




MEMORANDUM

To: Mayor and Council

From: Greg Meszaros, Director, Austin Water 

Date: March 26, 2014

Subject: Risks and Cost Impacts of Deferring Water Treatment Plant 4 (WTP4)

The purpose of this memo is to provide a summary of the risks and cost impacts of deferring the startup, commissioning and operation of Water Treatment Plant 4 (WTP4) as recommended by a letter signed by representatives of the SOS Alliance, Change Austin, the Sierra Club and Paul Robbins. The letter stated that a WTP4 deferral strategy would, in their estimate, “create a net savings of about \$2 million per year.”

While Austin Water respects the effort to cut costs, this proposal does not end up saving money but would cost millions of dollars. Therefore, the utility does not recommend deferring the startup and operation of WTP4. Deferring WTP4 would not only deprive the water system and Austin Water customers of the benefits that the plant will provide, but the proposal also leaves out significant costs and risks that would be experienced by delaying the plant’s opening. Many of these costs and risks categories were detailed in the September 21, 2011 Audit Report review of the WTP4 postponement analysis performed by CDM Smith in response to Council Resolution 20110728-110 that directed the City Manager to determine the costs associated with postponing the completion of WTP4. Many of these costs would still be incurred today if the plant was “deferred” (not used upon completion). So, much of that evaluation is still valid. As a reminder, some of the bigger costs associated with a “deferral” are summarized below:

- **Equipment Warranty Costs.** The City will lose equipment warranties by not operating approximately \$370 million of newly installed equipment and facilities during the plant’s warranty period. Failure to run the raw water intake, pumping, treatment, and transmission system for its intended purpose would void/limit warranties and transfer equipment and workmanship defect risks to the Utility. There are many examples of warranty risks associated with not running the plant as intended. For example, the Jollyville Transmission Main is not designed to sit unused for years without risking failures such as leaks at dried out joint gaskets. In order to manage these risks, the Utility would need to repeatedly fill, drain and waste millions of gallons of water each year in order to limit damage to the \$93 million dollar Jollyville investment. Even with these protective steps the City would be significantly limiting its future warranty rights on this system. For additional perspective, in consultation with our WTP4 Advisor CDM Smith, we determined that a strategy tied to

extended warranties is fraught with costs and risks. One surety company indicated that extended warranties would be extremely difficult to secure, would not go beyond 2 years, and would cost on the order of 1.5% of the project's total construction cost per year. In the case of WTP4 1.5% of \$370M equals \$5.55M per year. The loss of equipment warranty in and of itself makes "deferral" a very costly and risky path. One failure during a "restart" could cost the City millions of dollars to repair without compensation from the manufacturer due to the voided warranty.

- **Startup and Commissioning Shutdown Costs.** Additional costs related to defining a reasonable stopping place to cease the startup and commissioning effort of WTP4. Examples of these costs include: preparing shutdown change order documents by design engineer, negotiating a fair change order with the CMAR to minimize loss of investment, and paying contractor's termination and early demobilization costs. Additional costs would be incurred because equipment is not fully tested until it is operated long enough to identify problems. These types of equipment problems and associated costs normally identified during a typical startup and commissioning effort of a Plant would need to be identified when the Plant is started up and commissioned later, which will come at an additional cost to the Utility.
- **Settlement/Litigation Costs.** Additional settlement/litigation costs related to terminating without cause and for the City's convenience. By deferring the startup and commissioning effort, the City will incur costs associated with settlement and/or litigation (e.g., claims from contractors currently under contract to train and commission and, shutting down this work before it is completed).
- **Protection Costs.** Additional costs related to providing site security, surveillance and monitoring systems, placing newly installed equipment and materials in long-term suspense and/or storage, and providing preventive and routine maintenance for this equipment during WTP4's deferral period.
- **Startup and Commissioning Remobilization Costs.** Additional costs related to remobilizing to complete the startup and commissioning of WTP4. Examples of these costs include: developing new contract documents to re-startup and re-commission WTP4, bidding these projects, and remobilizing a contractor to complete the work.
- **Interim Water Treatment/Distribution System Costs.** Additional costs related to engineering and constructing interim projects to address water system needs and risks during the WTP4 deferral period. WTP4's deferral requires that additional infrastructure be installed to supplement what WTP4 would otherwise be providing to the water system in 2014.
- **Operational Costs.** Additional operational costs incurred by the Utility during WTP4's deferral period such as increased energy costs to pump water from the lower elevations of the Davis and Ullrich water treatment plants.
- **Bond Rating Risks.** Failure to start up WTP4 as planned would increase the risk that bond rating agencies would downgrade bond ratings leading to significant increases in future borrowing costs.

SUMMARY - The September 21, 2011 WTP4 Postponement Audit Report identified \$100M of costs for a 5 year deferral and \$155 million for a 10 year deferral. While the plant has advanced closer to completion since the 2011 report, many of these same deferral costs and risks remain. In addition, new risks, such as voiding warranties on \$370M of newly constructed facilities, are associated with a startup deferral option. For these reasons, Austin Water believes that opening WTP4 as scheduled is the most responsible course of action for the City to undertake from both a financial and water system risk perspective. As the Utility prepares for WTP4 startup we will continue to look for opportunities to optimize the operations and maintenance costs associated with the facility.

Please contact me if you have any questions or need further clarification to the information contained in this memorandum.

cc: Marc Ott, City Manager
Robert Goode, P.E., Assistant City Manager