

REVISED PUBLIC COMMENT – for CVWD Board Mtg on 4/27/2021 (from Marilyn Tyler) -----  
Revised 4/26/2021

RE: Comments Made By Director Raghavachary at Engineering Cmte. Mtg. on 4/20/2021

I want to bring to the Board’s attention the following exchange between myself and Director Raghavachary at the most recent Engineering Cmte. Mtg. on 4/20/21. Mr. David Gould had just presented a 20-year “pyramid” pipeline replacement schedule to satisfy a 75-year replacement cycle (replacing pipe as it reaches 75 years of age). The schedule is called “pyramid” because starting in FY2022, it gradually ramps up to a peak of pipeline replacement in FY2032 of approximately 3 miles of pipe at a CIP cost of \$11.4M for pipeline replacement alone. Then the schedule gradually ramps down to FY2042.

ME: “I want to ask David Gould if he could show an alternative pyramid replacement schedule for an 85-year replacement cycle, because it could solve some problems shown in the 75-year pyramid replacement schedule.”

DIRECTOR RAGHAVACHARY: “I’m not going to permit that. The Board has already approved a 75-year pipeline replacement cycle, they’ve already indicated approval of one of the four scenarios presented at the last Board meeting. Weren’t you at the last Board meeting! Didn’t you hear what they said!” (The last comments in a sarcastic, belittling tone.)

ME: “I don’t agree that the Board approved a 75-year pipeline replacement cycle. But I’ll bring this to the Board’s attention at the next Board meeting.”

#### MY CONCERNS

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FIRST CONCERN: Director Raghavachary is incorrect---the Board did NOT approve a 75-year pipeline replacement cycle at the last Board meeting, so the topic is still open to discussion.

SECOND CONCERN: Director Raghavachary compounds her ignorance with arrogance. For the second time in a public forum, Director Raghavachary arrogantly addressed a member of the public in a sarcastic, belittling way. (And for the second time, her facts were wrong.) Director Raghavachary’s behavior falls short of the decorum, courtesy and consideration shown to the public by the other Directors.

THIRD CONCERN: In her desire to force a quick decision, Director Raghavachary appears to view valid technical questions and valid technical discussions as unnecessary time-wasting obstacles getting in her way of closing the deal. But with the serious problem of aging pipelines, the objective is not to make a fast decision but a sound one.

#### REQUEST TO THE BOARD

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Please consider an 80-year replacement cycle for pipeline replacement. An 80 year replacement cycle avoids the problems shown in David Gould's pyramid 75-year replacement schedule.

75-year REPLACEMENT CYCLE – Problems: pyramid replacement schedule requires massive ramp-up of total CIP from \$5.5M in FY2023 to \$15M in FY2032 and beyond (to deal with peak of pyramid in FY2032 where 3mi of pipe is replaced at a cost of \$11.4M). Also, around the pyramid peak, pipe is being replaced at the rate of 2.5mi-3mi per fiscal year---David Gould had previously stated that the public is seriously disturbed if more than 2 miles of pipe is replaced per year.

80-year REPLACEMENT CYCLE – Can be achieved by gradually ramping up to 1.7mi in FY2026 and remaining at that rate thereafter (80-year plateau replacement schedule). ADVANTAGES: total CIP ramps up to \$7.5M in FY2026 (from which \$5.1M is used to replace 1.7mi of pipe), and from this point total CIP can increase by inflation rate alone (e.g., 4%), because pipe is being replaced at a constant rate of 1.7mi/year.

WHY THIS MATTERS: On tonight's agenda under Action Item 2, the "Long Term Planning Scenarios" were created to fund a 75-year pipeline replacement cycle by aggressively increasing revenue. If CVWD goes with an 80-year pipeline replacement cycle, then the two scenarios can be relaxed because significantly less revenue will be required per year.

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ATTACHMENT: Powerpoint presentation by my husband Scott Tyler showing his analysis of several Plateau Replacement Schedule scenarios.

Inputs to the model were amount of pipe by year of origin (from 1947-2021), Cost/LF by FY. Output is age of remaining pipe by FY (e.g, in FY2050 what is the current age of the remaining pipe if we have been replacing 1.7mi per year in the previous years).

For all scenarios, we followed David's ramp-up for FY2022-FY2025): FY2022 – 5,450 ft/1.03mi; FY2023 – 6,300ft/1.2mi; FY2024 – 7,200ft/1.36mi; FY2025 – 8,200ft/1.55mi, FY2026 – 8,976ft/1.7mi, ...thereafter 8,976ft/1.7mi for each subsequent FY for an 80-year plateau pipeline replacement schedule.

RESULTS: Scott's analysis (which covered ALL pipe put into the ground from 1947 to 2021 and spanned the fiscal years from FY2022-FY2062 to make sure there was no build-up of aging pipe) showed the following:

- An 80-year replacement cycle can be achieved by replacing 1.70mi/year from FY2026 onward
- An 82-year replacement cycle can be achieved by replacing 1.55mi/year from FY2026 onward

- An 85-year replacement cycle can be achieved by replacing 1.40mi/year from FY2026 onward
- A 78-year replacement cycle can be achieved by replacing 1.9mi/year from FY2026 onward

These results show the Board it has viable options besides an aggressive 75-year replacement cycle.

(Note: Scott wrote a Python program to automate his analysis---he's willing to give the program to CVWD if you want it.)