independent System Operator (CAISO) is the only market operator currently in the Western Energy Coordinating Council (WECC). Mr. Norris then provided an overview of the Energy Imbalance Market (EIM). CAISO operates a day ahead as a real time centralized market in their balancing area. Utilities in CAISO's

balancing area turn over control of their transmission and generation to the CAISO. CAISO's EIM is an extension of just the real-time centralized market into other parts of WECC. EIM participants maintain operational control over their generation resources and retain all their obligations as balancing authorities, transmission operators, and transmission service providers. Mr. Norris then outlined risks of not joining CAISO, including fewer trading partners and loss of liquidity in the real-time market. Staff recommends joining CAISO's EIM. There is uncertainty on the costs and benefits of participation in the EIM. Status quo does not seem to be an option and will likely have reduced wholesale benefits. Todd Lloyd, Assistant Section Manager, then detailed the cost analysis including implementation, staffing, consultant, contractor, software, and system costs. Kris Bobo, Sr. Power Analyst, then detailed the EIM benefit, cost, and risk analysis model design. A model was built that dispatches Tacoma's flexible hydro generation using historical El prices in order to see how much value would be gained or lost from joining the EIM historically. Thirty-two scenarios were created to perform a sensitivity analysis on the range of possible outcomes for historical years. Mr. Norris then summarized the reasons staff is recommending that Tacoma Power join the EIM: Modernizes wholesale trading practices; Prepares Tacoma Power for likely evolution of markets; Reduces risk of reduced trading partners; Improves reliability on pathway to 100 percent clean grid; Expected benefits exceed expected costs. This will require the following steps: Authorization to execute an implementation agreement with CAISO; Authorization to begin hiring the implementation team and procuring the necessary consulting services and software; and Seeking a Board resolution for a projected limited duration. Discussion ensued with Board Members requesting additional information and clarification on this subject in separate briefings.

Tacoma Power: Joint Base Lewis McChord (JBLM) Cost Allocation Study

Erin Erben, Power Assistant Section Manager, provided introductory remarks. The generation cost allocation methodology that came out of last year's rate process was requested by JBLM. Tacoma Power maintains that the existing 12-CP allocator best reflects the current cost structure of the utility. Arguments for seasonal CP allocators are more applicable to thermal utilities. Hydroelectric systems are unique because plants are built for energy instead of capacity. Times of greatest resource constraint is not necessarily the time of highest load. Zero fuel cost and fish passage costs greatly reduce the direct link between generator cost and output. Christina Leinneweber, Sr. Utilities Economist, then provided additional information by detailing graphical representations of precipitation distribution, retail load versus load resource balance, peak day resource stack, and cost drivers. The Tacoma-owned hydro portion of the system was not designed for peaks. Market focus is selling excess supply, not buying capacity for seasonal peaks. Ms. Leinneweber then summarized the various methodologies utilized by peer utilities. Ms. Erben concluded the presentation by stating the final report will be sent to JBLM and there will be a meeting with them in June.

Executive Session

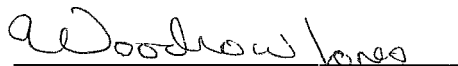
Board Member Larkin moved to convene an executive session at 5:45 p.m. for ten minutes for the purpose of discussing pending litigation per RCW 42.30.110(1)(i); seconded by Board Member Flint. The executive session was adjourned at 5:55 p.m.

Adjournment


The study session was adjourned 5:55 p.m. until the next regularly scheduled study session on Wednesday, May 22, 2019 at 3:00 p.m.

Approved:

Approved:



Woodrow E. Jones, Jr., Chair



Bryan Flint, Secretary