MINUTES OF THE
BOARD OF DIRECTORS MEETING
OF THE TURLOCK IRRIGATION DISTRICT

Turlock, California
5 March 2019

The meeting of the Board of Directors of the Turlock Irrigation District was called to order at 9:00 a.m. in regular session on the 5th day of March 2019. Present were: Directors Charles Fernandes (President), Rob Santos (Vice-President), Michael Frantz (Secretary), Joe Alamo and Ron Macedo, General Manager Casey Hashimoto and Executive Secretary to the Board Tami Wallenburg.

SALUTE TO THE FLAG

MOTION APPROVING CONSENT CALENDAR

Moved by Director Santos, seconded by Director Macedo, that the consent calendar consisting of the following be approved:

A. Minutes of the regular meetings of February 26, 2019.
B. Demands against the District represented by check numbers 381584 to 381783, inclusive, in the amount of $2,182,334.52.

All voted in favor with none opposed. The President declared the motion carried.

PUBLIC COMMENT PERIOD

Customer David Fransen expressed concerns regarding the SRWA’s Regional Water Project, the costs involved with the project and the fact it only benefits two cities, Ceres and Turlock. He also alleges that the TID Board violated Brown Act by not taking a vote to not move forward with the project when it stalled a few years prior. He questioned why the District would not choose to build and own the plant like Modesto Irrigation District did years back. Mr. Fransen also expressed concerns over the Turlock Subbasin groundwater levels and pumping. He asked the Board to revisit the water project topic in open session.

WEEKLY UPDATE

Utility Analyst-Hydrology Olivia Cramer reported on current water conditions and forecast. Accumulated precipitation measured at the three mountain stations in the Tuolumne River watershed from September 1, 2018 to present total 32.8 inches, or 126.3 percent of normal to date. The snow water content when compared to April 1 of last year is at 128 percent, the statewide average to date is showing 143 percent. San Francisco reservoirs contain 528,477 acre-feet and the Water Bank is at 570,000 acre-feet of credit. Don Pedro contains 1,671,234 acre-feet. Average combined releases are at 5,974 cubic feet per second with most going to the river. Computed natural flow is averaging 8,188 cfs, and Turlock Lake contains 24,545 acre-feet of water. The
updated weekly watershed report shows Don Pedro remains close to last week’s elevation though staff plans to encroach flood level zone on March 8 again due to Hetch Hetchy’s need to draw Cherry Lake down to 210,000 af. but staff anticipates no problem in bringing it back down. Ms. Cramer also noted releases will remain steady for now but as the forecast changes releases may be increased as needed.

RESOLUTION NO. 2019 - 5

RESOLUTION APPROVING AND ADOPTING ELECTRIC SERVICE RATE SCHEDULE DT

BE IT HEREBY RESOLVED by the Board of Directors of the Turlock Irrigation District that the Electric Service Rate Schedule DT, Domestic Plug-In Electric Vehicle Experimental Program, a copy of which is attached to this resolution, is hereby approved and adopted for the Turlock Irrigation District effective April 1, 2019.

Moved by Director Alamo, seconded by Director Santos, that the foregoing resolution be adopted.

Upon roll call the following vote was had:

Ayes: Directors Santos, Frantz, Alamo, Macedo, Fernandes
Noes: Directors - None
Absent: Directors - None

The President declared the resolution adopted.

ELECTRICAL ENGINEERING AND OPERATIONS ADMINISTRATION REPORT

AGM Electrical Engineering and Operations Joe Gill presented an overview of the District’s Transmission Inspection Program utilizing Small Unmanned Aircraft System (sUAS or drone). Lines inspected include 230kV, 115kV and 69kV and are inspected on a bi-annual, annual and 2-year cycles. Inspections are primarily done on foot patrol for detailed inspection normally followed by an aerial inspection if issues are detected. Crews inspect numerous items related to the transmission line including poles/towers, conductors, insulators, hardware, vegetation and right-of-way areas. He then introduced Line Division Manager Mike Nixon who reviewed drone use as one of the inspection tools.

