SPRINGFIELD WATER AND SEWER COMMISSION



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Minutes of Meeting February 8, 2022

The Springfield Water and Sewer Commission held a virtual meeting on February 8, 2022. The virtual meeting was held in accordance with Chapter 20 of the Acts of 2021.

Commissioner Otero called the meeting to order at 9:11 a.m. and announced the Commissioners that are participating remotely. Secretary for the Commission Jaimye Bartak called the attendance roll:

William E. Leonard, Present Daniel Rodriguez, Present Vanessa Otero, Present

Also Participating
Joshua Schimmel, Executive Director
Norman J. Guz, Commission Counsel
Anthony Basile, Comptroller
Domenic Pellegrino, Director of Finance
Bill Fuqua, Director of Wastewater Services
Darlene Buttrick, Director of Engineering
Jim Laurila, Director of Water Operations
Theo Theocles, Director of Legal Affairs/Chief Procurement Officer
Jaimye Bartak, Communications Manager/Secretary for the Commission

New Business

1. Discussion of Board Meetings: Report by Commission Counsel.

Attorney Norm Guz noted that legislation enabling remote meetings ends April 1 unless extended. Hybrid meetings will still be permitted.

Commissioners discussed how to incorporate public comment during regular Board meetings. Commissioners decided to incorporate public comment on the agenda when requests are received by the Secretary to do so.

2. Update on Capital Projects and WIFIA Program: Report by Executive Director.

Commissioner Leonard opened the discussion by reading a quote from "The Story of Cobble Mountain" by Frank B. Murray:

"We are in the habit of taking the water supply as a matter of course, and so long as we have had no experience from the failure of it, we assume that it will continue to flow on forever." – Board of Springfield Water Commissioners, 1892

Commissioner Leonard noted that the passage is reflective of the current moment. Commissioner Otero thanked Commissioner Leonard for requesting this meeting.

Executive Director Josh Schimmel discussed the first quarterly update as part of the WIFIA loan agreement. Atty. Guz explained that the \$300 million match for WIFIA is based on cost estimates from 1.5 years ago. Mr. Schimmel noted that the WIFIA project list was expected to change due to changing priorities and increasing costs.

Mr. Schimmel reported that as costs for strategically important projects rise, distribution and collection system and metering projects are likely to be pushed out, despite their importance. The infrastructure bill may offer additional funding and grant opportunities for projects such as these. But the remaining projects are not optional due to the risks to water production.

Mr. Schimmel explained the three ways water is conveyed from the reservoir to West Parish Filters. The 42" is intended to be the primary route. During high rain events, water quality becomes poor in the intake reservoir, so the 42" is intended to bypass that, but it is currently not functional due to the valve failure.

Mr. Schimmel continued that the current challenge with the treatment plant is that raw water quality has changed in the past 5-6 years due to climate change. Rain events are bringing more organics to WPF, stressing the system. The rapid sand filters remove more organics than the slow sand filters, but slow sand filters still need to be utilized to meet peak demand.

Commissioner Otero asked if disinfection byproducts would still be an issue even if all equipment and components were working properly. Mr. Schimmel responded that the plant would always be running the risk of DBP exceedances, as its design originates from the early 1900s and 1970s but the regulations are from 2012. Mr. Schimmel reported that the water quality violations are likely to continue, particularly after large rain events. Mr. Schimmel noted that the plant's unique and aged equipment is not serviceable, including the backwash pumps, backwash valves, and the rapid sand filter beds, one of which went offline last week due to structural failure.

Mr. Schimmel continued that the filter beds are being repaired under emergency procurement. The beds as they were designed in the 1970s do not enable regular, proactive inspections and maintenance to prevent a similar failure. The slow sand filters serve as backup, but they produce suboptimal water quality.

Mr. Schimmel explained that in the area of raw water conveyance, the failure of the 42" valve is still the subject of litigation. Partial design and rehabilitation of the pipeline has taken place. In-line hydro was considered for that pipeline in collaboration with Eversource using a state grant. The in-line hydro opportunity delayed the replacement of the 42", but then Eversource backed out of the agreement on the basis that the water plant is not in their service area. Eversource is not required to do net metering. With the 42" out of service, all water went through the power plant. When two of the three power plant turbines needed repairs, the only choice was to send water through the diversion gates.

