Maryland ENVIRONMENTAL SERVICE

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MARYLAND ENVIRONMENTAL SERVICE
FISCAL YEAR 2023 CAPITAL BUDGET HEARING
RESPONSE TO DEPARTMENT OF LEGISLATIVE SERVICES ANALYSIS

Senate Budget and Taxation Committee
Capital Budget Subcommittee
The Honorable Craig J. Zucker, Chair

February 22, 2022

We first would like to thank Andrew Gray and the entire DLS team for their thorough work on the MES Operating and Capital Budget. Mr. Gray is top-notch, and we appreciate his professionalism throughout the budget development process.

MES provides the following responses to the request for response and recommended action:

DLS recommends that MES comment on whether the Conowingo Dam dredging project is ready for funding if the Sediment Characterization Study and Pilot Dredging Project final report will not be completed until summer 2022 and whether any other states have made a funding commitment to Conowingo Dam dredging. DLS also recommends deletion of the $6,000,000 GO bond authorization for the Conowingo Dam dredging project since the funding does not appear to be necessary at this time.

MES respectfully disagrees with this recommendation and urges the Committee to keep the $6,000,000 GO Bond authorization for the Conowingo Dam dredging project in place. As explained below, this funding will directly support efforts to begin the permitting process and identify innovative reuse / beneficial use for the materials to be removed.

We expect to see additional draft information in the next several weeks including a draft economic analysis report and the start of the innovative reuse / beneficial use field demonstration work. A draft report of the findings of the pilot project will be available for MES and MDE to review at the end of April or beginning of May.

We have sufficient information now to start the groundwork for a full-scale dredging and innovative reuse project, which can begin with project permitting, regulatory coordination, design, coordination with property owner and FERC, community outreach and an environmental assessment.

The Conowingo Dredging and Innovative Reuse and Beneficial Use Pilot Project is part of a multi-pronged approach to improve the health of the Chesapeake Bay. A 2015 study led by MDE and DNR, the U.S. Army Corps of Engineers, Susquehanna River Basin Commission and EPA's Chesapeake Bay Program found that the sediments and nutrients washing downstream and into the Chesapeake Bay during storms is directly contributing to dissolved oxygen impairments in the Bay. According to the study, an additional 6 million pounds of nitrogen and 260,000 pounds of phosphorous are now passing through the Conowingo Dam and into the Bay. The state's holistic strategy on tackling this decades long issue includes conditions relating to the relicensing of the dam and an agreement between MDE and Exelon that requires the company to invest more than $200 million in ecological and environmental projects and services, and operational enhancements to improve water quality in the Susquehanna River and Chesapeake Bay. It also includes an unprecedented, multi-state Conowingo Watershed Implementation Plan (CWIP) specifically designed to address the additional pollution that is moving into the Chesapeake Bay because of the lost trapping capacity of the Conowingo Dam.

This funding is critical. Removing this funding now, and assuming no other funding source is identified, would set the project backwards once again and we may lose the momentum we have built over the last three years.

The Department of Legislative Services (DLS) recommends that MES describe in detail how the project cost has increased from $4,226,000 to $16,072,018. DLS also recommends approval of the fiscal 2022 $7,284,815 general fund deficiency appropriation in the DGS program H00H01.02 Statewide Capital Appropriation to fund a fuel conversion project at the ECI cogeneration plant.

MES, has operated the wood-fired, 4 MW cogeneration plant at the Eastern Correctional Institution (ECI) for over 30 years. As a medium security prison, any alternative energy source must provide an independent, reliable, and proven source of energy. Lives literally depend on an uninterrupted supply of electricity suppling lights, and security systems that protect both the inmate population and DPSCS facility staff.

The work to install the necessary infrastructure to deliver natural gas at ECI was broken up into phases so that the work could be completed concurrently. This was critical to match the same schedule as the pipeline installation. The work consisted of design,

preparation of bid ready documents and bidding support to (a) convert the cogeneration facility from firing wood chips and No. 2 fuel oil (FO) to fire natural gas and No. 2 FO, (b) to convert the propane-fired equipment at ancillary buildings to fire NG, and (c) to install a service pipeline to deliver natural gas from the main distribution delivery point on the corner of US-13 and Perry Road to the cogeneration plant and ancillary buildings by September 2021. However, the original schedule and budgets were completed before COVID-19 and before any of the work was competitively bid. Consequently, because of a confluence of issues related to technical challenges associated with converting a 30-year-old facility and the impacts of COVID-19 on the supply chain, the original engineer's estimate of $4,226,000 to complete fuel conversion efforts at the ECI cogeneration facility increased to what is now expected to be a total of $16,072,018. The bulk of the cost overrun is found in the actual conversion of the two Co-Gen Boilers.

MES attempted to work directly with the Boiler OEM to perform the conversion, but the OEM ultimately declined recommending instead that MES work with a larger General Contractor to coordinate all the tasks needed to convert the two boilers. As a result, a separate and final solicitation consisting of the work related to the conversion of the boiler system inside the cogeneration plant was advertised on August 26, 2021, however, award was not recommended due to receipt of a single bid and a bid price exceeding the approved funding. The bid was submitted by W.M. Schlosser with a bid price of $10,202,000. As a result, MES re-advertised the project on November 5, 2021, and reached out to multiple contractors to promote bidder participation and improve project costs.

On December 17, 2021, MES received two bids for the ECI Plant Boiler Fuel Conversion solicitation (MES ID. 1-22-4-07-5R). This procurement represents the final contract needed to convert the plant to operate on natural gas. The low bid was presented by W.M. Schlosser Company Inc. at $9,895,000, which still far exceeds the Engineer's estimated budget for this work. The remainder of the cost overrun can be attributed to code compliance related to equipment changes, contingent measures for continued operations (extended need for temporary boiler/power), complex integration of controls with the balance of the plant and the extent of selective demolition also contributed to the increased costs. Non-technical issue contributing to cost increases across all the work include labor shortages and fluctuations in material cost (i.e., metal) stemming in part from COVID-19 and the geographic location of project site. Taken on the whole the cost of the project is projected to be $16,072,018 resulting in a budget variance of $11,846,018.

To mitigate the funding shortfall, MES has tentatively identified $4,561,203 in additional funding sources to meet the project needs. The source of the available funds consists of the following:

- Approximately $1.6M from the FY21 ECI Energy Reserve Fund, consisting of unspent operating funds.
- Approximately $2.5M from funds previously appropriated for boiler plant improvements at ECI, Jessup Correctional Institution and Maryland Correctional Institution-Hagerstown. These projects can be deferred at this time; however, they will need to be completed in the next few years.
- $550,000 from the 2020 Maryland Energy Administration MEIP Grant Program.

With the appropriation of the aforementioned fund sources, MES would still need $7,284,815 to complete fuel conversion efforts at the ECI Cogen plant.