Line Division Manager Mike Nixon reviewed steps leading up to utilizing drones for inspection of transmission lines. In 2014, TID applied for a FAA Section 333 Waiver for sUAS commercial use of drones. In 2015, the District acquired the certificate of waiver though in 2016 the FAA removed the need for the certificate of waiver and instead required drone pilots have a sUAS Pilot Certificate instead of the private pilot’s certificate. The District was granted registration in 2016 and a year later staff acquired the sUAS Remote Pilot Certificate with drone operations procedures being developed and inspection began in June of that year. The drone team consists of a minimum of two members which includes one pilot (must hold sUAS Remote Pilot Certificate) and one camera person/observer. Flight procedures are completed before each flight such as conducting a weather check for temporary flight restrictions, mission brief or objectives
outlined for the day, safety brief, risk assessments and drone visual inspection and pre-flight mechanical operation check. The District’s drone incorporates a Real-Time Kinematic system which offers precise accuracy for Utility specialized drones working around power lines. The dual camera platform plus its onboard FPV (first person view) camera gives optimum flexibility. The XT thermal camera is used for heat detection on connections and splices while the z30 camera has a 30x optical zoom providing detailed inspection from a safe distance. Board members asked several questions on how the District’s inspection program can help avoid potential disasters like PG&E has experienced to which Mr. Gill responded stating that even though the District has an excellent transmission inspection program, things happen that are out of our control but feels the District is well prepared. Director Alamo commented that it appears to be the perfect use of technology to keep our customers supplied with power.

**GENERAL MANAGERS UPDATE**

General Manager Casey Hashimoto had no new items to report.

**BUSINESS OF THE BOARD**

Director Frantz reported on a water meeting he attended in Chico the previous week. They discussed California water issues including putting it to the best use possible while supporting a healthy eco-system and farming community.

Director Santos reported on his and Director Frantz’ attendance at the Ad Hoc Committee on Transparency meeting on February 20th. Items discussed included the location of board workshops, public record requests, engaging the public in discussions and possible live-streaming of the board meetings.

**IRRIGATION DELIVERY OPERATIONS ASSESSMENT WORKSHOP**

AGM Water Resources Tou Her reviewed how water distribution staffing numbers have decreased over the years while still striving to maintain the District’s mission to provide reliable water and electrical service. An engineering consultant was contacted to perform a full assessment of the Districts delivery operation and to also identify opportunities to increase efficiency without reducing the level of service provided to customers. He then introduced Dr. Thorsen of David’s Engineering to present their findings of the assessment.

Dr. Thorsen presented an overview of the completed Irrigation Delivery Operations Assessment for the District. As part of the assessment, an evaluation of alternative system types for water delivery was researched as well as benchmarking District operations relative to other similar irrigation water suppliers in California. The consultant spent time observing water distribution operators (WDOs) field activities during peak and non-peak delivery periods and also surveyed all District WDOs. Alternative types of systems for water delivery included upstream-controlled open canal systems, which is most common and currently utilized by the District. A less common system would be a downstream-controlled closed pipe system which were used more in the 1960’s and 70’s. Dr. Thorsen compared several different water districts and irrigation districts with TIDs in many different areas such as their delivery scheduling methods, and how many acres were in the specific areas. He noted that every district like TID breaks the area into operational units, or service area. He also reviewed the differences for each dependent on if it is an arranged demand (AD) delivery or a rotation method. General observations of TIDs water operations
showed there were short durations with many hand-offs to be managed and growers were allowed to keep water until they completed their irrigation which increases operational uncertainty and requires communications. He then compared the number of WDO shifts, how many days on/off and distribution area size changes per shift. The final assessment revealed that when compared to other suppliers, TID scored highest in peak operations, number of deliveries and volume of deliveries. Key observations from WDO ride-alongs, interviews and surveys show WDOs communicating with growers averaged 4-6 calls per hour with a minimum of 3 and up to 6 calls per delivery. Scheduling deliveries takes approximately 2 to 3 hours per day as well as patrolling distribution areas. The District has a high 85% operational efficiency rate and showed the WDOs generally do a good job managing the most deliveries and greatest delivery volume among the compared suppliers. Dr. Thorsen then reviewed four recommendations to reduce effort and improve consistency levels by also expanding WDO training, development of SCADA alarms to alert night patrols WDOs, and the transfer of minor maintenance tasks to other workers. Board members asked several questions in regards to communication methods among WDOs and growers, customer reviews, possible changes to current service areas to which staff responded. Director Frantz emphasized the importance of keeping District customers involved in these discussions as it is the hope of the Board that they value any proposed changes before they are implemented. Director Macedo concurred stating it is the Board’s position to implement policy with goals of conserving water while providing excellent service to our customers.

MOTION TO ADJOURN

Moved by Director Alamo, seconded by Director Frantz, that the regular meeting of the Board of Directors be adjourned.

All voted in favor with none opposed. The President declared the motion carried.

Tami Wallenburg
Executive Secretary to the Board of Directors