Mr. Schimmel stated that the power plant needs an assessment. Procurement for that assessment is currently underway. The electrical and mechanical elements date from 1936 and likely need to be rebuilt. If the power plant is rebuilt, it can be used as a bypass. There is a need to understand how much investment is needed to rehabilitate the power plant, the amount is unknown at this time. To install in-

line hydro, a new pipeline would be needed, which would cost more than \$20 million according to most recent estimates. The potential return on investment for a 33 MW power station would need to be evaluated before making a decision between the power plant and in-line hydro.

Commissioner Otero noted that such an evaluation would take time. Mr. Schimmel agreed. Mr. Schimmel added that Massachusetts has committed to clean energy by 2050. The power plant generates \$2 million in a good year, and is a good asset. It would not make sense to rehabilitate the plant and build in-line hydro as well.

Commissioner Otero asked why the 42" is not being rebuilt if the main objective is to convey water to the plant, instead of waiting six months for an evaluation. Mr. Schimmel responded that the reason for an evaluation is because the new water treatment plant will use much more electricity, and retail/wholesale generation or on-site consumption could offset significant costs. An evaluation would confirm that the energy market and investments are appropriate for the long-term.

Commissioner Otero noted the main responsibility to keep water flowing, and that rehabilitating the 42" seemed best. Mr. Schimmel responded that the power plant will still need investment, even if it is for decommissioning.

Commissioner Rodriguez asked how long it would take to rehabilitate the 42". Director of Engineering Darleen Buttrick responded that rehabilitation could be done by January 2023, but replacement would take longer. In-line hydro could be installed by early 2024. Ms. Buttrick continued that the 42" could be rebuilt with space or provisions for in-line hydro, and would not change the timeline. The current budget for the 42" rehabilitation is \$9 million, but that rehabilitation would not be able to accommodate in-line hydro due to the velocities. The current estimate for rehabilitation to accommodate in-line hydro is \$16 million. Another \$15 is estimated for the in-line hydro itself. The question is whether to invest in in-line hydro or the power plant, and knowing the condition of the power plant is critical for informed decision making.

Commissioner Rodriguez stated that the first priority is making the water supply system more robust. Mr. Schimmel responded that the quandary is that waiting six months to evaluate the power plant increases the risk that something else will fail, and the 42" has experienced tremendous stress but would need to last another 100 years if it is rehabilitated.

Commissioner Otero suggested that putting the 42" back online as soon as possible relieves risk and allows time to evaluate the power plant. Commissioner Rodriguez noted that time was more of an issue than money due to the risk to the water supply. Mr. Schimmel noted that sensitivity to rates makes decision making for long-term investments much more deliberate, and that he would prefer to rehabilitate the 42" for higher velocities to accommodate the new plant, and not install in-line hydro. Ms. Buttrick added that that option has not been designed yet, so it will take longer than 16 months.

Commissioner Rodriguez asked why there could also not be an assessment for in-line hydro with that option. Mr. Schimmel responded because there is a risk in installing in-line hydro into the existing pipeline, and each conveyance option should work on their own (and not in conjunction with the diversion gates).

Mr. Schimmel stated that the power plant and dams are the remaining elements in need of study and reinvestment. Those activities will not take place with WIFIA funding, and all investment choices made now will impact future rates. Mr. Schimmel expressed that this meeting was to provide the Board with the scope of investment needed ahead. He noted as a silver lining that there is potential with Westfield Gas &

Electric to market energy produced, as well as potential for battery storage, peak shaving, wholesale, and direct consumption of the energy the power plant produces.

Mr. Schimmel continued that increases in the cost of chemicals (chlorine has increased by 200%) and inflation will impact rates as well. Completing the 42" sooner than later is likely better due to escalating costs.

Commissioner Leonard commented that the need for luck in delivering water needs to be eliminated, and rates in Springfield need to be stabilized.

Mr. Schimmel reported that staff will conduct more effort to leverage money out of the state and SRF program, particularly with ARPA and IIJA funding available. Commissioner Otero recommended considering a government affairs position. Mr. Schimmel responded that more staff impacts the budget, and other staff are greatly needed. Atty. Guz noted the need for help from Springfield's state delegation.

Commissioner Otero made a motion to adjourn at 11:16, Commissioner Leonard seconded the motion, voted unanimously.

3. Consideration and/or action on any other matters that may come before the Commission at this meeting.

None considered.

Submitted By:

Jaimye Bartak, Secretary